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EXTRACT

From an Act prescribing Rules for the Government of the State Library, passed March 8th, 1861.

SECTION 11. The Librarian shall cause to be kept a register of all books issued and returned; and all books taken by the members of the Legislature, or its officers, shall be returned at the close of the session. If any person injure or fail to return any book taken from the Library, he shall forfeit and pay to the Librarian, for the benefit of the Library, three times the value thereof; and before the Controller shall issue his warrant in favor of any member or officer of the Legislature, or of this State, for his per diem, allowance, or salary, he shall be satisfied that such member or officer has returned all books taken out of the Library by him, and has settled all accounts for injuring such books or otherwise.

Sec. 15. Books may be taken from the Library by the members of the Legislature and its officers during the session of the same, and at any time by the Governor and the officers of the Executive Department of this State who are required to keep their offices at the seat of government, the Justices of the Supreme Court, the Attorney-General and the Trustees of the Library.

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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, JULY 4, 1874. [Number 1.

J. W. A. Wright, Lecturer of California State Grange.

Perhaps no one person has been more prominently identified with the Grange movement in this State, especially in its earlier stages, than the subject of this sketch — J. W. A. Wright, first Master of the State Grange of California, whose likeness is herewith shown. Most of our readers are familiar with his name and his writings, for he has long been a correspondent of the RURAL PRESS, both in an official capacity and under the *nom de plume* of "Ralph Ramhler;" for these reasons, and because of his active part in the Grange movement, we feel sure that our readers will be interested in the following sketch of his life, which we have supplemented by an admirable likeness of himself.

Mr. Wright was born at Columbus, Mississippi, July 28th, 1834. His father, David Wright, was a Preshyterian minister, and at one time a missionary to the Choctaw Indians. His mother was a Virginian. Mr. Wright is a nephew of Colonel John Albert, of Washington, D. C., for over 30 years Chief of Topograghical Engineers of the U. S. Army. At the age of six years, being the only survivor of four children, he was left, by the death of his father, in charge of a widowed mother, who devoted all her remaining life to the welfare of her son. She was a woman of remarkable force of character. Left to depend on her own exertions for support, she tanght her son to work and to appreciate the dignity and worth of labor. He early learned from her teachings that he must depend for success upon his own exertions, under the blessings of Providence. In his hoyhood Mr. Wright worked for part of his time in a cabinet shop, to learn the use of tools, and wrote for a while as a copyist in a Chancery Clerk's office. But his mother labored to leave him that best of legacies—a sound education; by her economy and good management, coupled with some assistance from friends and the earnings of his own labors as teacher, he was enabled to secure the advantages of a thorough education.

He prepared for college in the schools of Mississippi and Alabama. After spending two and a half years at Greene Springs, Alahama, under Prof. Henry Tutwiler, whose eldest daughter he afterwards married, he entered the junior class at Princeton in 1855, and graduated as valedictorian of his class in 1857. In the fall of that year he returned to Alabama, and began teaching school as assistant to Prof. Tutwiler. As teacher, after completing his college course, his classes consisted of young men in Latin and Greek through the full course, French, rhetoric, and the higher mathematics. He also devoted much of his leisure time to natural history and botany, as his special and favorite studies, having been convinced of the practical value of these sciences at Princeton, hy the admirable lectures on geology and physical geography in the two years' course of Prof. Guyot, "the companion and friend of Agassiz." Princeton conferred upon Mr. Wright the degree of A.M. in 1860.

After our lamentable civil war broke out he continued teaching for a year; but having been raised with convictions concerning State's Rights, in which all Southern men were educated, and heing convinced that the only clear line of dnty was to stand by his State in the unfortunate position in which the logic of events had placed her; feeling, as well, that she needed the aid of all her sons in that terrible and ever-to-be-regretted emergency, he raised a company and entered the Confederate service in March, 1862, in the 36th Alabama Regiment. He served as Captain and Major of infantry, heing frequently in command of his regiment, until he gave his parole in May, 1865. He was always actively employed. He was in the hattles of Chickamauga, Lookout Mountain, Missionary Ridge, and also in Gen. Joe Johnston's and Hood's campaigns, and in the defence of Spanish Fort at Mobile from the 3d to the 9th of April, 1865. He was severely wounded, disabled and captured at Missionary Ridge in November, 1863, and remained in the hospital and prison at Chattanooga, Nashville and Camp Chase, until he effected his escape from the cars, while en route with Morgan and other Confederate officers to he confined in Fort Delaware in March, 1864. He then made an adventurous trip through Pennsylvania, New Jersey, New York and Vermont, to Canada, thence by schooner down the St. Lawrence, and hy a sea voyage of 30 days to the Bermudas; thence by blockade runner to Wilmington, and was restored to his family and command in June, 1864, after having heen numhered among the dead for three months. On his return he enjoyed the odd experience of reading his obituary; hut, at well as we can judge, he still has some life left, although ten years have elapsed, and those sad memories are almost forgotten. Far from retaining any hitterness from the lamentable struggle, the suhject of this sketch is known to be a lover of his *whole* country, and eagerly joins in all efforts to secure our public good. By parentage, education and natural disposition he is liheral and devoted to the interest of all our people. He gave his parole in May, 1865, and returned to Greene Springs, where he resumed his occupation of teaching.

Believing that all enterprise and prosperity were dead in the Southern States, and desiring a more active life, he came to California in the spring of 1868, and purchased land in Stanislaus and Fresno counties, and has engaged actively in developing the resources of the State as a farmer, ever since. Year before last he cultivated some 4,000 acres of land, hut, on account of the unfavorahle season, harvested hut 1,700 acres, and indeed has suffered in each of the dry years with his brother farmers in the valley, in endeavoring to bring his farming operations to success. Last year Mr. Wright cultivated 1,500 acres of land in Stanislaus and Fresno counties. Five years' experience in grain raising in California has convinced him, among other practical farmers, that irrigation is the only certain mode of farming in the interior valleys of the State.

In June, 1873, when the Farmers' Movement began to excite so much interest in California, a Grange was formed in Turlock, Stanislaus county, his place of residence, of which he was elected Master. On the 15th of July, when the California State Grange was organized in Napa, Mr. Wright was elected its first Master. He was the author of the declaration of purposes, which mapped out the work of the Order in California. This year he went East as a delegate to the National Grange, and had the honor of drawing up the famous "declaration of principles" (called by some one a second Sermon on the Mount), of which so much has been said. Mr. Wright's term as Master having expired at San José, he was elected State Lecturer, giving him in that way a more varied work, in the work of organization and maintenance of the Order in this State. He was *ex officio* Chairman of the first executive committee, which inaugurated the business agencies of the Granges in California.



J. W. A. WRIGHT.

Being naturally fond of retirement, Mr. Wright has always preferred life in the country and on a farm. His associations have heen almost constantly with farm life. This experience has made him an earnest advocate of the farmer's life, as the most independent and the happiest in the world, when the farmer can he favored with good seasons and fair dealing in handling his products and supplies. Although having from a sense of duty, as a citizen, taken an active part in shaping the politics of his locality, he has actively tried to work against corruption, bribery and political wire working, Mr. Wright has never heen in the slightest sense a professional politician. In his work as an officer, he has organized 33 of the Granges in this State. He has paid considerahle attention to meteorology, and kept an accurate rainfall and weather record of his locality. Our readers will, most of them, remember reading his observations on the climate of the San Joaqnin valley, and will remember as well his illustrated articles on the hotany of California, published in the RURAL at various times. Mr. Wright has made a host of friends in his travels throughout California, and as many of them are readers of our journal, we deem it unnecessary to call to their minds recollections of his genial manner, his intelligent conversational powers, good nature, and polite bearing to all with whom he comes in contact. The sketch which we have engraved, shown on this page, is an admirable likeness of Mr. Wright.

DIKING OVERFLGWED LAND.—Among the valuable correspondence which the PRESS this week presents to its readers will be found an able and interesting letter from W. M. Ryer, Esq., on the suhject of diking overflowed lands. Mr. Ryer is remarkahly well qualified for treating this important suhject; having added to his California experience several years of close observations in Holland and other foreign countries. Even the general reader will find much that is interesting in this communication, while those who are interested in the reclamation of tule or other low lands will find in it a sound, practical treatment of some of the prominent points of the snbject.

W. F. BABBE, of Antioch, says that he has lost 60 acres of wheat this season from the effects of a small hlack hug which made its appearance in the spring and has continued its work of desolation ever since. They have a hard, sharp horn or bill with which they penetrate the stock ahove the joint and apparently extract all the moisture or sap, by reason of which the heads are not filled.

FOUR hundred and thirty-five head of cattle were sold recently in Deer Lodge for $20 per head.

Facilities for Bringing Fruit to Market.

The fact that fruit-growing is only a part of the great fruit trade, is becoming apparent to all, and some are disposed to indulge in predictions concerning the probable result of the increasing magnitude of our fruit product. They are aware of the steady increase of planting, but they do not see any increase of markets, or any improved facilities for supplying those already established. But we have never wavered in our faith that the hounteous productions of our orchards and vineyards will create markets that will grow with their growth; and it requires but little insight into the nature of trade to inspire confidence in the fulfillment of her part of the bargain. Common sense, with the additional stimulus of a few common cents, in prospective, will develop the requisite activity and energy in huying, selling and transporting our fruit. The fruit trade of California is yet in a primitive condition. There is no probability that its profits will ever be enormous, but it is certainly destined to become a vast interest in this State. It will be a permanent business, and in consequence of the uniform productiveness of our orchards and vineyards, it will be less fluctuating than the fruit trade of other countries. There will be an opening here where many a man, outside of the fruit-producing class, will have a chance to turn an honest penny; and American shrewdness and enterprise will not let such an opportunity slip. The system essential in disposing of our increasing supply of fruit will he perfected by the increase of its production. As an instance of what is already heing done for San Francisco and Oakland in this respect, we give the following from the *Transcript:*

"There are many localities in this county not directly on the main trunk of the Central Pacific Railway, which ahound in fruits and vegetables. At this season it is necessary that they should be transported to the metropolitan market cheaply, speedily, and in an uninjured condition. Cherries and herries are particularly sensitive, and require very cautious and careful manipulation. The jolting of wagons crushes and ofttimes ruins loads of fruits, hesides greatly injuring the more tender vegetahles. The Central Pacific Railroad Co. has remedied these evils. Every afternoon an empty train of six or seven covered cars runs up along the line of the local road as far as Melrose *via* Alameda, and thence to Hayward's, the end of the branch line. Here partial cargoes of fruits are taken aboard, some vegetahles, and by and by a little grain will he added thereto. At the various stations between Hayward's and Alameda, further increments are made until the cars are filled. The laden train passes through by the Broadway station ahout seven o'clock P. M., every day, and the cargoes are transferred to the ferry-hoats at the end of Long wharf. They are not carried over to the city on the regular freight boat *Thoroughfare*, but in the passenger steamers. These evening vegetable and fruit trains are a great accommodation to fruiterers and gardeners, as also to consumers, who get their supplies cheap and in excellent condition."

RIVERSIDE.—A correspondent of the San Bernardino *Guardian* gives the following as the crop prospect at Riverside: Quite a large quantity of raisin grapes will he raised in the settlement this year; also, many white figs and a few limes and lemons. Quite a number of new settlers have lately bought from 20 to 80 acres each in the vicinity of Sunnyside, which they are heautifying and improving hy the setting out of great numbers of ornamental and semi-tropical and other fruit trees, adding much to the value and beauty of this locality. The farmers are nearly through harvesting their harley and wheat. The barley crop is quite heavy. A very ahundant crop of hay has been cut and stacked—much more than will be required for the use of the settlement during the coming year.

IT is stated that samples of agricultural products are heing secured in Dixon for the Centennial Exhibition. Let them be exhibited to our own citizens at the Mechanics' Fair. We would like to see a department in the fair for articles intended for the Centennial Exhibition.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Santa Cruz and Surroundings.

[By Our Traveling Correspondent.]

EDITORS PRESS:—Having passed a very pleasant vacation in and around Santa Cruz, I propose giving you a few items which doubtless will be acceptable to some of your numerous readers. It is scarcely necessary to mention the geographical position of the town. The population is 3,000, composed principally of Americans and Germans, with a sprinkling of other nationalities—there being, comparatively speaking, a small proportion of Mexicans, or Spaniards. The town has gained considerable notoriety as a watering place, and deservedly so. The writer, having had the pleasure of visiting quite a number of the principal watering places in America and Europe, can conscieuciously say he has rarely if ever visited a place that could point to so many objects of attraction, and at the same time boast of so delightful a climate, as Santa Cruz. The writer, in conversation with a lady from the East, learned that she proposed disposing of her property in Illinois and settling permanently here, and also that she was endeavoring to induce quite a number of her friends to do the same. During the conversation she mentioned having met an Italian gentleman, and through curiosity asked him how the climate here would compare with that of Italy, his answer being that he considered it equal if not superior.

The traveler, tourist or sportsman, will here find excellent hunting and fishing, and those in search of health cannot fail after a season to be greatly benefited. Each year a marked increase in the number of visitors shows that the traveling public appreciate the inducements held out to them to visit this truly charming resort.

The beach is a great source of pleasure and recreation to the thousands who visit here, a large proportion of whom are from the Middle States, and are consequently not satisted with such attractions. They can readily be distinguished from the residents, being generally very industrious in their efforts to secure curious sea-moss, etc., at low tide. The bathing is excellent, and the accommodations fair, though room exists for great improvements, the bathing-houses being permanent fixtures, and situated as far from the water as possible, necessitating on the part of the bather a considerable walk in bathing costume; and there are many who are deterred from bathing rather than submit to the criticisms freely bestowed on such occasions. This could be entirely done away with, however, should they introduce the portable bathing machine commonly used elsewhere, which can be readily hauled down to the water; and, doubtless, the proprietors would be recompensed by an increased revenue. And here a word might be said about pleasure-boats, which, at most watering places, can always be found; but here such a thing is unknown, though, doubtless, some enterprising citizen of of Santa Cruz will, within the next 10 years, see the propriety of furnishing such pleasant means of recreation and amusement to the many who delight in such, and in return have the satisfaction of increasing the popularity of the town and the pleasure of deriving a handsome reimbursement financially from the undertaking.

Tourists in search of delightful scenery and rural retreats will here find both, the drives in the vicinity being justly celebrated. Among others, that to the big trees (15 to 20 feet in diameter and 300 to 350 high) is very interesting. They are situated about 8 miles from town and to reach them one has to pass through some most magnificent scenery. There are two ways of going, but undoubtedly that by way of Felton, a pretty little town some six or seven miles distant, offers most inducements. By this rout the tourist may catch a glimpse of the powder mills, which nestle cozily in a pretty little valley far below the level of the road. En passant, let me here remark that the observing stranger will probably desire to visit these mills; if so, the visit cannot fail to be both interesting and instructing to many. The writer had the gratification of going through the entire works in company with Mr. Buchanan, the foreman. It is remarkable that very few accidents have occurred at these works since they commenced operations, some ten years ago, and during that time only three lives have been lost; this is entirely due to the extreme precautions taken by the company. The mills are all situated a considerable distance apart, to lessen the danger of a general conflagration. Some 100 men are here employed. The company manufactnre from seven to eight tons of powder daily at the present writing, but can double this if necessary. The works are superintended by Mr. B. Peyton, who has the reputation of being a very courteous gentleman. This visit to the powder mills and big trees can be made in one day when, should the traveler so desire, the following day a most delightful drive can be taken up Scott's valley to Vine hill, distance eight miles. Here are located the Magnetic springs, discovered some years ago and owned by Mr. C. S. Fisk, who has erected a most comfortable house near the springs, and is prepared to make invalids and others enjoy their visit. Those springs are already gaining quite a reputation from the benefit derived by those who have passed a season there. The water is said to be more particularly beneficial for neuralgia, paralysis, kidney diseases, etc., some most wonderful instances having been mentioned to the writer of cures effected. In all probability the tourist would desire to pass a few days at those springs, and if so, would be well repaid, as the scenery in the neighborhood is sublime.

Within a short distance of the springs are to be found the finest vineyards in the county; the largest producing 20,000 gallons of wine annually, owned by Mr. G. M. Jarvis, and the next largest producing 18,000 gallons, owned by Mr. John Jarvis. Here let me remark, that the carrying of the late elections by the local optionists exercised these gentlemen considerably, and apparently not without reason. Strolling over those fruitful hills, it is difficult for one to imagine them as they were twelve or fourteen years ago, entirely covered with chapparal and pronounced unworthy of being surveyed by the government surveyors. However, those gentlemen, with the indomitable energy and perseverance of the early pioneer, after years of labor and money expended, have succeeded in entirely transforming the hills, and they say there is no finer place in California for raising the vine naturally. Those gentlemen feel chagrined at having such a vital blow struck at their interests; however, so it is, and so it ever will be, that the few must suffer for the good of the many.

One can easily walk from the springs to the vineyards and see all that is to be seen, and return to the springs in time for lunch, when if not fatigued, I should strongly advise a visit to Strawberry valley, owned by Mr. John De Wolfe. The traveler leaving Santa Cruz for San Jose, by stage, after journeying along the road about eight miles, cannot fail to enjoy the view to be had of this charming little valley, as seen from an altitude of some seven or eight hundred feet. It is a perfect gem, and really is one of the most interesting features of the whole trip, which abounds in soul stirring scenery, and along the whole route from Santa Cruz to San José is very magnificent and romantic.

In the valley, within a short distance of Mr. De Wolfe's house, is a spring similar to the one before mentioned, and if I am not mistaken, Mr. De W. proposes by another season to have a house erected for the reception of invalids, etc. Should he do so, his place cannot fail to attract not only those in search of health, but those devotees who are ever ready and eager to discover new beauties and enchantments in nature. The writer had the pleasure of passing a few days very pleasantly at Mr. De W.'s house; who, with his family, endeavored to make his stay agreeable, and succeeded so well that it required quite an effort to tear himself away from such loveliness, but *necessitas nullum legem habet*. Before closing my remarks about Strawberry valley, I would say that rarely a place is found to be more happily named, as here are to be found the most delicious strawberries; certainly the finest grown in this county, and the writer failed during his stay in Santa Clara valley to find fruit there that would bear comparison with it.

Places of interest here mentioned are only a few of the many; and the visitor will require to be very industrious indeed, if he would visit them all in less than a week. Among others, the drive up the coast to Laguna creek is very attractive, and the natural bridge—a great curiosity—is well worth seeing; also the ruins situated in Scott's valley, which are by many pronounced a mystery, while others confidently maintain that they are the remains of some gigantic temple, erected centuries ago by the aborigines. Others again just as confidently maintain that they are nothing more than a mass of sand rock, which, through the influence of the elements, has assumed the grotesque and fantastic appearance it now bears. Without offering any opinion, the writer would recommend a visit, as they will not be only interesting to most people, but afford a great deal of food for thought and research.

The manufacturing interest, probably more than any other, supports the town of Santa Cruz. Here can be found powder-mills, paper-mills, tanneries, lime-kilns, sugar-mills, saw-mills, etc. No place in the State can offer more and better water privileges than can be found here. In nearly every ravine an excellent stream of water is to be had. The farming interest also is important, but not specially so, and, as a rule, the farmers in this vicinity appear to be an industrious and prosperous class. As the crops are looking very well, they all feel very happy and contented. The Grange here is in a very prosperous condition, and has a large number of members. The same cannot be said, however, of the Farmers' Club, a great many of the old members having joined the Order of Patrons of Husbandry.

A narrow-gauge railroad is in course of construction from here to Watsonville, and a force of 300 men are at present employed grading, bridge-building, etc.; and it is confidently expected that in three months 15 miles of the road will be in running order. A considerable portion of the iron is now here. The estimated cost of the road, when completed, is $280,000; the stock is all held here, the Watsonville people not being as enthusiastic as the Santa Cruz people over the railroad; F. A. Hihn is President, and Titus Hale, Treasurer. When this railroad is finished, it is expected that travel in this direction will greatly increase. At present the traveler can arrive by several different routes, all of them having their own special attractions, and each having a fair share of patronage. Were space more plentiful, I should like to say something about the redwood forests, but will have to defer it. I will merely state, however, that the patch of redwood here is considered the largest and best in the world, being some 50 miles long and 18 broad. The lumbering business is very extensive, and gives employment to vast numbers of men. Owing to low prices, however, a large number of mills are shut down this season.

Before closing my letter, I should mention that the town has every facility for taking care of quite a number of visitors, there being four or five hotels—the two principal ones being the St. Charles Hotel and the Pacific Ocean House; the former having a most excellent livery attached, and, being kept by W. N. Cummings, who is a good host and genial gentleman, will undoubtedly, if any of your readers will visit him, treat them well in every respect. More anon from Watsonville.

CHAS. T. BELL.

How our Swamp Land may be Reclaimed.

[Written for the PRESS.]

The Comparative Value.

Land of a similar nature and of equal productive capacity to the overflowed land of California sells readily in Holland and North Germany for from two hundred to eight hundred dollars per acre; in California it sells for less than one twentieth that amount, notwithstanding the greater difficulty of reclamation and of keeping in repair the works of reclamation, and the storms and rains which may come suddenly and with disastrous effect at any time and in any month of the year, in these European countries.

In the brief space allowed the writer in your journal it is impossible to give a satisfactory description of his observations upon the Delta of the Nile and the low lands of the European continent; and as your readers are probably acquainted with the characteristics of these countries, it becomes unnecessary. But that many persons in California do not seem familiar with the proper manner of reclaiming overflowed land, is obvious from the abortive efforts they have made in that direction.

The Difference between Tidal Overflow and the Overflow from Rivers.

It is very proper to make a distinction in the manner of enclosing land by dykes, when such land is subject only to tidal overflow, which may be for one, two or three hours twice a day, and with a drainage of several hours between each tide; for with such land the system of reclamation now adopted may give satisfactory results.

Very different must be the character of the dykes enclosing land subject at any time to an overflow which may continue for one or more weeks; for in the tide overflows drainage is effected twice a day, but in the overflow from the rivers, drainage can only be effected when the water falls below the lower level of the overflowed land.

There will probably be no serious damage ever resulting to either stock or crops upon land in Suisun bay, below Sherman Island, or upon the marsh land of the bay of San Francisco from defective levees.

On the other hand, the high waters in the rivers of California have this year clearly demonstrated how thoroughly improper has been the mode of dyking adopted in many places on the margins of these rivers.

Turf Levees Peculiar to California.

Outside of California the world does not present the picture of sane men being engaged in building levees of turf that will burn by fire, or float away by water. No bears ever worked so effectively in the stock market to depreciate values as the present owners of overflowed land have to render valueless their own lands.

The amount of money expended already by several parties in levecing with turf levees and in planting of seed, would, if wisely used, have given a permanent protection to their lands and crops, and they would not now have to contemplate grain almost ready for the sickle and bearing sixty bushels to the acre perishing because of a foot of water being over the land.

Subterranean Channels Under the Levees.

It is rare to find any land bordering water courses that will not have subterranean channels or cracks extending for some distance in the land. Old logs, decaying roots, often afford conduits for water; sometimes a subterranean drainage may have formed a channel, or the surface vegetation may have bridged over a crack, a beaver cut, or a small water course.

What is known as *float* land is found in Holland, Egypt and, perhaps, among all large bodies of overflowed lands. It is in most cases formed by aquatic plants taking root in land several feet below the surface, and sending to the surface their dense vegetation. Upon this dense surface vegetation, sufficient earth accumulates to sustain additional vegetation, and when this receives the deposit of the rivers sufficient to close the light from the subaqueous plants, they perish, and thus the bond between the float and the lower land becomes severed. With a great probability that the dense sod on the margin of the river has bridged over some cracks, roots, logs or water channels, is it wise to expect a levee will protect your land when built over such conduits?

The first rule laid down by continental engineers is to dig a narrow, deep ditch and fill it well in with good earth, and no levee is ever built in those countries without these precautions. Upon this ditch the center of the levee rests.

The Necessity of Trenching before Leveeing.

Grand Island is the most successful reclamation among the islands of the interior of the State. Its levee is of pure sediment, with neither sod or turf except a cross levee at the lower part of the island. This cross levee is defective because it is composed of turfy material, and because there are subterranean channels beneath this levee.

Upon this island they have found it necessary during the high water, in many places, to dig ditches beneath the inside of or under the levee, and fill them up with compact earth, and thus cut off the subterranean water channels. The experience of Grand Island confirms the importance of the first directions of the European engineers to "cut off your subterranean channels."

Levees Should be from Material Taken from the Bed of the River.

Nearly all the lands overflowed by the San Joaquin are composed of a light, turfy material which will float or burn. The value of this land is very great, as its productive capacity is not excelled by any in the world. The attempt to guard this land from overflow with levees composed of the material found on the spot has this year resulted in a failure. The proposition to take the turf nearer the edge of the bank to cover over the present levees will result in a greater failure. First, because there is not enough of pure sediment unmixed with vegetable matter to make a permanent levee, and its weight will tend to elevate the ditches. Second, the experience on Sherman Island has been, that cutting outside of turfy land tends to open subterranean conduits for water and to furnish starting points for fissures.

There is no material suitable for levees on the larger portion of the low lands of the San Joaquin river, unless that material is taken from the bottom of the river or sloughs.

Dredging, not Ditching, Machines Required.

Had the money and genius which has been expended in the creation of ditching machines been employed in building old-fashioned dredging machines, and had such machines been used in raising the bottoms of the rivers to make levees upon the land, then the reclamation of such land would have become a success.

Upon the Isthmus of Suez a large number of dredging machines were used, being more economical than the labor of fellahs, whose wages were much less than the wages we pay Chinamen. Those machines dug to the depth of 26 feet, and with their many buckets carried the dirt to such a hight that through sluices they cast it 200 or more feet from them on the land or in dump carts. In Holland they have many dredging machines digging out lakes and rivers, elevating the earth to a proper hight and casting it on land, thus forming levees.

As before stated, a small ditch is dug, into this ditch good earth is well stamped, and upon this the levee is constructed of earth, free of decomposing vegetable matter. The value of money in California has prompted men to disregard the experience of centuries in older countries. A few more failures and we will find that by borrowing the experience of such countries we would have saved money.

The Foundation of Levees should be in Ditches.

To reclaim the land of the San Joaquin river, heavy earth should be taken from the rivers and cast into their present ditches until a levee is raised over these ditches sufficiently high to protect the land.

It is well known that so tenacious is the turf on this river that the weight of no ordinary levee will compact the earth beneath, sufficient to obliterate the small channels which may be beneath the levee.

On the other hand, heavy earth cast into the present ditches will not have the resistance from the cohesion of the surface sod, but it will tend to bring the float land to its bearing, and close all communication between the outside and inside of the levee.

The objection urged to using the present ditches as a base for levees is that the amount of earth required will be too great, and that it can not be afforded at present.

To this we may reply that earth may be cast upon the land from the bottom of the rivers for about five cents per cubic yard, by the many bucketed dredging machines; whereas, the cutting of turf by Chinamen costs 10 cents. Further, it may be stated that overflowed land is valuable in proportion to the security to stock, crops and improvements. Land feebly leveed brings fear to settlers upon such land, and they hesitate long before they venture either to improve or cultivate, and they do neither as well as if they were acting upon a certainty. In Holland they reclaim land submerged, as the land in the bottom of the bay of San Francisco; but they reclaim such land in a manner to give them confidence; they then build towns of brick, 18 feet below the surface of the water they have excluded.

There is no body of land of greater productive capacity to be found on this earth than the land bordering on the rivers of California; and

yet, to save these lands from an overflow of three or four feet, which may come every three or four years, money is dealt out so sparingly as to render their so-called reclamation a *fraud* and a *deceit*.

To doubt the practicability of successfully and certainly reclaiming these lands, is to refuse to accept that which has been demonstrated for ages in other countries.

Cheaper to Reclaim by Levees than Pay Tribute to Railroads.

The interest of the money expended in reclaiming swamp lands is, as a general proposition, less than the amount paid to railroad companies by the owners of upland; for the swamp lands are accessible to sail vessels which will take the products of the soil to market for about one dollar per ton; whereas the average paid by farmers in the winter may be *three* or more dollars. An acre in the great valleys of this State which produces two tons of marketable produce, pays the interest on $40 for the transportation of that produce more than a similar acre of lowland does. If there is reason in this statement, surely the owner of lowland should not refuse to expend, if necessary, as much as $10 or $15 per acre to reclaim with certainty land that will produce double as much as the most favored upland.

By a latitude of expression we may say that upland in the interior is reclaimed and made available by railroads, to which they pay tribute to the extent of the interest on from $20 to $60, according to distance and the productions of each acre. The difference of cost of transportation is more than the interest on the cost of the most expensive reclamation which may be required on the most exposed swamp land.

If a company were guaranteed the privilege of transporting the products of the now submerged lands for a period of years at prices charged by the roads of the Sacramento and San Joaquin valleys, they could, with great profit to themselves, build all the levees required aud present them without cost to the owners of the land. W. M. RYER.

Letter From Motto Mosa.

EDITORS PRESS :—Fourteen months ago I was doing well as a store keeper in the towu of Merced, California; but, like many other young men, I wanted to do better, so I struck out for the country to locate a farm, and found myself in Texas, before I was ready to settle—and I would say to you—do not advise a young man to travel so far, or to go to Texas. Tell them they are in a golden country, where perseverance and energy will gain an independence quicker than anywhere else. For, as far as I can see, California contains all the good qualities of Texas, and a hundred fold more that Texas has not dreamed of. I am frequently asked: "Don't you think you have left a better country than you have found?" "Yes." After getting a piece of land selected for a homestead I wanted to know how to improve it to the best advantage, so I went to a book store to subscribe for the RURAL PRESS. To my surprise, the proprietor had never heard of our RURAL PRESS! As I did not know your terms, etc., I thought I would take a farm journal published iu the State, and was told that no paper on agriculture was published in Texas. Nor could I get a farm paper at all. I thought it very strange, settlements and farms all over the country, and not an agricultural paper to be had in the city of San Antonio.

The farming community of Western Texas, as a rule, possess ordinary intelligeuce, though most of them don't think anything worth knowing, outside of corn, cotton and sweet potatoes; beauty, taste or refinement are not much considered. The climate here is similar to yours. I have told my neighbors of the RURAL PRESS and they express a desire to see it. The book-man also asked as a favor to look at the paper if I get a copy. I want to subscribe for a farm journal and if you can send me a copy you will have me on your subscription list soon. If you think it worth while to send several copies, I will distribute them judiciously and get all the subscribers I can. When I was in the San Joaquin valley, with the farmers I often read yonr paper, and feel satisfied that it will take wherever it goes; and especially in a country like this where there are none, and where there is room for so much improvement.

We have the wild mustang grape, which grows very luxnriantly all through the woods. On being pressed the pulp shoots out the same as the Isabel grape. The inside of the skin is very smarting and puckering to the mouth. Can you give me a receipt for making wine from them? A man in the country has made wine, but it sours after standing a short period of time. Can you tell me how to keep it from souring? If you can and will, by letter or through your paper, you will oblige

CHAS. P. ELLIOTT.

Motto Mosa, Atascoso Co., Texas.

[Our correspondent can hardly expect to obtain any recipe for making good wine from the material described above. Even though the grape were a suitable variety, an uncongenial climate or certain properties in the soil may disqualify the grape for wine-making. In our issue of last week will be found a description of the process of making merchantable wine, contributed by T. S. Myrick, of Placer county.—EDS. PRESS.]

LETTER FROM KALAMAZOO, MICHIGAN.—EDITORS PRESS:—The weather has beeu very dry here but we now have some rain, and everything looks better. We are beginning to have a few potato bugs, but the wet weather will keep the vines growing. Potatoes have been very high this spring. Wheat is up to about $1.50 a bnshel. Hay has brought $26 at on lately. Corn has been 85 to 90cts a bushel. Beans $7 a bushel. Seed corn $2 a bushel. Oats are now looking very good, but it will be late for their harvest unless they are very short. Everyone is now saving everything to eat for next year's feed. I have let several have your PACIFIC RURAL to read, who praise it very highly. HENRY H. MAPER.

Kalamazoo, Mich., June 6.

THE VINEYARD.

The Location of Vineyards.

EDITORS PRESS:—There is a district in Hungary, in Europe, which is called Tokay, and there is a variety of the grape that is cultivated in this State which is named Flame Tokay. This district is in the foothills of the Carpathian mountains, above the large valley and extended plains of the river Theiss. The grape is extensively cultivated in Tokay, both for raisins and wine. The wine is branded Tokay; and, on account of the admirable location of the district and the peculiar composition of the monntainous soil, the wine is said to be the best that is produced in Europe. It is bought up in advance of the vintage, for years ahead, at fabulous prices, which only the nobility and gentry can afford to pay. Probably, none of this famous wine has ever been brought across the Atlantic. Also, in the valley of the Theiss, a common wine is made on nearly every farm, which is in general use by the peasantry, and which is as cheap in price as it is common in quantity. The difference in the quality and value of the Hungarian wines depends upon the location of the vineyards.

In all the countries along the northern shore of the Mediterranean sea, the grape is successfully cultivated; but the vineyards are generally in the mountainous districts, and nobody undertakes to manufacture a superior article of either raisins or wine from the grape that is raised on the alluvial bottoms of the rivers and water courses. We read of "the vine-clad hills of France," but not of the vine-clad bottomlands of France. We read of the vineyards and olive groves in all the foothills which encircle the snow-crested Alps, or that slope towards either sea from the classic Apennines, but not of the vineyards on the plains of Lombardy, except on frames or stilts. The raisin, wine, olive or fig, of commerce, is either raised or manufactured in mountainous districts, and only a cheap, poor and inferior article is produced on the broad savannahs of the rivers.

During the last ten years, it has been proved by successful experimeut and cultivation that California is as much the land of the grape as either France, Italy or Hungary. Aud, although the grape-vine will grow and flourish in the valleys which are swept by the bleak and periodical winds of the Pacific Ocean, or in the great valleys of the Sacramento and San Joaquin rivers, or on the "moving sands" of the Colorado, or on the high ridges of the Sierra Nevadas, it has nevertheless been found to be true that the quality of the fruit, and consequently of the wine that is made from it, depends upon the proper location of the vineyard and the experienced cultivation of the vine. No person, who makes any pretense whatever to agricultural science, will undertake to prove that a superior article of wine can be made from the grape that is raised on tule land, by any chemical process that is known in the adulterating or "doctoring" vocabulary. And it is surprising that an intelligent and discriminating public, as are the people of California, can be hoaxed and cajoled into the use and abuse, even, of villainous vinous compounds, when pure and good wine can be obtained. At the present time there are only about 40,000 acres of land in this State which are devoted to the grape culture, and there are only 30,000,000 grape-vines. During the last year, several vineyards that had been planted on low and damp soils, were dug up by the roots, and their places filled by other products better adapted to the peculiar soil and location. But it has been estimated that there are at least 8,000,000 acres of land in this State adapted to the culture of the vine. This great body of land, like a wide and extended belt, stretches aloug the western slope of the Sierras for at least 300 miles. This immense fruit belt has an elevation above tide water of from 500 to 2,500 feet. Here is the natural home of the grape-vine. At an elevation of from 1,000 to 2,000 feet, the wild grape-vine grows in the greatest luxuriance; and so, also, (without digression) do the wild plum, wild cherry, and thorn apple. (There are a dozen wild grape vines on my ranch that are this year loaded with fruit). Now, to continue the thread of argument, where the wild plant or vine is found on the bosom of Nature, there, precisely, is the proper and exact location for the cultivated one of the same species. Hence, as here in the foot-hills, the wild grape-vine is found to grow, flourish and bear fruit luxuriantly; so here in the foot-hills, also, is the place to domesticate the cultivated family of grapes. And, as on the tule lands, the natural production is grass, so there is the proper aud suitable place to raise the family of grasses. And, further, as in the great valleys of the State, the natural production is wild oats, so, also, there is precisely where to cultivate oats, barley, wheat and the entire kindred and relationship of grains.

But it is not contended or asserted, that everywhere on this great fruit belt of the Sierras, the best quality of grapes can be raised, or the best article of wine produced because, there is often a great difference in the flavor and boquet of wine that is made of the same variety of grapes, even on the same sectiou of laud. Yet, having determined to make a home in the foot-hills for the cultivation of fruit, and particularly of the grape, orange, almond, plum, prune, peach, fig, apricot, nectarine, pear or apple, somebody of the grand army of prospectors will locate on the particular soil where a vineyard can be established, and a quality of wine be produced that will equal or rival even the world-famous brand of Tokay of Hungary. There are over 70,000 acres of land in the fruit belt of Placer county, and not one-fourth of it is under cultivation. Here, land can be obtained of the Government for nothing, or at the highest figure, $2.50 per acre. T. S. MYRICK.

Auburn, Placer county, June 16, 1874.

A NEW MEDICINE FOR DISEASED GRAPE VINES.—The Abbé Rolland has communicated to the *Cultivateur de la Region Lyonnaise* an "infallible remedy" against the phylloxera, which, after two years' trial, he recommends "with confidence" to vine growers. It consists in inoculating the vine with the pure essence of *Eucalyptus globulus*, which has lately attracted so much attention in medical circles. A broad incision is made through the bark at the neck of the vine, in which a few drops of the essence are deposited by means of a small camel-hair brush. The result is, that in about three days the phylloxera entirely disappears, while the vine is not in the least injured by the operation. The incision may be made through auy other part of the bark with equal success, but the result is more speedily attained the nearer it is made to the roots.

CHEAP PROTECTION FOR VINES.—Take an old cheese box, take out the bottom, remove the hoop from the cover, and get some mosquito netting and place over the box, and the hoop will hold the netting in its place.

CATTLE BREEDERS.

Colonel Younger on Short-horns.

EDITORS PRESS:—Great minds think alike, said I to myself, as I read the first four paragraphs under the above heading in your last issue, aud recalled to mind Dr. A. P. Stevenson's address on "Short-horns and their Points," before the Indiaua State Short-horu Convention, at Indianapolis, May 21st, 1872.

On proceeding a little further, however, I began to suspect that in this particular instance I might be mistaken, and on reperusing the whole article, I came to the conclusion that a breeder who could mix up such outrageous nonsense as therein occurs, with some such wholesome truths, must have borrowed the latter from a second party. I sought my agricultural files and naturally turned to the address above mentioned. Let us see how my efforts were rewarded:

Yonnger speaks—The head should be small, broad above the eyes, a well-developed brain, etc.

Stevenson echoes (?)—The head should be small; above the eyes, wide, giving space for large cerebral development.

Says Yonnger—The body should be nearly square.

Answers Stevenson—Ditto, ditto, ditto.

And, continues Younger, still referring to the body, should be rather barrel-shaped; the ribs rising well from the spine, rounding and meeting below, give ample room for the free action of lungs and heart.

Whilst Stevenson expresses himself thus—The ribs rising well from the spine, giving to the body a rouud or barreled shape, afford much more room to the organs within, the heart and lungs, etc.

Again shouts Younger—The line of the back should be straight and level, extending out to the setting on of the tail.

And echo (Stevenson) answers—The back should extend out straight to the setting on of the tail.

Adds Younger—The thigh should be straight nearly up to the tail.

Acquiescent Stevenson replies—The thigh should pass up to this point (the setting on of the tail) nearly straight.

Thunders Younger—Legs short, and should stand well under the beast.

An echo from Indiana—The legs should be short; should stand well under the animal.

Younger furious—Broad in the chops.

Yes! Yes! Oh, Yes! Says Steveuson—Broad in the crops.

Younger—Horns small and of a waxy color; no black tips.

Stevenson (mildly)—Horns should be clear, without black tips or any black marks whatever. Some say of a waxy color.

Younger (with one eye closed, his right hand raised and an imaginary cowhide between his thumb and dexter finger)—By the touch the breeder knows the quality of the beef and the aptitude to fatten.

Stephenson (pinching the calf of his leg)—By the touch the butcher ascertains beforehand the quality of the flesh; hy it the hutcher ascertains the aptitude to fatten.

Sapient Younger—It is an index to the constitution, but is the most difficult to acquire. Nothing but long practice and close attention will give that knowledge.

Exhausted Stevenson — Of all the qualities of the ox, this is probably the most difficult to understand; it will require much practice to become an adept in this knowledge.

What a Farce!

I do not think, Messrs. Editors, there is any doubt now whence the wholesome truths were derived. The above are Colonel Younger's happiest efforts at clippiug.

In the third paragraph he tells us that "the nostrils should be distended; the jaws distinct and clean." What does he mean, and what would he have us, and more particularly the members of the San Francisco Club, understand hy the "hind legs coming up to the middle of the thigh?"

Colonel Younger next proceeds to inform us, there now are two prominent forms of Short-horns, and describes them (I will not take up your valnable space hy repeating the stuff. I refer readers to your last issue). I wonder what is next to come! If each defect in an animal is to constitute a different form in a class, then how many types of Short-horns have we already got? (That's a conundrnm.)

Colonel Younger very truthfully asserts that to be successful in breeding this noble beast, we must acquire a full knowledge of the exact form and the relative proportions one part should have to the other, so that when looking at any Short-horn we shall know whether he comes up to the standard in form of what a thoroughbred Short-horn should be at any age.

Go, Colonel, and study your precepts before you again favor us with a lecture on this subject; and in the meantime, Messrs. Editors, you can do nothing better for the Short-horn interests in this State than to reprint the whole of Dr. Stevenson's address, part whereof appears to so great disadvantage iu your last issue. Yours, SOLANO.

SHORT-HORN bulls sold by S. S. Matthews, of Kansas City, Mo., on June 17th, 1874: Duke of the Sierras, born in 1872, purchased by John Sullivan of Sau Francisco for $160 in gold coin; Humboldt Duke, born in 1872, purchased by B. Jacques of Santa Barbara for $100; Duke Buckingham, born in 1872, purchased by J. Heinlein of San José for $100; Duke of Gemini, born in 1872, purchased by F. L. Such & Co. of San Francisco for $125; Dawsou Duke, born in 1873, purchased by E. W. Burr of San Francisco for $125; 2d Duke of Noxubee, born in 1872, purchased by C. A. Murray of San Mateo for $200; Prince William, born in 1871, purchased by M. L. Brittan of Redwood City for $200; Red Neck Duke, born in 1873, purchased by F. L. Such & Co. of San Francisco for $160; Balanger, born in 1873, purchased by J. H. Coombs of San José for $150; Harper Duke, born in 1872, purchased by B. Jacques of Santa Barbara for $100; Dandy Clay, born iu 1873, purchased by Joseph Kay of San José for $145; Charley, born in 1872, purchased by D. S. McLellan of Sau Mateo for $100. Say 12 bulls for an aggregate of $1,665, or an average of $138.75.

HOG CHOLERA.—A. G. Wallace, of Tuscola, Ill., recommends the following as a feed for hogs when the cholera is raging: Use two swill barrels. Mix a feed of hran, shorts, or middlings, and water and feed only after fermentation. This mixture soon becomes sour standing in the sun and is devoured eagerly by the hogs. Feed once a day through the season when hogs are most likely to have the disease. By using two barrels, and mixing in one in time for fermentation to take place before the supply is exhausted in the other, the same degree of "sourness" is maintained. He has fed this regularly for five years in the cholera season, and has not lost a single auimal. Others who have tried it have met with the same success. Mr. Wallace has in the same time lost no chickens or turkeys by disease, and he attributes their freedom from discase to the use of the fermented food. The cholera has made sad havoc among the hogs in Central aud Southern Illinois this season, and as all the old preventives and remedies have failed, the very simple one above given may prove of value.—*Agriculturist.*

HINTS TO BREEDERS. — The importance of selecting the right dam in breeding cannot be too strongly urged upon all who are endeavoring to improve our breeds of horses; but there is also a point which breeders in general have not cousidered sufficiently in their efforts to produce excellent animals, and that is the natural disposition of both sire and dam. Just as the gentleman is more likely to be courageous than the clown, the carefully-bred horse should not only have the capacity to go over a given space in a given time, and the endurance to allow him to do it when asked, but he should have all the gentleness and capacity for learning any useful habit or work that is ascribed to the thoroughbred Arabian. A bad temper will not only make a horse unpleasant to use, but will lead him to waste his strength. —*Palgrave.*

SELF-MILKING is prevented by a Chautauqua farmer, by the application of pine tar to the teats a few times.

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The California State Grange Headquarters are st room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

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ELK RIVER GRANGE, Eureka, Humboldt Co.: Theodore Meyer, Master; D. A. DeMerritt, Ssc'y.
FERNDALE GRANGE, Ferndale, Humboldt Co.: F. L Boynton, Mastsr; G. W. Griffith, Seo'y.
KIWELAITAH GRANGE, Arcata, Humboldt Co.: Lewis R Wood, Master; D. D. Averill, Ssc'v.
MATTOLE GRANGE, Petrolia, Humboldt Co.: Stephen Goff, Master; D. J. Hornson, Sec'y.
ROHNERVILLE GRANGE, Rohnerville, Humboldt Co.: B. T. Jameson, Mastsr; H. S. Oase, Secrstary.
TABLE BLUFF GRANGE, Tabls Bluff, Humboldt Co.: Jackson Sawyer, Master; B. H. O. Pollard, Ssc'y.

INYO COUNTY.

BISHOP'S CREEK GRANGE, Bishop's Creek, Inyo Co.: T. J. Furbee, Master; W. T. Wiswall, Sco'y.
INDEPENDENCE GRANGE, Independence, Inyo Co.: Josiah Earl, Master; J. B. Write, Sec'y.
LONE PINE GRANGE, Lone Pins, Inyo Co.: C. L. Jackson, Mastsr; R. A. Loomis, Sec'y.

KERN COUNTY.

BAKERSFIELD GRANGE, Bakersfisld, Kern Co: S Jewett, Master: Jerome Troy, Secretary.
CUMMINGS' VALLEY GRANGE, Tebaiobipa, Kern Co.: Geo. W. Thompson, Mestsr; T. M. Yatss, Sso'v.
LINN'S VALLEY GRANGE, Glenvills, Kern Co.: A. B. Du Broutz, Mastsr; S. E. Reed, Sso'y.
NEW RIVER GRANGE, P. O. Bakersfisld, Ksrn Co: John G. Dawes, Master; Jas. Dixon, Secretary.
PANAMA GRANGE, P. O. Bakersfield, Kern Co.: P. D. Rosb, Master; J. F. Gordon, Sec'y.
TEHAICHIPA GRANGE. Tshaichipa, Karn Co.: John Norboe, Master; James Prescott, Ssc'y.
WELDON GRANGE, Weldon, Kern Co.: R. T. Melvin, Mastsr; J. T. H. Gray, Ssc'y.

LAKE COUNTY.

GUENOC GRANGE, Guenoc, Lake Co.: H. A. Oliver, Master; Thos. H. McGreer, Sec'y.
KELSEVILLE GRANGE, Kelseyville, Lake Co.: D. P. Shattuck, Mastsr; T. Ormston, Seo'y.
LAKEPORT GRANGE, Laksport, Lake Co.: C. Cutter Master; N. Phelan, Seo'y; J. W. Howard, Local Agent.
LOWER LAKE GRANGE, Lower Lake, Lake Co.: A. E. Noel, Master; Horace Stow, Sec'y.
UPPER LAKE GRANGE, Upper Lake, Leke Co.: D. V. Thompson, Master; D. Q. McCarty, Seo'v.

LOS ANGELES COUNTY.

ALLIANCE GRANGE, El Monts, Los Angeles Co.: S. S. Reeves, Master; J. W. Marsball, Seo y.
AZUSA GRANGE, El Monts, Los Angsles Co.: W. W. Maxey, Master; J. C. Pbeston, Sec'y.
COMPTON GRANGE, Compton, Los Angslss Oo: C. W. Coltren, Master; J. A. Walker, Sec'y.
ELMONTE GRANGE, Los Angeles Co.: G. C. Gibbs, Master; P. O., Los Angelcs. J. H. Gray, Sec'y; P. O., El Monte.
ENTERPRISE GRANGE, Los Angelss, Los Angeles Co.: A. M. Southworth, Master; W. T. Henderson. Sec'y.
EUREKA GRANGE, Spadra, Los Angelss Co.: T. O. Tanner, Mastsr; Joseph Wright, Ssc'y.
FAIRVIEW GRANGE, Anahsim, Los Angelss Co: Edward Evey, Master; J. M. Guinn, Sec'y.
FLORENCE GRANGE, Los Angsles Los Angsles Co.: Josiah Russell, Master; William Porter, Sec'y.
FRUITLAND GRANGE, Tustin City, Los Angeles Co; N. O. Stafford, Master: G. L. Russell, Sso'y.
LOS ANGELES GRANGE, Los Angelss Co.: T. A. Garey Master; T. D. Hancoce, Sec'y.
LOS NIETOS GRANGE, Los Nistos, Los Angsles Co.: J. F. Marquis, Master; P. O., Los Angsles; W. S. Reavis, Sec'y: P. O., Anaheim.
NEW RIVER GRANGE, Los Neitos P. O., Los Angeles Co.: Willis Newton, Master; S. G. Bakkr, Sec'y.
ORANGE GRANGE, Richland, Los Angsles Co.: Joseph Beach, Master; J. W. Anderson, Ssc'y.
SILVER GRANGE, Los Nettos, Los Angeles Oo.: H. L. Montgomery, Master; W. P. McDonald, Sec'y.
SPADRA GRANGE, Spadra, Los Angeles Co.: A. T. Currier, Mastsr; Jos. Wright, Sso'y.
VINELAND GRANGE, Tustin City, Los Angelss Co.: Dr. A. B. Haywoon, Mastsr; L. S. Robinson, Ssc'y.
WESTMINISTER GRANGE, (Anebsim, P. O.) M. B. Obaig, Master; Henry Stephens, Seo'y.

MARIN COUNTY.

NICASIO GRANGE, Nicasio, Marin Co.: H. T. Taft, Mestsr; J. W. Noble, Sec'y.
POINT REYES GRANGE, Point Reyes, Marin Co.: N. H. Stinson, Master; A. H. Stinson, Sec'y.
TOMALES GRANGE, Tomalss, Marin Co.: Wm. Vanderbilt, Master; R. H. Prince, Sec'y.

MENDOCINO COUNTY.

CAHTO GRANGE, Cahto, Mendocino Co.: R. M. Wilson, Master; J. P. Simpson, Sso'y.
LITTLE LAKE GRANGE, Little Laks, Mendocino Co.: B. G. Mast, Master; W. A. Wright, Seo'y.
MANCHESTER GRANGE, Manchsster, Mendocino Co.: Joseph Wooden, Mastsr; B. F. McClure, Sec'y.
POTTER VALLEY GRANGE, Pomo, Mendocino Co.: J. Mewhinney, Master; Geo. B. Nichols, Sec'y.
SANEL GRANGE, Sanel, Mendocino Co.: Alex. Marshall, Master; Jos. A. Knox, Sec'y.
UKIAH GRANGE, Ukiah City. Mendocino Co.: W. D. Write, Mastsr; A. O. Carpenter, Sec'y.

MERCED COUNTY.

BADGER FLAT GRANGE, Kreyenhagen's P. O., Merced Co., *via* Gilroy: A. P. Merritt, Master; A. T. Fowler, Sec'y. Agent, W. F. Clark.
COTTONWOOD GRANGE, Merced Co.: J. L. Crittenden, Master; J. J. Doyle, Ssc'y. Address of Master and Sec'y., Hill's Ferry, Stanislaus Co.
HOPETON GRANGE, Hopeton, Mersed Co.: John Rud Dole, Master; T. Eagleon, Sec'y.
LOS BANOS GRANGE, Kreysnhagen's P. O., Merced Co., *via* Gilroy: Wm. M. Viney, Master; A. McGlashan, Sec'y.
MERCED GRANGE, Mercsd, Mercsd Co.: W. E. Elliot, Master; F. E. Tadlock, Jr., Ssc'y. Agent, W. P. Fowler
PLAINSBURG GRANGE, Plainsburg, Mercsd Co.: P. Y. Welch, Master; J. E. Wilcox, Sec'y.
SNELLING GRANGE, Snelling, Mercsd Co.: Daniel Yeizer, Mastsr; W. L. Hamlin, Sec'y.

MONTEREY COUNTY.

HOLLISTER GRANGE, Hollister, Montsrey Co.: H. Pomeroy, Master; Wm. H. Oliver, Sec'y. J. D. Fowler, Local Agent.
MORNING STAR GRANGE. Castrovills, Monterey Co.: O. E. Williams, Master; F. Blakie. Seo'y.
RISING STAR GRANGE, Panoohe Valisy, Monterey Co.: C. Valpy, Mastsr; J. W. Craycroft, Ssc'y
SALINAS GRANGE, Salinas, Montersy Co.: O. S. Abbott, Master; W. L. Carpenter, Ssc'y. Agsnt, W. L. Carpenter.

NAPA COUNTY.

BERRYESSA GRANGE, Monticello, Napa Co.: J. W. Smittle, Master; O. Schetter, Seo'y.
CALISTOGA GRANGE, Calistoga, J. N. Bennett, Master; L. Hopkins, Seo'y.
NAPA GRANGE, Napa City, Napa Co.: James M. Trompson, Mastsr; Manuel Eyre, Ssc'y.
POPE VALLEY GRANGE, Pope Valley, Napa Co.: J. A. Vanarsdale, Master; O. A. Booth, Seo'y.
RUTHERFORD GRANGE, Yountvills, Napa Co.: G. S. Burredge, Master; H. W. Crabb, Sec'y.
ST. HELENA GRANGE, St. Helsna, Napa Co.: J. H. Allison, Mestsr; J. L. Edwards, Ssc'y.
YOUNTVILLE GRANGE, Yountville, Napa Co.: J. M. Mayfield, Master; Frank Griffin, Ssc'y. Agent, J. M. Mayfield.

PLACER COUNTY.

LINCOLN GRANGE, Lincoln, Placsr Co.: M. Waldron, Master; J. S. Marriner, Sec'y.
ROSEVILLE GRANGE, Roseville, Placsr Oo.: A. D. Nehr, Mester; I. N. Nehr, Ssc'y.
SHERIDAN GRANGE, Sberidan, Placer Co.: O. H. Long, Master; T. J. Lewis, Sec'y.

SACRAMENTO COUNTY.

AMERIOAN RIVER GRANGE, Brighton, Sacramsnto Co.: E. G. Morton, Sr., Master; Cyrus Wilson, Ssc'y.
COSUMNES GRANGE, Elk Grove, Sacramsnto Oo.: James A. Elder, Master; J. H. Ateins, Sec'y.
ELK GROVE GRANGE, Elk Grove, Sacramento Co.: Obadiar S. Freeman, Master: Delos Gage, Sec'y.
ENTERPRISE GRANGE, P. O., Brigbton, Sacramento Co.: J. M. Bell, Master; Morris Toomey, Sec'y.
FLORIN GRANGE, San Joaquin Townsbip, Sacramento Co.: Caler Arnold, Mester; Wm. Scholefield, Seo'y.
FRANKLIN GRANGE, Franklin, Sacramento Co.: Amos Adams, Master; P. K. Beckley, Sec'y.
GALT GRANGE, Galt, Sacramento Co.: J. C. Sawyer, Master; J. L. Fifield, Ssc'y.
GEORGIANA GRANGE, Rio Vista, Solano Oo: F. M. Kittrell, Master; Geo. A. Knott, Sec'y.
SACRAMENTO GRANGE, No. 12, Sacramento, Sacramento Co.: W. S. Manlove, Mastsr; A. S. Greenlaw, Sec'y.
SHERMAN ISLAND GRANGE, Emmatown, Sacramento Co.: J. M. Upham, Master; W. M. Robbins, Ssc'y.
WALNUT GROVE GRANGE, Courtlend, Sao amento Co.: Solomon Reenyon, Master; J. V. Pratber, Ssc'v.

SAN BENITO COUNTY.

MOUNTAIN GRANGE, San Benito Oo.: S. Kennedy, Master; J. W. Mathews, Sec'y.

SAN BERNARDINO COUNTY.

RIVERSIDE GRANGE, Riverside, San Bernerdino Co.: E. G. Browne, Master; W. W. Kimball, Ssc'y.
SAN BERNARDINO GRANGE, P. O., San Bernerdino, San Bernardino Co.: R. Shelton, Master; I. Broodhurst, Ssc'y.

SAN JOAQUIN COUNTY.

ATLANTA GRANGE. Moreno, San Joaquin Oo.: W. J. Campbell. Master; Mrs. J. W. Moore, Seo'y. P. O., Morano, San Josquin Co.
OASTORIA GRANGE, Lathrop, San Joaquin Co.: H. W. Cowell, Master; J. Straran, Seo'y.
COLLEGEVILLE GRANGE, Collegeville, San Joaqnin Co.: Alex. Mayberry, Master; J. O. McIntosb, Seo'y.
ELLIOT GRANGE, Elliot, San Joaquin Co.: Henry H. West, Master; N. S. Misiner, Sso y.
FARMINGTON GRANGE, Farmington San Joaquin Co.: J. M. Broves, Mester; E. O. Lono, Scc'y.
GRAYSON GRANGE, Grayson, San Joaquin Oo.: T. O. Brown, Master; Geo. H. Copeland, Sec'y.
LIBERTY GRANGE, Acampo, San Joaqnin Co.: Justus Schomp, Master; J. J. Emslie, Sso'y.
LINDEN GRANGE, Linden, San Joaqnin Co.: John Wasley, Master; James Wasley, Seo'y.
LOCKEFORD GRANGE, Lockeford, San Joaquin Co.: O. C. Holman, Mastsr; Sol. S. Stewart, Sec'y.
LODI GRANGE, Lodi, San Joaquin Co.: J. W. Kearny, Mastsr; Mrs. Nellie Crouch, Sec'y.
RUSTIO GRANGE. Lathrop, San Joaquin Oo.: J. A. Shepherd, Master; Henry Moore, Sec'y.
STOCKTON GRANGE, Stockton, San Joaquin Co.: Wm. L. Overhiser, Master; Wm. G. Phelps, Ssc'y.
WEST SAN JOAQUIN GRANGE, Ellis, San Joaqnin Co.: M. Lammers, Master; Geo. E. McStay, Sso'y.
WILDWOOD GRANGE, Wildwood School House, San Joaquin Co.: Jos. Leighton, Master; A. B. Munson, Seo'y.
WOODBRIDGE GRANGE, Woodbridge, San Joaquin Co.: J. L. Hutson, Master; A. S. Tromas, Sso'y.

SAN LUIS OBISPO COUNTY.

ARROYO GRANDE GRANGE, Arroyo Grands, San Luis Obispo Co.: W. H. Nelson, Master; D. F. Newsom, Sec'y.
CAMBRIA GRANGE, Cambria, San Luis Obispo Co.: C. H. Ivins, Mastsr: Herbert Olmstead, Sso'y.
MORO CITY GRANGE, Moro, San Luis Obispo Co.: A. J. Mothersead, Master; H. Y. Stanley, Sec'y. Agent, A. J. Mothersead.
OLD CREEK GRANGE, Old Oreek, San Luis Obispo Oo.: Isaac Flood, Mastsr: R. M. Preston, Sec'y.
PASO ROBLES GRANGE, Paso Robles, San Luis Obispo Co.: H. W. Rhyne, Master; J. P. Moody, Sec'y.
SAN LUIS OBISPO GRANGE, San Luis Obispo, San Luis Obispo Co.: Wm. Jackson, Master; E. L. Reed, Sec'y.
SANTA MARIA GRANGE, Suey Station, San Luis Obispo Co.: Joel Miller, Master: M. D. Miller Sec'y.

SAN MATEO COUNTY.

OCEAN VIEW GRANGE. Ocean View, San Mateo Co.: I. G. Knowles, Master; Edward Robson, Sec'y.
PESCADERO GRANGE, Pescadero, San Mateo Co.: B. V. Weeks, Mestsr: H. B. Sprague, Sec'y.
SAN MATEO GRANGE, San Mateo Co.: A. F. Green, Mastsr; W. H. Lawrence, Sec'y.

SANTA BARBARA COUNTY.

CARPENTERIA GRANGE, Carpenteria, Santa Barbara Co.: O. N. Cadwell. Master; G. E. Thurmand, Ssc'y.
CONFIDENCE GRANGE, Guadaloupe, Santa Barbara Co.: A. Copeland, Master; J. T. Austin, Seo'y.
SANTA BARBARA GRANGE, Santa Barbara, S. B. Co.: O. L. Abbott, Mastsr; O. Kenney, Sec'y.

SANTA CLARA COUNTY.

GILROY GRANGE, Gilroy, Santa Clara Co.: W. L. Angney, Master; H. Coffin, Sec'y.
MAYFIELD GRANGE, Mayfield, Santa Clara Co.: F. W. Weissbaar, Master; Jas. M. Pitman, Ssc'y.
SAN JOSE GRANGE, No. 10, San Jose, Santa Olara Co: Wm. Erkson (P. O. Alviso), Mastsr; Miss Jettoba Watkins, Ssc'y.
San Jose. Agent, J. W. Herndon.
SANTA CLARA GRANGE, Santa Clara P. O., Santa Olara Co.: H. M. Leonard, Master; I. A. Wilcox, Ssc'y.
SARATOGA GRANGE, Saratoga, Santa Olara Co.: Francis Dresser, Mastsr; Miss Jennie Farwell, Sec'y.

SANTA CRUZ COUNTY.

BEN LOMOND GRANGE, Santa Crnz Co.: H. H. Buckles, Master; Chas. Craghill, Scc'y.
PAJARO GRANGE, P. O., Watsonville. Santa Crnz Co.: D. M. Clough, Master; G. W. Roadhouse, Seo'y and Agent.
SANTA CRUZ GRANGE, Santa Cruz: G. O. Wardwell, Master; J. W. Morgan, Seo'y.
WATSONVILLE GRANGE, Watsonville. J. McCallam Master; A. F. Richabdson, Sso'y.

SHASTA COUNTY.

COTTONWOOD GRANGE, Cottonwood, Shasta Co.: G. G. Kimball. Master; John Barry, Ssc'y.
REDDING GRANGE, Redding, Shasta Co.: Joseph F. Dinsmore, Master; Samuel J. R. Gilbert, Sec'y.

SOLANO COUNTY.

BINGHAMPTON GRANGE, Bingbampton, Solano Co.: Albert Bennett, Master; Edgar A. Beardsley, Sec'y.
DENVERTON GRANGE, Denverton, Solano Co.: J. B. Carrington Master; G. O. Arnold, Ssc'y.
DIXON GRANGE, Dixon, Solano Co.: J. C. Merryfield, Master; James A. Ellis, Sec'y.
ELMIRA GRANGE, Vaca Station, Solano Co.: J. A. Olark, Master; M. D. Cooper, Seo'y.
MONTEZUMA GRANGE, Collinsvills, Solano Co.: Thos. T. Hooper, Master; O. Knox Marshall, Sec'y.
RIO VISTA GRANGE, Rio Vista, Solano Co.: A. B. Alsip, Master; J. H. Gardner, Sso'y.
ROCKVILLE GRANGE, Cordelia, Solano Co.: W. A. Lattin, Master; J. R. Morris, Sec'y.
SUISUN VALLEY GRANGE, Suisun, Solano Co.: J. M. Lemmon, Master; A. T. Hatch, Sec'y.
VACAVILLE GRANGE, Vacavills, Solano Co.: E. R. Thurbur, Master; Oscar Dobbins, Seo'y.
VALLEJO GRANGE, Vallejo, Solano Co.: G. O. Peabson, Master; Chas. B. Deming, Sec'y.

SONOMA COUNTY.

BENNETT VALLEY GRANGE, Santa Rosa, Sonoma Co.: I. De Turk, Master; J. H. Plank, Sso'y.
BLOOMFIELD GRANGE, Bloomfield, Sonoma Co.: Wm. H. White, Master; A. B. Glover, Sso'y.
BODEGA GRANGE, Bodega, Sonoma Co.: E. S. Purrine Master; J. Wilkinson, Seo'y.
OLOVERDALE GRANGE, Cloverdals, Sonoma Co.; Chas. H. Cooley, Master; J. B. Cooley, Sso'y.
GEYSERVILLE GRANGE, Gayserville, Sonoma Oo.: Calvin M. Bosworth, Master; R. R. Leigh, Sec'y.
HEALDSBURG GRANGE, Healdsburg, Sonoma Co.: Charles Alexander, Master; Mrs. S. A. Peck, Seo'y. Agent, P. S. Peck.
PETALUMA GRANGE, Petaluma, Sonoma Co.: L. W. Walker, Master; D. G. Healn, Sec'y. Agent, W. M. Hill.
SANTA ROSA GRANGE, Santa Rosa, Sonoma Co.: Geo. W. Davis, Mester; J. A. Obreen, Sec'y.
SEBASTOPOL GRANGE, Sebastopol, Sonoma Co.: M. O. Hicks, Master: Joseph Porrinoton, Sec'y.
SONOMA GRANGE, Sonoma Oo.: P. O., Sobome, Sonoma Co.: Wm. McP. Hill, Master; W. A. Berry, Sec'y.
TWO ROCK GRANGE, Two Rock, Sonoma Co.: S. L. Barlow, Master; Howard Andrews, Sec'y.
WATERFORD GRANGE, Waterford, Stanislaus Oo.: R. R. Warder, Mester; W. O. Collins, Seo'y.
WINDSOR GRANGE, Windsor, Sonoma Co.: A. B. Nalley, Master: J. H. McClelland, Ssc'v.

STANISLAUS COUNTY.

BONITA GRANGE, Crow's Landing, Stanislaus Co.: J. W. Treadwell, Mastsr; A. B. Crook, Seo'y.
CERES GRANGE, Wsstport Precinct, Stanislaus Co.: W. B. Harp, Master; C. N. Whitmore, Sso'y.
OAK DALE GRANGE, Oak Dale, Stanislaus Co.: A. S. Emery, Master; O. B. Inoalls, Sso'y.
ORISTIMBA GRANGE, Hill's Ferry, Stanislaus Co.: W. J. Miller, Master; Tros. A. Chapman, Seo'y.
SALIDA GRANGE, No. 8, Modssto P. O., Stanislaus Oo.: B. F. Parees, Master; A. H. Elmore, Sec'y.
STANISLAUS GRANGE, Modesto, Stanislaus Co.: J. D. Spencer, Master; Vital E. Bangs, Sec'y.
TURLOCK GRANGE, Turlock, Stanislaus Co.: A. S. Fulkerth, Master; W. S. Robinson, Ssc'y.

SUTTER COUNTY.

SOUTH SUTTER GRANGE, Pleasent Grove, Sutter Co.: Thos. Boyd, Master; Alex. Donaldson, Seo'y.
SUTTER GRANGE, Msridian, Sutter Co.: W. O. Smith, Master; M. O. Hungerford, Ssc'y.
YUBA OITY GRANGE, Yuba City, Sntter Co.: Geo. Ohleyer, Master; S. R. Crandler, Seo'y.

TEHAMA COUNTY.

FARMINGTON GRANGE, Farmington, Tebama Co.: Addison J. Loomis, Master; S. H. Loomis, Seo'y.
NEW SALEM GRANGE, Paskento, Tshama Co.: Oliver Harris, Master; J. R Whitlock, Seo'y.
RED BLUFF GRANGE, Red Bluff. R. H. Blossom, Master; John Curtis, Sso'y.

TULARE COUNTY.

CHRISTMAS GRANGE, P. O., Visalia, Tulare Co.: A. B. Corey, Master; W. H. Stuart, Sec'y.
DEEP CREEK GRANGE, Fermersville: W. G. Pennebaker, Master; F. G. Jefferds, Ssc'y.
LAKE GRANGE, Kingston: M. S. Babcock, Master; E. J Benedict, Seo'y.
TULARE GRANGE, Tulare City, Tulare Co.: D. E. Wilson, Master: Victoria Wright, Seo'y.
TULE RIVER GRANGE, Portersvills, Tulars Co.: G. A. Williamson, Mester; N. T. Blair, Sec.
VISALIA GRANGE, Visalia, Tulare Co.: Wiley Watson, Master; H. G. Higbie, Sec'y.
WOODVILLE GRANGE, Woodville, Tulare Co.: J. A. Slover, Master; J. Stewart, Sso'y.

TUOLUMNE COUNTY.

SONORA GRANGE, Sonora, Tuolumns Co.: S. S. Turner, Master; R. F. Williams, Seo'y.

VENTURA COUNTY.

OJAI GRANGE, San Buenaventura, Ventura Co.: O. E. Scule, Master; Joseph Hobart, Sso'y.
PLEASANT VALLEY GRANGE, Pleasant Valley, Ventura Co.: D. Rondebush, Master; B. Browning, Seo'y.
SAN PEDRO GRANGE, San Bnenavsntura, Ventura Co.: J. Y. Sanders, Master; D. D. Nenre, Sec'y.
SATICOY GRANGE, P. O., San Buenaventura, Ventura Co.: Milton Wasson, Master; E. A. Duval, Sec'y.
SESIPE GRANGE, Ventura Co.: S. A. Guiberson, Master; Thos. Marple, Sec'y.
VENTURA GRANGE, San Bnena Ventura, Ventura Co.: J. Willett, Master; Chas. S. Prebsle, Sec'y.

YOLO COUNTY.

ANTELOPE GRANGE, W. J. Olark, Master; C. L. N. Vaugen, Sec'y: P. O. Antelope, Yolo Co.
BUCKEYE GRANGE, Yolo Co.: P. O., Buckeye, Yolo Co. Wm. Sims, Master; L. Moody, Sec'y.
CACHE CREEK GRANGE, Caohe Creek, Yolo Co.: D. B. Hurlburt, Master; L. D. Stephens, Sso'y.
CAPAY VALLEY GRANGE, Capay, Yolo Co.: R. R. Darby, Master; P. M. Savage, Sso'y.
DAVISVILLE GRANGE, Devisvills, Yolo Co.: Chas. E. Green, Master; John Krimmer, Sec'y.
HUNGRY HOLLOW GRANGE, P. O., Oat Valley, Yolo Co.: G. L. Parker, Master; C. O. Perkins, Sec'y.
WEST GRAFTON GRANGE, Yolo, Yolo Co.: A. W. Mobris, Master; Geo. W. Pabs, Seo'y.
YOLO GRANGE, Woodland, Yolo Co.: W. M. Jackson Master; D. Scbindler, Seo y. Agent, W. M. Jackson.

YUBA COUNTY.

MARYSVILLE GRANGE, Maryeville, Yuba Co.: O. G. Bockius, Master; Jas. M. Outts, Sec'y.

Nevada Subordinate Granges.

RENO GRANGE, Reno, Nev.: A. J. Hatch, Master; R. H. Kinney, Seo'y.
EAGLE VALLEY GRANGE. ———, Nev.: G. W. Chedio, Master; O. A. F. Gilbert, Sec'y.
CARSON VALLEY GRANGE, Genoa, Nev.: R. J. Livingston, Master; J. S. Child, Sso'y.
WASHOE VALLEY GRANGE, Franktown, Nev.: Elias Owens, Master; G. D. Winters, Seo'y.

☞ Deputies who organize new Grauges are requested to send this list of officers, and the names of all obarter members, with other facts of interest, for fres publication in the Rural Press, as early as possible.

Grange Discussions. — The Sacramento Grange, at its last meeting, resolved that at its meetings hereafter, one of the regular orders of business should be the answering of pertinent agricultural questions, to be asked by its members, and the discussion of practical agricultural, horticultural and flo

The Grange and Politics.

The twelfth article of the National Constitution of the Patrons of Husbandry forbids political discussion in the work of the Order, which is just and right, and the citizen, when he becomes a Patron, surrenders the right of political discnssion in the Grange; but as a citizen, he surrenders no right belonging to him as such, and as the franchise is the highest right of the citizen, his becoming a Granger does not lessen his obligation as a citizen to see that none but men of honesty and capability occupy positions of trust and honor in the political affairs of State and nation, but strengthens it; and, as political honesty is rather the exception than the rnle, it certainly becomes the citizen Granger to use all honorable means to secure men of unflinching integrity to fill the positions of honor and trust, and how is he to accomplish it without participating in politics?

We can see but two ways of remedying the political evils which are grinding us as between the upper and nether millstone, the first of which is for the Granger to see that none but good men are nominated by the party to which he belongs; and to do that he must be wide awake, for the political parties of this country are run by rings and cliques who look only to their own self-aggrandizement, and think that the men whose strong arms and brave hearts have taken this country from the wilderness and made it to blossom as the rose, are so tied down by party tyranny that they will vote for any man that they may nominate. Such has been the case in the past, but the day is dawning, when party nominations and party resolntions will avail but little; when the citizen, be he Granger or not, will look to his own interest, and see that a good, moral character is a better recommendation for office than party platforms or party resolutions. The second way, if there is no redress from parties as now run, if they cannot be cleansed, is for the citizens to rise in their majesty, lay prejudice aside, and tell the old political hacks and wire pullers to stand aside, that they have interests in this country, and they must be seen to, and as the parties have failed, in the future the people will do it themselves.—*Indiana Farmer.*

Further in reference to the above, and contrary to the usual course of jonrnals not in the interest of the Order, which either hold that the Grange is actually political in its character, or should or will become so, the New York *Tribune* uses, editorially, the following truthful and sensible language: "The farmers have not sacrificed their independence by entering the Grange, and they have shown thus far a most sensible resolution to keep the Order entirely free from political embarrassments. Wherever an attempt has been made under the impulse of local excitement to drag the Grange into the political arena, the result has shown that the members, as a body, were opposed to any such prostitution of their original pnrpose, and that a perseveraunce in the attempt would break up the association. We believe the farmers' movement is capable of accomplishing great good by infusing a new and wholesome element into politics, giving the people a more direct control over the nominating conventions, and rousing the honest, hard-working multitude to the necessity of watching more carefully the characters of public men, and voting only for those who cannot be bonght, whether they spell their Republicanism with a big R or a small one. But, of course, the moment the farmers' clubs attach themselves to one or the other of the rival factions in politics, they announce their own destruction. They become absorbed in the party, are swept along by it and never again come to the surface. The Grange seems to recognize this truth, and we see in it therefore, abundant vitality and the promise of bonndless usefulness."

It should be generally understood that the reports we hear from the Western States, of the Grangers taking an active interest in political nominations, etc., are all false. Such statements are concocted and set on foot by the enemies of the Order, hoping thus to distract and divide its councils. As a general thing this trick is well understood by members of the Order, who simply laugh at the ignorance or wickedness of that portion of the press which indnlges in this harmless piece of political rickery.

READING AND HEARING.—There is no doubt but that reading and close study gives the most thorough knowledge of any subject. But there are many who have not accustomed themselves to reading and study, or who have not had the opportunity in the possession of books or newspapers to do so, and who are compelled to depend, for their general information, upon casual speakers. This is trne of every class of information, whether in the sciences, in politics, in religion, in mechanics, agriculture, etc. Moreover, those who begin to hear, aud continue in that, are finally stimulated to read and study. For farmers the Grauge and the Club are most efficient means for thus securing the necessary interest in the former, whereby the proper stimulus may be engendered for the more perfect work of the latter.

FIXING THEIR OWN PRICES.—The Mendocino Grangers have established the price of hay at $7 per ton in the field, or $10 per ton delivered to any part of the valley.

A Model Report.

EDITORS PRESS:—The enclosed is such a *model report* from one of my Deputies, aud contains so much information that will be of interest to Patrons generally, that I send it to you for publication. J. M. HAMILTON.

BRO. J. M. HAMILTON, W. M. STATE GRANGE: I have the honor to report the condition of the Granges in my district, all of which were lately visited by me. I deemed it necessary that the Granges of my jurisdiction should be pnt in possession of the new A. P. W. Have visited Geyserville and Cloverdale Granges; both are working in harmony and efficiently; but are growing only slowly, and not making the progress that they should make.

UKIAH GRANGE, organized by me in November last, is doing good work; has about 70 members. Find Bro. White, W. M., competent and faithful in the discharge of his duties, as are also the other officers. They all seem earnest in the determination to carry out the objects of our orgauization.

POTTER VALLEY GRANGE was next visited. The growth of this Grange has been remarkable, numbering now abont 180 members. It has absorbed nearly all the available material in the valley. Bro. Mewhinney has been very energetic and faithful in his duties as Master, has devoted most of his time to the Grange, and has a Grange that he may well feel proud of. I regret that the location of their new hall has caused a split in their Grauge. There are two rival towns in the valley; each has its friends and champions; a vote was taken, resulting in 18 majority for Centerville. Now the defeated party desires to withdraw and organize a new Grange at their end of the valley. The Grange is large and cumbersome, and if they cannot agree as a whole, it would be better if another Grange was organized, and an equal division of the property made.

LITTLE LAKE GRANGE, Bro. B. G. Mast, Master, organized by me last winter. I now find it in good working order, growiug slowly but surely; are going to build a hall. They have about 60 members, all zealous in the cause, and much pleased with the Grange. Passing to Humboldt county I first visited

ROHNERVILLE GRANGE.—This Grange has labored under great disadvantages. Bro. Jameson, M., has been afflicted nigh unto death with consumption, and been compelled to seek a milder climate; consequently, all the work has fallen upon Bro. H. S. Case, W. O. How faithfully he has discharged his duties you may judge. The Grange has 90 members, well versed in our work and enthusiastic in our cause; is in every respect prosperous and harmonious. Next visited

FERNDALE GRANGE, Bro. F. L. Boynton, W. M. This is the banner Grange of Humboldt; has 110 members, and many more seeking admission. Bro. Boynton very properly prefers to go slowly and surely; small classes are better and more thoroughly instructed than large ones. I find this Grange in splendid working order. Bro. Boynton is very efficient and earnest. All the members vie with each other to make their meetings pleasant and instructive, and perfect harmony prevails. This Grange is second to none in the State.

TABLE BLUFF GRANGE, Bro. Jackson Sawyer, W. M. This Grange is prosperous and efficient in the work; has about 70 members. Much good feeling prevails, though they have several elements to harmonize. The officers and members take much interest in our work, and have used the Grange organization to their benefit through the agencies.

ELK RIVER GRANGE, Bro. T. Meyer, W. M. For a live Grange, where the social features of the Order are fully cultivated, commend me to this one. Though small in numbers, they more than make up by the efficiency, earnestness and good feeling which prevail among the members. They meet to wo.k and have a jolly good time, and have it.

ARCATA GRANGE, Bro. L. K. Wood, W. M. This fine Grange numbers about 90 members, intelligent and earnest men and women. Bro. Wood has devoted much of his time to his Grange; they are prosperous and efficient. I regret to learn that good feeling does not prevail between the W. M. and *a few* of the members. Bro. Wood has resigned his position as M., and Bro. H. W. Arbogast has been elected to succeed him. I sincerely hope that harmony and good feeling may exist in this Grange, as it can be made one of the best in the State.

On the whole, I find my Granges working well, and I feel justly proud of them. Some little mistakes needed correcting, of course; but I took pains to instruct them thoroughly on this visit, and I predict that from now on they will go on smoothly and correctly doing their work. The new A. P. M. was given to all, and the secret work of the Order practiced. I was everywhere received with the utmost cordiality and kindness, and treated with the utmost consideration.

On my way home I visited Mattole valley, Humboldt county, where I organized Mattole Grange with 30 charter members. Stephen Goff, M., and D. J. Johnson, Sec'y. P.O. address Petrolia, Humboldt county.

I also organized on Jnne 1st Cahto Grange, with 30 charter members. R. M. Wilson, M.; J. P. Simpson, Sec'y. P.O., Cahto, Mendocino county.

I also organized on the 5th, Sauel Grauge, with 27 charter members. Alex. Marshall, M.; J. A. Knox, Sec'y. P.O., Sauel, Mendocino county.

I arrived home June 6th, having lectured eleven times, visited ten Granges and organized three new ones; traveled 510 miles on horseback, part of the time in rain and snow, over high mountains and fording deep streams, and finally reached home tired and well nigh worn out, having devoted five weeks of my time to the advancement of our canse, at the expense of my own personal interests. And now, Worthy Master, I feel that I have faithfully discharged my duties as a Deputy and a Patron. All the Granges in my district have been organized by myself, and I think that I have just cause to be proud of them. I was asked to visit Upper Lake Grange, while in Potter valley, being informed that they are working in a very loose and improper manner. Being in your county and organized by yourself and out of my district, I thought that I would not interfere, except at your request.

From nearly all parts of the State I hear the same complaint—the Granges are not working uniformly, and I thiuk that measures shonld be taken to correct their errors. I regret that you did not return in time to meet with us in the late State Council, as that would have beeu a good opportunity to have given ns the changes made in our secret work, which I hear were made at the late meeting of the National Grange. Were the changes made important? When will we get them? Will be down to the fruit growers' Grange convention. We rejoice to hear of your safe return to our midst and sincerely hope you enjoyed your visit. Sister M. joins me in kind regards, hoping soon to have the pleasure of hearing from yon. I remain, Yours fraternally, T. H. MERRY.

Healdsburg, Sonoma Co , June 8, 1874.

From the Granges.

LIVERMORE GRANGE had a very pleasant time at its Harvest Feast to-day. Worthy Master Hamilton was present and conferred the Fourth Degree upon a class of 20. We had visitors from all the Granges in the county. Modesty forbids me from praising our dinner, but I am sure that all present will bear testimony that it was a good one, and one in every respect worthy to be called a "Grangers' Harvest Feast." Our Grange is prospering finely. It now numbers 106 members, embracing nearly all of our substantial farmers. We have organized a Farmers' Union, and shall incorporate as soon as sufficient stock is taken to warrant it a success.

F. R. FASSETT, Sec'y.

Livermore, June 27, 1874.

TABLE BLUFF GRANGE, HUMBOLDT CO.—This Grange is in a very flourishing condition, numbering 60 in full membership, and still they knock at the gate. The Fourth Degree was lately conferred on a class of 19, and their second Harvest Feast was held, which produced the finest display of everything that was good to eat, and the most sociability and enjoyment, in trying to get away with a portion of the good things prepared by our sisters, that ever was produced on Table Bluff. After doing justice to the dinner, the company listened to a very able and appropriate address, delivered by I.G. Swinnerton, Esq., for which he received a unanimous vote of thanks in return, and everybody went home rejoicing.

SANTA CRUZ GRANGE held its regular degree meeting on the 27th ult., and conferred the fourth degree on a class of 16 members, after which the usual harvest home feast took place. The Grange has concluded (on account of distance) not to accept the invitation of Watsonville Grange, to visit them and participate in the Fourth of July celebration. It is, however, in contemplation to have a Grange celebration in a grove on the second plateau, near the residence of Paul Sweet. Over 50 Grangers, with their families, will participate.

BADGER FLAT GRANGE, MERCED COUNTY.—Since the resignation of Worthy Master W. W. Parlin, of Badger Flat Grange, A. P. Merritt has been elected aud installed Worthy Master, and A. T. Fowler as Secretary. Our Grange is moving slow but sure; being very busy with harvest labor, our attendance is not large, but all are working with vigor for the good of the cause. The crops are promising a bountiful yield on land that has been irrigated.

A. T. FOWLER, Sec'y.

Los Baños, June 22d, 1874.

SUTTER GRANGE, AT MERIDIAN, SUTTER CO., will hold a Fourth of July celebration in one of the pleasant groves near that town. They invite the neighboring Granges to join with them, as well as all friends of the Grange. The location is a very pleasant one, on the bank of the Sacramento river. We can assure the stranger that the hospitality of the people in that section is unrivaled.

THE YUBA CITY GRANGE, which now numbers 140 members, before the year closes is expected to number 200 strong. The farmers are fast seeing it is to their interest to join, in spite of the discouragement poured into their ears by the enemies of the Order.

THE PETALUMA GRANGE will celebrate the fourth (to-day), by a dinner at their hall, and a public oration at the Petaluma theater. Bro. J. W. A. Wright, Lecturer of the State Grange, we believe, is the orator selected for the occasion.

WALNUT CREEK GRANGE HARVEST FEAST.—We predict that a very pleasant and profitable season will be enjoyed by the members of this Grange and their guests, on the 4th. Dr. E. S. Carr will deliver the address.

TEMESCAL GRANGE holds its next harvest feast in Oakland, on Saturday, July 11th, the anniversary of its organization.

New Granges.

INDEPENDENCE GRANGE, INDEPENDENCE, INYO COUNTY, was organized June 20th, by Deputy J. W. A. Wright, with 30 charter members. Josiah Earl was chosen Master, and J. B. White, Secretary.

BISHOP'S CREEK GRANGE, BISHOP'S CREEK, INYO CO., was organized June 22d, by Deputy J. W. A. Wright, with 30 charter members. T. J. Furbee, Master; W. T. Wiswall, Secretary.

LONE PINE GRANGE, LONE PINE, INYO CO., was organized by Deputy J. W. A. Wright, with 19 charter members. C. L. Jackson, Master; R. A. Loomis, Secretary.

WELDON GRANGE, WELDON, KERN COUNTY., was organized June 25th, by Depnty J. W. A. Wright, with 25 charter members. R. T. Melvin, Master; J. T. H. Gray, Secretary.

TEHAICHIPA GRANGE, TEHAICHIPA, KERN CO., was organized June 27th, by Deputy J. W. A. Wright, with 30 charter members. John Norboe, Master; James Prescott, Secretary.

CUMMINGS' VALLEY GRANGE, TEHAICHIPA, KERN COUNTY, was organized June 29th, by Deputy J. W. A. Wright, with 30 charter members. George W. Thompson, Master; T. M. Yates, Secretary.

Brother Wright, in communicating the abovc, adds as follows:

I wish I had time to write you something of this region of our highest mountains, their peaks, covered with perpetual snow, and an otherwise desert country, where the average rain-fall is less than *three inches a year*, made in places a garden-spot by irrigation from the unfailing mountain streams.

Owen's valley is peopled with many good, earnest, industrious farmers, as well as miners, and has a bright future in store.

I find Tehaichipa valley a beautiful conntry, which, with three closely adjacent valleys, Brite's, Cummings' and Bear valleys, includes more than 100 thrifty farmers.

These valleys are 4,000 feet above sea level, and the greater part of their land well wooded with oaks. Tehaichipa is the Indian name for "Valley of Oaks," and like most Indian selections expresses well the nature and features of the country.

All the people of these valleys that I had the pleasure of meeting are earnest friends of the Grange, as is indicated by 60 of them entering our Order at its very advent among them.

BISHOP CREEK GRANGE, INYO COUNTY, was organized June 22d, by General Deputy J. W. A. Wright, with a full list of charter members and the following list of officers: T. J. Furber, M.; J. L. Garretson, O.; B. H. Roberts, L.; John Clark, C.; Jas. W. Inman, S.; Andrew Dell, A. S; E. D. Powers, T.; W. T. Wiswall, Sec'y; D. Watson, G. K.; Mrs. M. A. Clark, Ceres; Mrs. A. Powers, Pomona; Mrs. A. R. McLarran, Flora; Mrs. M. Inman, L. A. S. Brother Wiswall, Secretary elect, in furnishing the above, desires to return the thanks of the entire Grange to Brother Wright for the prompt and courteous manner in which, under many difficulties and misunderstandings, the organization was effected.

A VALUABLE GRASS.—The Visalia *Delta* of June 25th says: We have frequently had our onr attention drawn to a new species of grass which may be seen covering the sidewalks and banks of the ditch on Acqnia street, between Court and church, in this town. In appearance it is somewhat like our salt grass, but seems to be more hardy, and seems to be pushing its way into the middle of the street, in defiance of all passers. Its sweetness seems to render it particularly valuable in this country for dairying, as it will undoubtedly stand more drouth than any other grass known to this climate. On inquiry we find it was introdnced here by Captain Joseph Thomas, and was brought, we believe, from Georgia. This grass is said to flourish in South Carolina, where it becomes a great nuisance, on account of the difficulty in killing it. It evidently endures more drouth than any other grass we have, and would be valuable for dooryards as well as dry pastures.

STORM AT CALISTOGA.—A heavy rain storm prevailed at Calistoga, June 7th, for twenty-four hours, clearing off the following morning. The miners working on the 200-foot level of the Calistoga silver mine were compelled to snspend work on that level temporarily, on acconnt of the flow of water from this storm. The road to Clear Lake is very badly washed, but travel will not be interrupted. About 500 tons of new hay in the fields was spoiled by the rain. During the storm a peddler's wagon containing two men was capsized on the St. Helena mountain road, and precipitated down a cliff sixty feet into the canon. The team was wrecked, and one of the men, named Kingford, had his shoulder-blade broken. The other man escaped miraculously, with several severe bruises. A broken rein caused the mishap.

A NEVADA man is putting considerable money into circulation in Union, Oregon, in payment for large droves of cattle and hogs which he is buying.

BERRYESSA, Napa county, demands 100 harvest hands to assist in getting in her abundant harvest.



No Time Like the Old Time.

[By O. W. Holmes.]

There is no time like the old time,
When you and I were young,
When the buds of April blossomed,
And the birds of spring time sung!
The garden's brightest glories
By summer suns are nursed,
But oh the sweet, sweet violets,
The flowers that open first!

There is no place like the old place,
Where you and I were born,
Where we lifted first our eye-lids
On the splendors of the morn,
From the milk-white breast that warmed us,
From the clinging arms that bore,
Where the dear eyes glistened o'er us,
That will look on us no more!

There is no friend like the old friend
That has shared our morning days,
No greeting like his welcome,
No homage like his praise;
Fame is the scentless sunflower,
With gaudy crown of gold;
But friendship is the breathing rose,
With sweets in every fold.

There is no love like the old love
That we courted in our pride;
Though our leaves are falling, falling,
And we're fading side by side,
There are blossoms all around us,
With the colors of our dawn,
And we live in borrowed sunshine,
When the light of day is gone.

There are no times like the old times—
They shall never be forgot!
There is no place like the old place—
Keep green the dear old spot!
There are no friends like our old friends—
May Heaven prolong their lives!
There are no loves like our old loves—
God bless our loving wives!

Pen and Pencil Marks on the Road.

[Written for the Press by Mrs. Eliza E. Anthony.]

About a week ago, my protector (who is so extremely modest that I dare not publish his name) and I, started on a short visit to San Francisco. I suppose you will exclaim, "Humph! I'm sure that is no great journey to write about. I go there every week or two, and never saw anything worth writing of yet." Not so fast, my friend; perhaps you do not use your eyes and ears, but busy yourself in a novel until you reach your destination; and if any reader finds one grain of information amidst this chaff, I for one, shall be satisfied. But to go back where I started from. It was a lovely morning when the cars glided out of the depot, and with a whistle of defiance dashed through the open country, past farms and farm houses. There are thirteen stations between San José and San Francisco. Menlo Park, the fifth station, is a lovely place, reminding one of the oak-studded parks of old England. Northeast of San Mateo, San Francisco Bay glistens like a sheet of silver under the sun's fierce rays.

About two seats in front of your correspondent, there was a lovely brunette, essaying a handkerchief flirtation with a young man, on whose chin the down of manhood was just showing itself; the last I saw of them, he was very close to her of the brunette style, and both eating candy from the same paper. A couple of gentlemen behind me were discussing as to whether girls should be housekeepers or teachers. One said, that American girls are, as a general rule, averse to house-keeping, and prefer to rush out into the world, expecting to find more excitement; and that his opinion was that girls should learn house-keeping, etc., instead of following men's occupations His companion mentioned a family in San Francisco, who shall be nameless, there being three girls, the oldest twenty-five, the youngest twenty-one, who had been teaching several years, and who could have been married well, but they were so fastidious, that no one would suit them, unless he were rich, of good family and *fashionable*—his good qualities were an after-consideration. Here the train stopped, and every one rushed out, as if they hadn't all day before them; and we followed the crowd.

I will pass over my delightful visit, the kindness of the editors of the Rural Press, *Golden Era*, *New Age*, *Chronicle* and *Call*. After visiting everything of interest, we started for home the third day on the steamer "Reform," and were agreeably disappointed, going on board, to find a very comfortable vessel; but as I have no particular fondness for the "briny deep," you cannot expect a rapturous effusion. The fare is one dollar to San José or Santa Clara; and people kept coming, until there were exactly twenty-six passengers on board. Ten o'clock on the instant, we start; the plank is drawn off; one twelve-year-old girl is sobbing because she could not take a fat little poodle; but papa was inexorable, and Poodle was hustled ashore. We were soon gliding smoothly along, leaving a train of foamy water behind, and every turn of the wheel seems like the heart-beat of some huge animal. At first, the passengers were very reserved, taking a mental estimate of each other from head to foot, but before dinner were chatting quite gaily. On entering the pilot-room, Milbrae, the beautiful residence of D. O. Mills, was pointed out to me, by Captain Nelson, who loaned me his powerful glass, to view it the more distinctly, while the pilot stood immovable at his wheel. How little we think of the responsibility and absolute power of the man at the wheel, who has in his hands life or death! We passed three signboards about two miles from shore, which served to warn vessels off the shallow water; it being only from four to six feet deep. Redwood City, embowered in trees, could be dimly seen in the distance; and the back-ground of rolling green hills, served to enchance the beauty of the scene. I was wishing for an adventure, as we wound slowly along the narrow, tortuous channel, and when about a hundred yards from the wharf, it came. The vessel was fast in the mud! The bow of the vessel was embedded in the mud on one side of the channel, and the stern was high and almost dry on the other. Truly a pretty predicament! As there was no danger, it was amusing to watch the passengers. One fine lady declared that the vessel would upset or blow up, and her husband was alternately fanning and soothing her; while another drew out her handkerchief, and actually shed about two tears, then seeing that she did not cause any commotion, forgot her tears, and began asking questions: "If we would *ever* get out, if there was any danger? etc." The sailors took a twist around the stern of the vessel with one end of a huge rope, and then jumping ashore, made the other end fast around a post, which was there for that purpose; then commenced hauling in—and such a "Yo heave oh," and a "Bear away" you never heard. Snap, broke the rope, and the whole performance had to be gone through with again; and to cut a long story short, in thirty-five minutes the vessel swung around, and we soon landed, and in about an hour had traveled the nine miles from Alviso, and the gentlemanly driver, Mr. Carter, set us down at "Home, Sweet Home."

San José, June 19, 1874.

A Mathematical person writes to one of the papers to say that if "Columbus, when he first came to America, had put away one cent and not disturbed it until to-day it would have amounted to the sum of $607,089,909 76." If this is true it is a great pity the idea never occurred to Columbus. He might have had a nice little fortune to comfort him in his old age. But is it true? That depends, of course, upon where he would have put it. Old Starbuckle, of Berks county, Penn., several years ago read in an almanac that money would double itself by compound in eleven years if it were put away and left untouched. Accordingly, Starbuckle put $900 in a tin box and buried it in his cellar. He permitted it to remain there for eleven years, and then dug it out with the confident expectation that the amount in the box would be $1,800. But it wasn't, and Mr. Starbuckle now only considers the science of arithmetic a transparent fraud, but he don't repose any confidence in the almanac when it says Sunday comes on the first day of the week." Max Adeler is responsible for the corespondent, and then gives his own experience, as follows:

"I went into a Philadelphia bookstore the other day, for the purpose of procuring a copy of Christopher North's well-known "Noctes Ambrosianæ." The first person I encountered was a red-haired clerk, to whom I said:

"'Have you "Noctes Ambrosianæ?'

"'Wh-wh-wh-what d'you say?' he asked, with mouth and eyes wide open.

"'I called to ascertain if you have Noctes Ambrosianæ?'

"'I don't exactly—that is, I don't under—knocked his—what d'you say?'

"'I say that I understood that you had "Noctes Ambrosianæ." If you haven't, why don't you say so at once?'

"'I don't know what you mean, I never did such a thing in my life."

"'Perhaps you don't understand me. I wish to see if you have "Noctes Ambrosianæ."'

"'Oh, he has, has he? He's knocked his what do you call it, has he? Well, I don't care a cent if he has. You've come to the wrong shop. You must be crazy. Your mind seems to be unhinged; you haven't—' (breaking off suddenly and addressing a clerk in the rear of the store.) 'Say, Bill, here's a feller that's foolin' around here wantin' to knock somebody. Get a policeman quick.'

"Then I left and hunted up another emporium of learning."

A Georgian negro was riding a mule, and when he came to a bridge the mule stopped. "I'll bet you a quarter," said Sambo, "I'll make you go over dis bridge," and with that struck the mule over the head, which made him bob suddenly. "You take de bet, den?" said the negro, and contrived to get the mule over the bridge, "I won dat quarter, anyhow, cried Sambo. "But how will you get the money?" asked a man who had been close by unperceived. "To-morrow," replied Sambo, "massa gib me a dollar to get corn for the mule, and I take the quarter ont."

"William," said one Quaker to another, "thee knows I never call anybody names; but, William, if the Governor of the State should come to me and say, 'Joshua, I want thee to find me the biggest liar in the State of New York,' I would come to thee and say, 'William, the Governor wants to see thee very particularly.'"

Haste makes work, which caution prevents.

A Woman at the Bottom of It.

"To tell the truth," said John Haviland, as he threw aside his evening paper and faced the little group in the parlor, "I am fast growing out of patience with this text, 'A woman at the bottom of it.' It would be strange in this world, made up as far as we are aware, of nothing but the two sexes, if a woman should not occasionally be found at the bottom of anything good! It is the injustice of the thing that makes me angry. For there are hundreds of us poor fellows who owe all we are, all we have, and all we can hope to become in this world or the next, to the unselfish love of woman."

The gentleman's face was flushed, and he spoke very warmly and feelingly,—so much so that his wife, rocking her baby to sleep in the farther corner of the room, inquired: "But why should you care, John? It always has been so and always will be so. We don't think much about it now, because we have been taught to expect it."

"But you should care! and you should fight for each other more than you do. There is one chapter in my life's history that I have always kept locked in my heart; but to-night I feel as if it were my duty to open it for your inspection; and I do it for the love of woman—for the love of one woman who made me what I am worthy to be—the husband of a good woman."

"Why, John," said Mrs. Haviland, softly approaching—baby still held tightly to her bosom—"you absolutely frighten me."

"Let's have the story," said the rest of the group, certain that something good might be anticipated; and John commenced at first a little timidly, but gaining confidence as he proceeded.

"When first I came to New York at the age of 12 years to seek my fortune, I could call myself a precocious chap without danger of being accused of an unusual degree of self-appreciation. I was quick to learn everything, the bad as well as the good. My employer used profane language. I picked up the oaths he dropped with a naturalness that surprised even myself. The boys in the office all chewed tobacco. This was a little the hardest job I ever attempted; but after two weeks of nausea and indescribable stomach wrenches I came off victorious, and could get away with my paper a day with the best of 'em.

"True, every word of it," continued the speaker.

"One afternoon I was sent with a note from my employer to the upper part of the city. I hadn't anything to read, but I had plenty of tobacco, and with that I proposed to entertain myself during the two or three hours I must spend in the passage. For some distance I did not notice who were beside me, but by-and-by a lady said very softly and pleasantly, 'Would you please, little boy, be more careful? I am going to a party this afternoon, and I should hate to have my dress spoiled.'

"I looked into her face. It was the sweetest face I ever saw. Pale, earnest and loving, to my boyish heart it was the countenance of an angel."

"'What in the world did you say?' interrupted Mrs. Haviland, her bright eyes filling with tears as she saw how the memory of the beautiful woman affected her husband.

"Say! There was little I could say. I think all I did for some time was to look. I managed to dispose of my tobacco however, and wiped my mouth very carefully, all of which I felt certain she saw and commented upon.

"'Have you a mother, little boy?' she next asked, in the same low tone.

"'No ma'am,' I answered, and I felt my throat filling up, and I knew I must swallow mighty fast to keep from sobbing.

"'You have a father, then, I suppose?' she kept on.

"'No ma'am, no father.'

"'Brothers and sisters?'

"'Neither, ma'am.'

"'Then the little boy is all alone in the world?'

"'All alone, ma'am.'

"'How long has his mother been dead?' and the dear woman looked away from my face and waited till I could speak.

"'Two years,' I answered.

"'And you loved her?' came next.

"'Dearly,' was all I could say.

"She was silent for a moment, and then said so sweetly—oh! I shall never forget it—

"'And what do you think your dear mother would say—how do you think she would feel—to know that her little boy was guilty of such a disgusting habit as this?' pouting to my cheek where the tell-tale quid had vainly tried to stand its ground.

"'I must leave now,' she continued, 'but here is my card, and if you come to see me most any evening I shall be glad to see you, and perhaps we can be of service to each other.

"She gave me her little gloved hand, and to my dying day I shall never forget the sensation of that moment. I could not bear to part with her; without her I felt that I could do nothing; with her I could grow to man's estate—a man in the truest sense of the word. From that moment tobacco never passed my lips.

"As soon as I could summon courage I called upon that lady. Well do I remember how my heart beat as I waited in the elegant parlor for her to come down, and how awkward I felt as I followed my guide to her private sitting room. Here she got at every point of my life, and before I bade her good-bye it was arranged that I should spend two evenings of each week at her house and study on these occasions just what she thought best.

"No lover ever looked forward to the meetings with the mistress of his heart any more ardently then I did to these meetings with my friend.

"I grew careful of my personal appearance, careful of my conversation, and strove in every way to be worthy of this noble friendship. Two years passed in this delightful manner—two years that made me. My friend not only attended to my studies, striving also all the while to sow the right kind of spiritual seed, but she procured me a business situation with a particular friend of hers, where I remain to this day. Nobody but God knows what I owe this woman. During the last three months of those two years I noticed that she grew constantly pale and thin, She never was betrayed into speaking of herself. Sometimes when I asked her if she felt worse than usual she would reply:

"'Oh, no! I am only a little tired—that is all.'

"One evening she kept me by her sofa longer than was her custom, while she arranged lessons and laid out work enough, it seemed to me, for months.

"'Why so much to-night?' I inquired, conscious that my heart ached, and vaguely suspecting the cause.

"'Because, dear,' she answered, 'I do not want you to come for the next week, and I am anxious that you should have sufficient work to anticipate as well as to keep you busy. I think I can trust you to be a good boy, John?'

"'I think you can, ma'am,' I answered, almost sobbing.

"'If I should see your mother, my dear boy, before long, what shall I say to her for you?'

"Then I knew all, and my grief knew no bounds. It is of no use to go on. She died two days after, and when I hear folks saying, 'there's a woman at the bottom of it,' I feel like telling the whole world what a woman did for me."—*American Citizen.*

The Danbury Man in Liverpool.

Bailey has reached the land of his ancestors—the home of the Saxon and Druid, etc. He was violently sea-sick during the passage over, but managed to retain a good deal of his humor. His first visit to a ruin is described:

Coming back from the parks, I spied from the cab window the unmistakable indication of what my soul had panted for for years—what the soul of every student of the Old World pants for from the cradle to its realization—the broken walls of a ruin. There they lay before me with the sunshine touching up their mosses, and bringing into strong relief their broken and worn edges. I bade the cabman to stop, and fastened my eyes on the sight. It was not a very large ruin, but it was a pretty good-sized ruin for a Sunday. I pictured to myself the day when it stood as a whole, with its long line of masters alternating in the possession, and making the walls reverberate with the flow of mirth and banqueting. How many a merry step had passed along its corridors, and how many sad faces had peered from its lattices! A flood of strange, weird reveries set in upon my soul, and carried me by its power away down the ages that are gone.

I said to the cabman: "How old a ruin is that?" pointing to the wall with a trembling finger.

"That? That's new 'ouse going up for Peter Stevenson, the linen draper on George street."

It is a simple thing, but it has punched a very large hole in the cup of my expectations. How am I to know whether a building I back up against to stir up my soul with is eight hundred years or eight hundred days old? How do I know but that every builder is supplied with moss and ivy and verdigris by the barrel, and is bound by his contract to work them in? This is no way to fool with a stranger.

A female teacher in a school that stood on the banks of a river once wished to communicate to her pupils an idea of faith. While she was trying to explain the meaning of the word, a small fishing-boat came in view. Seizing upon the incident for an illustration, she exclaimed, "If I were to tell you that there was a leg of mutton in that boat, you would believe me, would you not, without even seeing it yourselves?" "Yes ma'am," replied the scholars. "Well, that is faith," said the schoolmistress. The next day, in order to test the recollection of the lesson, she inquired, "What is faith?" "A leg of mutton in a boat!" was answered from all parts of the schoolroom.

Companionship and Health.—To be perfectly healthy and happy one must have friends. They need not be in large numbers, but one, two or three kindred spirits with whom one can commune, share joys and sorrows, thoughts and feelings. In choosing friends great care is necessary. There must be some common bond of sympathy. It may be moral, intellectual or social; but even these bonds are not sufficient. A weakly person, an invalid, needs healthy friends; a timid one, bravo friends. Those who are blessed with good friends are healthier and happier than those who have none.

Collins Graves, who rode so fast down the Mill river valley to warn the people of approaching danger, is said to be the first milkman who ever ran away from water.

A table of interest—The dinner table.

Hair Love.

The absent daughter, married and far away, sends home a tiny curl in a letter—it is that of her first-born. "The softest, silkiest, brightest hair, she verily believes, in all the world! And its dear little head is covered with it like so many rings of gold. Ah, if they could but see it!" Why, it seems but yesterday she was a child herself, the merriest of the honsehold band—the most mischief-loving, provoking, and yet fascinating being one can well imagine. Threats and reproof were alike thrown away upon her; but a fond word would bring her to her mother's side in a moment, all penitence and humility, although ten to one the next she was as wild as ever. But she become grave all of a sudden, married, and took to housekeeping by instinct, as it were, for she could have had little experience in these matters; but loving makes us apt scholars, and she became a very pattern wife and mother. We need not say how the tiny curl will be kept and prized hy the happy grandmother, who wept with joy as she remembered all this. Mindful, at the same time, with the sad experience which is the heritage of old age, of the precariousness of human felicity, and how mauy as bright buds of fair promise as the golden-haired child are now among the angels of heaven!

The young soldier, dying on the field of glory, prays with his dying breath that a lock of his hair may be cut off and sent in remembrance of him to his mother and dear Mary. And when it reaches them, having traveled, perhaps, hundreds of miles, how sacred and holy is such a relic? We can fancy the aged mother's tears and kisses, and "his Mary" laying it on her heart, and never being known to smile again on earth, although she continues meek and patient to the last.

The death of a beloved object seldom fails to sanctify and make us better—to wean us gently from earth to heaven; such, at least, is the intention of all our afflictions, if we could only but think so; while change and estrangement harden and petrify the affections until they seem to turned to stone! "It is a perilous thing," says Frederica Bremer, "when the beloved image in the heart of man is destroyed."

The lover sends a lock of hair to his mistress, friend to friend, parent to child, child to parent. We verily believe this same hair love to be universal, and pregnant with a thousand romantic and touching episodes.

"If I had Leisure."

"If I had leisnre, I would repair that weak place in my fence," said a farmer. He had none, however, and while drinking cider with a neighbor, the cows broke in and injured a prime piece of corn. He had leisure, then, to repair his fence, but it did not bring back his corn.

"If I had leisnre," said a wheelwright last winter, "I would alter my stove-pipe, for I know it is not safe." But he did not find time, and when his shop caught fire and burnt down, he found leisure to build another.

"If I had leisure," said a mechanic, "I should have my work done in season." The man thinks his time has been all occupied, but he was not at work till after sunrise; he quit work at five o'clock, smoked a cigar after dinner, and spent two hours on the street talking nonsense with an idler.

"If I had leisure," said a merchant, "I would pay more attention to my accounts, and try and collect my bills more promptly." The chance is, my friend, if you had leisure you would probably pay less attention to the matter than you do now. The thing lacking with hundreds of farmers who till the soil is, not more leisure but more resolution—the spirit to do, to do now. If the farmer who sees his feuce in a poor condition would only act at once, how much might be saved. It would prevent breechy cattle creating quarrels among neighbors, that in many cases terminate in lawsuits which take nearly all they are both worth to pay the lawyers.

The fact is, farmers and mechanics have more leisure than they are aware of, for study and the improvement of their minds. They have the long evenings of winter, in which they can post themselves upon all the improvements of the day, if they will take ably conducted agricultural journals and read them with care. The farmer who fails to study his business and then gets shaved, has none but himself to blame.—*Cor. N. E. Farmer.*

A SURGEON, after a sanguinary battle, was going his rounds, examining his patients. He came at length to a sargeant who had been struck by a bullet in the left breast, directly over the region of the heart. The doctor, surprised at the narrow escape of the man, exclaimed, "Why, my man, where in the name of goodness could your heart have been?" "I guess it must have been in my mouth just then, doctor," replied the poor fellow, with a faint smile.

A BOY from the conntry was recently taken as page into a gentleman's family. One afternoon, just before dark, after having been called up to the drawing-room, he came down into the kitchen, laughing immoderately. "What's the matter?" cried the cook. "Why, dang it!" said he, "there are twelve on 'em up there who couldn't light the gas, and they had to ring for me to do it!"

SOME of our city preachers are having their chests examined with a view to decide in what part of Europe to spend the summer!

Young Folks' Column.

What's the Use of Grumbling?

Suppose, my little lady,
Your doll should break her head,
Could you make it whole by crying
Till your eyes and nose are red?
And wouldn't it be pleasanter
To treat it as a joke;
And say you're glad "'twas Dolly's
And not *your* head that broke?"

Suppose you're dressed for walking,
And the rain comes pouring down,
Will it clear off the sooner
Because you scold and frown?
And wouldn't it be nicer
For you to smile than pout,
And so make sunshine in the house
When there is none without?

Suppose your task, my little man,
Is very hard to get,
Will it make it any easier
For you to sit and fret?
And wouldn't it be wiser
Than waiting like a dunce,
To go to work in earnest
And learn tho thing at once?

Suppose some boys have a horse,
And some a coach and pair,
Will it tire you less while walking
To say, "It isn't fair?"
And wouldn't it be nobler
To keep your temper sweet,
And in your heart be thankful
You can walk upon you feet?

And suppose the world don't please you,
Nor the way some people do,
Do you think the whole creation
Will be altered just for you?
And isn't it, my boy or girl,
The wisest, bravest plan,
Whatever comes, or doesn't come,
To do the best you can?

OCCUPATION FOR IDLE BOYS.—A contemporary, in noticing the swarms of idle and mischievous boys that frequent our larger cities and furnish so many grounds of annoyance to the law and order abiding, very justly remarks: "Possibly no problem of all the vexatious list tries the judgment of law-makers so severely as that of holding in check the incipiences of crime. To put boys under repression and render it permanently wholesome, is the object of constant solicitude to all thinking, conscientious men. It is not enough that you establish places of detention, where, for a time, all excesses may be checked and tendencies carefully restrained. You must combine an atmosphere of kindness and confidence, which shall move the better instinct of the immature culprits. Instead of forcing the boys into uncongenial trades, give all of them the free training of agricnltural pursuit. There is nothing better for the development of mind and muscle at snch an age than the wholesome labor of farm and garden. Five hundred boys could be very profitably employed in the cultivation of a great farm uuder municipal control. Boys, as a general thing revolt from the binding necessities of trades, and it would be a wise economy to put them to the free work of the farm."

A SISTER'S LOVE.—There is something inexpressibly touching in a sister's love. Her heart is a realm of pure and earthly affection, and happy should that brother be to whom she clings through the changing scenes of the blighting world. She has been his companion in childhood; she has watched the development of his mind and person; she has admonished him when wrong, and smiled upon his triumphs; she has peopled his mind with the beautiful treasures of her own; she has taught him those virtues which will render him a useful member of society, prepare him for death and embalm his memory when he has passed away. Sooner can you bind the free wind than seal up the springs of such mysterious affections. Thoy will flow on, and the desert and cave cannot forget their progress. And as sorrow and misfortunes strip from life its charms and dreams, there is one recollection that will come like music to a brother's heart—that will thrill upon its darkened and troubled depths with a strange yet sweet melody, and bring up scenes of home and childhood, long unremembered. It is the recollection of a sister's love.

MACKLIN'S ADVICE TO HIS SON.—"I have often told you that every man must, to a great extent, be the maker or marrer of his own fortune. He who depends upon incessant industry and integrity, depends upon patrons of the noblest and most exalted kind; these are the creators of fortune and fame, the founders of families, and can never disappoint and desert you. You have genius, you have learning, you have industry at times, but you want perseverance; without it you can do nothing. I hid you bear this motto in mind—Perseverance."

WAKING UP.—I have seen little people that just hated to wake up. You could hardly coax them to go to bed either. No matter how sleepy they were, when bed-time came they would beg to sit up a few moments longer. And in the morning it was nearly impossible to get those sleepy eyes wide open, and oh! how cross they were till after breakfast! The birds don't act so, nor the chickens, nor the flowers.

THE little boys of Rochester, whose street ball playing and kite flying has been stopped by order of the police, display considerable ingenuity in getting around the command. They allow the little girls to fly the kites and play ball, while they sit and enjoy themselves.

Good Health.

The Human Frame.

No 4.—The Stomach.

This important organ is a muscular sack, formed by a dilatation of the alimentary canal. In shape, it somewhat resembles a curved section of a cone; in size, it varies from eight to 12 inches in width, and from three to four in its greatest diameter. It is usually estimated to contain about one quart when in a perfectly normal condition; but so universally are excesses committed in eating and drinking, that, in scores of observations, we do not remember to have seen a single one that had not been dilated beyond this capacity. Its situation varies considerably, according as it is distended with food, or otherwise; its proper position is just below the last organ described—the liver. It is of a purely carniverous type; being intended only for the dissolving or chymifaction of the food which has been finely triturated by the teeth. It furnishes by far the most important of the five solvents concerned in digestion—the gastric juice. It actually digests, or reduces to chyme, all the elements of the food except the non-nitrogenous and hydro-carbous, or sugar, starch and oil. Of these, sugar and starch are digested by the duodenal juices; oils, by the pancreatic fluid.

Of its physiological functions we know much; the celebrated Martin case, wherein a permanent fistula or opening, followed a terrible gun-shot wound, having afforded wonderful facilities for studying its functions, and given a great impetus to the investigation of all the details of alimentation. Many important facts have been thus obtained; some physiologists even going so far as to lay down laws for the exact time in which any given article of food would be digested, and, consequently, classifying all such as wholesome or unwholesome according as they seemed to resist the action of the digestive powers of the stomach, or otherwise. By such rules pigs' feet and tripe were laid down as being digested in an hour; trout, in one and a half hours; milk, in two hours; roast beef, in three; and so on, until the climax was reached with roast pork and boiled cabbage, which, they said, required five and one-half hours for their proper digestion. But, from close observation, it is our belief that stomachs have as many whims and idiosyncrasies as have their masters, and that which is easily digested by one is "poison" to another. Hence, the folly of any set of rules which prescribe just what all persons shall eat. Each person should know enough of his own temperament and physiological organization to be able to select those articles of food which are best adapted to his own individual wants.

Treated from this common sense stand-point, many of the fearfully numerous diseases of the digestive organs would cease to exist. But we go on, defying or ignoring Nature's laws; eating, in half the time required for perfect mastication, double the amount necessary for our sustenance; jumping up and going at hard brain work, immediately after each meal when we ought to take complete mental relaxation for some time, in order that our nerve forces may be properly concentrated upon the digestion of our food; drugging ourselves with stimulants, when we see our digestive powers are beginning to fail, until the inevitable result follows and we become confirmed dyspeptics. We then pounce upon the stomach as the unlucky source of all our evils, forgetting that a large percentage of our food was never intended to be digested by it; forgetting that Nature has given us organs of locomotion, demanding that they be exercised; free, pure air, requiring it to be breathed; proper hours for repose, and insisting on their being so occupied.

Indigestion may also be intestinal, and aggravated by the nse of sugar or starchy substances; or it may be pancreatic, and increased by the improper use of oils; or it may he due to a torpid liver, or deficient nerve energy, and rendered doubly worse by sedentary habits. Treat your stomach as becomes a rational heing; live in accordance with the laws of nature, taking due exercise, pure air, good food that is suited to your own peculiar organization, and above all, allow yourself plenty of cheerful, mirth-provoking relaxation, and it will be impossible for you to suffer from indigestion.

EXERCISE.—The various kinds of physical exercise are considered by Dr. Bowditch in some detail. Walking, he believes, is the best form, and most generally applicable. It exercises the body better than any other method. The most favorable time is about midday in winter and in the morning and toward evening in summer. Late in the ovening is less useful because of the liability to dampness and coldness in the absence of the sun's rays. Fast rnnning, in the opinion of the writer, is pernicious to consumptives; it produces violent motions of the heart and too rapid breathing, and consequently great tendency of blood to the lungs. As regards dancing, it is said that, at appropriate hours and for a proper length of time, nothing can be better. It promotes grace and ease of motion and positive health, if used thus properly. Horseback exercise for consumptives is excellent, and in fact a remedy for the disease at its inception. An easy pacing or galloping horse is better than a hard, square, solid trotter, as the latter is apt to cause pains in the chest and undue fatigue.

Hygienic Hints.

It is possible that the statnre of all persous may be increased if the conditions of health are enforced during infancy and childhood, and until the age of puberty is reached. Exercise in the open air, and the kinds of food which produce the carbonate and phosphates, which are found in milk and in the husks of grain, are highly conducive to osseous development.

But few people attach due importance to the use of the kind of diet which contains the elements that contribute to the formation of bone.

The constituents of bone are carbonate and phosphate of lime, and one-third the weight of the bone organic matter, therefore we should freely use oatmeal, Graham flour, beans, etc. In some localities the water is impregnated with lime, owing to the under-stratum of limestone that exists there, and it contains mineral properties sufficient, if used for domestic purposes, to increase the development of bone and muscle. Children should have all the milk they can drink. If it is first diluted with water, hot or cold, the proportion should be one tablespoonful of water, or a piece of ice, in a pint of milk. Sometimes milk disagrees with the stomach and forms curds. This tendeney is entirely obviated by the admixtnre of water.

Children are more often fed too little than too much; too often their food is not sufficiently strong or nutritious. Cakes and candies should never be given to children until they have first eaten of wholesome food; they should have all they want of every kind of farinaceous food, and should also be allowed the judicious use of all other kinds, else some part of the system may be deprived of some important element of nutrition. They should not be permitted to remain long on the wet, damp ground, although their feet may be protected with overshoes. There are many days during the year when it is better for them to play on the porches that are most exposed to the sun. Dwelling-houses should have porches on all sides, so that children can have a preference on which to play, according to the weather. If they are sick give them no food or medicines except fruits, canned or otherwise, and air as pure as that which is unconfined, though they should not be exposed in a current of air. If there is a fever lemonade should be drank freely, and iced milk if it is desired. Whatever articles of food the appetite has a longing for may be judiciously given. Very fortunate are those children who live in healthful localities and have all the milk they can drink from healthy cows that are properly fed; and they are certain to enjoy robust health and develop strong osseous frames if they exercise freely in the open air and sleep early and as long as they wish to, especially if assisted by the under-stratum of limestone found in some localities. Even if there is a predisposition to hereditary disease, these healthful influences will prove great preventives. Although the importance of food cannot be over-estimated, yet heat and light are threefold more important. More nutriment is furnished by the atmosphere than is found in any kind of food. It must be pure, or we are deprived of the vital means of life and sustenance; and the solar rays bring to our brains and bodies the very essence of life.—*Herald of Health.*

MODERN SURGERY.—Life is not only saved or prolonged in thousands of instances every year through the agency of modern surgical skill, but how much more tolerable and happy it has been rendered by the wonderful progress made in this branch of science. If misfortune overtakes us and we are brought under the surgeon's knife, it is only necessary to inhale the vapor of a few ounces of ether or chloroform, and we become oblivious to all suffering. Consciousness returns only to awaken joy that the duties of the surgeon are ended. Surgical instruments and appliances are marvelous examples of artistic skill and ingenious invention. What with the opthalmoscopes, stethoscopes, spectroscopes, curious mirrors, etc., the human body in most of its parts is brought quite within the field of vision, so that dark cavities and deeply-hidden organs are illuminated and forced to reveal to the eye the nature of morbid conditions. The future for scientific surgery, and also for medicine and chemistry, is full of promise. One difficulty after another will be surmounted in the years to come, and perhaps there will remain ultimately but one great physical catastrophe which cannot be overcome by human skill, and that is death.—*Boston Journal of Chemistry.*

DRINKING WATER AND ZINC.—In a communication to the Royal Society of Edinburgh, James R. Napier called attention to the fact that zinc from galvanized iron goods dissolved very rapidly in Loch Katrine water. He exhibited water of a milky color, made so by immersing 2½ lb. of galvanized iron nails and other objects for about 30 hours. He also showed pieces of a kitchen boiler, which had been coated by the so-called galvanizing process, in which, after 12 months' use, the zinc coating had entirely disappeared, and the iron itself was greatly corroded.

BARLEY WATER.—*The Druggist* gives the following: Take of pearl barley, two onnces; boiling water, two quarts; before adding the boiling water, let the barley be well washed. Then boil it to one-half, and strain the liquor. A little lemon juice and sugar may be added if desirable. To be taken *ad libitum* in inflammatory diseases.

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SAN FRANCISCO:
Saturday, July 4, 1874.

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Removal.

July 13th, 1874, the business office of this Journal will be removed just one block east of our present location, to No. 224 Sansome Street, southeast corner of California, over the Bank of British Columbia, where we have secured large and elegant quarters. This removal is made in consequence of the sale of the building in which we are now located, to parties who will proceed immediately to demolish the present structure, and erect a new and magnificent block in its place.

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th, —— Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhibition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers, Mechanics' Institute, No. 27 Post street, San Francisco, California. In order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Williston, Secretary; J. B. Frisbie, Treasurer.

ABOUT two hundred men are grading on the North Pacific coast railroad in the vicinity of Tomales and San Rafael. It is stated by parties who claim to be well posted that the whole line from Tomales down will be in running order by the 16th of October.

THE LOS ANGELES TOBACCO CO. are building their curing houses. They will commence cutting their crop early in July.

Our New Volume.

The present number commences the eighth volume of the RURAL PRESS, and we feel confident that our rural friends will extend the same congratulations to us in our success that we have offered to them in this, their unprecedented season of prosperity. And commencing as we now do, our new volume, just as they are harvesting their abundant crops, it affords us much gratification to think that our labor during the past six months as an agricultural journal and family paper has been to them a helper in their labors, and has added to the attractions that have centered about their homes. We begin our labors for the coming half year with a determination to make the present volume still more useful and attractive.

It will be noticed that we have been able to greatly increase the amount of reading matter given in the PRESS, by changing from leaded to solid type. This has been done entirely for the benefit of our readers; and we are confident that when they consider this, with the amount of editorial labor bestowed upon the paper, they will credit us with publishing one of the *cheapest* as well one of the *best* papers on the Pacific Coast.

We again extend the fraternal grasp to our numerous and valued exchanges. They will please accept our hearty thanks for their compliments and general courtesy. It is our wish and intention to retain in full our list of exchanges as long as it is.

Our patrons have our sincere thanks for their substantial support, for friendly encouragement, and for innumerable courtesies.

The Shipments for the Last Season.

On the 30th of June the ship "Patterdale" left this port for Liverpool, with a full cargo of wheat; being the last shipment of the season just closed. This made the two hundred and forty-seventh cargo cleared during the season. So far as known there have only been two total losses among all these. These were the "River Krishna," wrecked at Tuskar Rock, just before reaching her destination, and the "Durham," wrecked in the vicinity of the Society Islands. A portion of the cargo of the "St. Marks" was thrown overboard, and parts of a few other cargoes have been damaged, but on the whole the shipments have been very fortunate. Forty-seven vessels were en route at that date also.

The new season's crop has, of course, been coming in for some time, the first arrival being on June 11th, and consisting of 974 centals, from Hill's Ferry, per steamer "Hattie Fitch." This is about the average of arrivals of new grain, the dates for the last four seasons being 1870, June 9th; 1871, June 23d; 1872, June 10th; 1873, June 7th.

The price obtained for this lot was not up to the average; but, in view of our enormous crop this season, this was hardly to be expected. The price received was $1.65; against $1.80 in 1870, $1.27 in 1871, $1.85 in 1872, and $1.80 in 1873. But this slight lowering of the rates will be made up ten-fold in our greatly increased yield; so that we may confidently look to the shipping season we are just entering upon as one of unexampled prosperity to our farmers.

Lower Rates of Interest.

There are many who manifest a sort of pride in referring to the high rates of interest prevailing in California; considering it as an indication of great energy; and declaring that the fact that we are paying rates of interest double those of our Eastern competitors is evidence of our superior advantages. But how is it that at this time, when the energies of all departments of trade and industry are exerted as they never were before, dividends on loaned money are particularly low? Savings banks, it is understood, will declare a lower dividend for the month just ended, than any previously offered. According to the theory of those who favor high rates of interest, the money-lender should have reaped as bountiful a harvest of real gold in June, as the farmer is reaping of the golden grain in July. But instead of this, their money went begging at six and seven per cent. throughout the month. We look upon this as the best evidence yet produced of our real prosperity at present, and of general confidence in the future. For either our producers and dealers had money of their own to carry them through, or the confidence of capitalists in California enterprise was so strong, that they preferred trusting their money in these currents, even on terms extremely advantageous to the borrower. One of these suppositions must be true, and they are alike in their healthy indications.

W. N. STEUBEN, of Gilroy, has exhibited gooseberries raised on his place, measuring three inches in circumference and one and a half in length.

THE son of Tim. Sheehan, of Bower Cave, near Coulterville, fell from a mowing machine, on 27th ult., and had to have his right foot amputated at the joint.

Protection to Game.

For the benefit of those who are in doubt as to where sporting is an infringement of the game law, we give from a contemporary the following, which will be a safe guide in hunting and fishing matters:

Quail, Ducks, Etc.

In the counties of Lassen, Plumas and Sierra, it is unlawful to "take, kill or destroy" quail, partridges or grouse between March 15th and September 15th, or any kind of broadhill ducks between March 15th and August 15th.

In Los Angeles and San Bernardino it is unlawful to kill quail, partridges, grouse, or any broadhill duck between August 1st and the first of April of the next year.

In all the other counties of the State none of the feathered creatures above enumerated must be molested between March 15th and September 15th.

Trout.

Trout cannot be lawfully caught in any part of the State between October 15th and April 1st, in the following year. And it is unlawful to catch trout, except with hook and line, at any time, in the counties of Santa Clara, Santa Cruz, San Mateo, Monterey, Alemeda, Marin, Placer and Nevada. It is a misdemeanor to take, catch or kill trout in any part of the State, by the use of nets, weirs, baskets or traps.

Elk, Deer, Antelope.

The law protects elk, deer and antelope, from January 1st to August 1st, in all the State except El Dorado, Placer, Nevada, Sierra and Siskiyou counties, where it is not permissible to hunt such game from February 1st to August. As this is the kind of game our inquirer is longing for, he will have to wait till August. [Laws of 1871-72, page 433.]

Salmon.

The Penal Code makes it a misdemeanor to "take or catch" salmon between June 1st and September 1st; nevertheless the restaurants and fish stalls have no lack of salmon at present, and have not lacked it during the whole of last month. By what authority this fish is caught now it seems difficult to surmise. An examination of the laws of 1871-72 and those of 1873-74 shows no amendment to the Code provisions referred to.

A Yellow Larkspur.

Mr. C. C. Goodrich writes us from Copperville, Lassen county, enclosing in his note a very pretty specimen of a flower which he pronounces a yellow larkspur; a flower which botanists declare does not exist. Mr. G. sends this to disprove a statement which he saw in the RURAL PRESS a year or two ago, and we are rather disposed to acknowledge the corn, or the larkspur, after examining the flower—for if it is not a larkspur "to all intents and purposes," it certainly is in appearance. The PRESS, however, in asserting that there are no yellow larkspurs, placed its reliance on science, and she speaks of the larkspur as "a genus of plants, order *ranunculaceæ*, which yields May's favorite garden plants. They are annual herbs, with leaves much divided; flowers blue, red or purple, but never yellow." It really does seem as though science had better limit her instructions to things that have an existence, and say less about what does not exist. Such a course would be particularly advisable in treating of California; for nothing is impossible in California.

The flower sent by Mr. Goodrich was gathered on the hills near Copperville, where they grow in great abundance.

APRICOTS.—We have received from Pentland Bros., of Knight's Ferry, a box of very superior apricots, for which our thanks. In a letter received at the same time we were requested to note whether finer apricots were in this market, in order that buds might be procured of the parties raising them. We do not think the buds could be changed to advantage, judging from the fruit sent to us, and comparing it with that in our markets. With regard to the price of apricots given in our market review, queried by our correspondents, we find that the quotation referred to was correct. It should be remembered that, while the RURAL is dated on Saturday, it goes to press Wednesday of each week, and consequently this is the latest day on which to gather quotations. At the opening of the apricot season the price fell rapidly, each day making a large difference, and thus it happened that only eight cents per pound, instead of fifteen, were returned.

SAN LORENZO is the garden spot of the Pacific Coast for cherries, which are now in their prime. The trees bend beneath the weight of the luscious fruit. On Friday quite a party of Oakland ladies and escorts visited the gardens of Mr. Moat, and returned laden down with the largest and the handsomest clusters which have yet made their appearance here this season. San Lorenzo also is famous for its currants and berries, and in fact all of the small fruits arrive here at the greatest perfection.

THE Southern Pacific Railroad Company announce that they will hereafter carry grain from the Castroville depot to San Francisco at $4 per ton; to Oakland wharf, $4.25 per ton. This includes loading, weighing and storage for the entire season.

Our Holiday.

Although the date of the RURAL PRESS is July 4th, our readers are not to suppose that the issuing of it has necessitated anything like a desecration of that day; for the busy hands and brains that have toiled all the week in "getting it up," closed the labors of the week on the "night before the Fourth," as the youthful patriots say. And before the "one gun at day-break" gave the formal announcement of the dawning of the glorious day, the PRESS was on its way to its thousands of destinations far and near. Those of us who have kept "Fourth of July" for half a century have noticed a marked difference in regard to the uniformity with which this holiday is celebrated. Even twenty years ago it was considered optional with the employer whether his workmen kept holiday or not, and many worked of their own choice; sometimes to gratify their greed, and sometimes from a supposed necessity. Now no employer requires his workmen to stick to their tasks on this day, and they would not do it if it were required of them.

The whole country to-day lays aside its cares, runs away from its labors, and throws up its cap exultingly in city and country. Our readers have probably discovered before this, that the PRESS is not given to croaking on any subject; and they will not be surprised when we declare, as we now do, our belief that the growth of true patriotism among the American people is in full keeping with their increasing power to maintain their liberty.

Strawberries from the Foot-hills.

Mr. Felix Gillet, of Nevada City, sends, according to promise, samples of strawberries from the vines which he has advertised through the RURAL PRESS. These strawberries belong to the following varieties: "General Grant," the "Lady," "Princess Dagmar," "Alice Nicholson," "Alcott Pine Apple," "Coxcomb" and "Baron Lynan de Lynich." We do not hesitate in pronouncing these the finest strawberries that have been inspected, or prospected, by us during the present season. There was a difference of opinion among those who sampled these berries, in regard to their comparative merits; consequently, we can only report the general result of the vote, which was to the credit of all. Mr. Gillet did not stint his invoice to mere samples, but put in a liberal supply of each; and also included a lot of cherries, of the "Bigarreau Grosse de Mezel" variety, which were very fine. Mr. G. writes us that the pear trees imported by him from France are doing remarkably well. He also informs us that the season has been quite favorable to silk worm raising, and promises to furnish us with some points on this subject, one with which he is well acquainted.

Mr. Gillet will please accept our thanks for the strawberries.

A Combination.

The Bay District Horticultural Society have made arrangements for co-operating with the Mechanics' Institute in the ninth annual exhibition of the latter, which opens in this city on Tuesday, August 18th. This combination will add much to the interest felt in the approaching exhibition of the Mechanics' Institute, and the advantages which the grand pavilion now being erected will afford for a fine horticultural display will ensure a grand success for this as for other departments.

The pavilion even in its present incomplete state attracts crowds of visitors, its vast dimensions alone being an object of curiosity; while those who are more critical than curious make frequent calls at the huge structure to note the development of its internal arrangements. We hear but one opinion as to the judgment and taste of the building committee, thus far manifested. Their labors receive general approval. There is evidently no lack of energy, taste or means on the part of the Board of Managers.

AMERICAN POMOLOGICAL SOCIETY.—We have received a copy of the proceedings of the American Pomological Society at their Fourteenth Annual Session, held in Boston, September, 1873. It is a valuable acquisition to the library of the pomologist. The discussions are extremely interesting, and a great amount of practical information can be obtained from their perusal, while the essays read before the society are among the soundest productions on fruit culture with which we have became acquainted.

J. E. FEELEY, viticulturist of Santa Clara, has an improvement in harness used for plowing vineyards, which is described as follows: It consists of a short stretcher, instead of singletrees, the ends of the stretcher being covered by the heavy leather tugs, the ends of which are brought together at the rear of the stretcher, and attached to the plow by a ring, staple or clevis. The object of this is to prevent the destruction to vines or trees caused by the ends of the ordinary singletree.

GROUND will be broken on July 4th for the construction of the Visalia railroad. It is expected that the road will be completed by the 15th of August.

Hints to Amateur Gardeners.

It is not expected that the professional gardener will be enlightened hy the following suggestions; nor are they intended for the benefit of the favored few to whom fortune has granted the means for the gratification of an expensive horticultnral taste, deriviug from it healthful aud pleasant recreation, if not actual profit. Bnt there is a large class of people who have small gardens, with little or no experience in gardening; and it is to these that we have more particularly addressed the following hints:

Early spring is the season when the subject of gardening assumes a prominence in a very large number of families. The women and children are enthusiastic for a garden; but the men are not quite so zealous iu the matter. They anticipate a great amount of hard lahor, with an urgent call for funds; while the returns, they are quite sure, will not amount to the cost of what they could bring home from the market in a couple of haskets. So they are firmly resolved to never make another garden; but their firmness yields to the decision, or the teasings of the majority, and each, of course, consents to plant the garden just ouce more. Now, in this conclusion, he has not only showed the goodness of his heart, hut also the souudness of his judgment. People, when they are wavering iu the decision to cultivate the little spot of ground attached to their dwellings, (almost every house out of the large citiee has some gronnd for gardening,) should consider the queetion, what ehall be done with it if it is not cultivated. If it is entirely neglected, it will eoon be covered with an intolerable mass of weede, that must, at freqnent periods, be cut down and hauled ont of sight; thus demanding an amount of labor and expense which, if applied to fruit and vegetahlee, would make the place pleasant to behold, and furnish many a dainty and wholesome dish to the table. They perhaps have seen very pleasant places where there were neither cultivated gardene nor unsightly weeds; but, instead, pretty grass-plots, planted with trees and shrube. But they should bear in mind that it is a laborious and expensive job to grade and sod these grass-plots at first, and, when formed, they require a liberal supply of manure, and are only kept attractive hy very frequent cutting and clean raking while the trees and shrubs demand qnite as much, if not more, care and labor ae those in the cultivated garden. Thus, the question, what shall we do with our ground if we do not cultivate it, should he well considered.

Regarding the profits of gardening, he would say, that if the enthusiastic heginner sits down and estimates the value of the anticipated products of his garden in dollare and cents, he will, like beginnere in everything, he disappointed at the end of the season. It is the extravagance and fickleness of such that hae thrown an air of caution and distrust around the subject (as it does, in fact, around every subject), and has stripped it of the interest which it deserves.They have gone into it rashly, managed injudiciously, and instead of turning the experience of one seasou to the benefit of the next, they throw down their arms in terror and diegnst. They then eet themselves up as veterans in the cause, and are ever ready to allow all future beginners the henefits of their dearly bought wisdom. But they afford a mere caricature of the matter. They exaggerate its expensee and trouhles. and burlesque its pleasures and profits. Such wisdom should be valued as lightly on this subject as it is wherever it obtrudes itself npon our notice; still it does prodnce its effects upon the wavering, and its ehallow and unfair character should he exposed. Like Henry the Fifth before the battle of Agincourt, he would say:

> "He which hath no stomach for this fight,
> Let him depart; his passport shall be made."

Bnt to those who are willing to apply the same perseverance and economy to it that are essential to success in anything, we can safely promise not only a large amount of wholesome gratification, but also a fair return for money expended. The queetion of profit and loss should of course be considered; hut it is of little consequence when compared with other advantages derived from gardening. We all need some recreation from our daily avocations, and for this purpose nothing is so beneficial as gardening. In this our physical powere can he exercised in the most healthful manner, with enough of interest for the mind to enable it to throw off its galling burdens, and, which is of more importance than all other considerations, effecting an improvement, not only in our habite, but also in our dispositions. This has been acknowledged by the greatest men of all ages. They have derived from it improvement and happiness for themselves, and have urged ite consideration upon nations, communities and neighborhoods. It is one of those great truths that we can all test and avail onrselvee of its benefits. The man who will take hold of the matter iu earnest and do hie garden justice, will soon find that while he has been subduing worthless weeds there, and aseisting nature in producing frnits, vegetables and flowers, he has been effecting the same results in himself aud family.

Our homes are considered too much as mere places to lodge and eat; and when these wants are satisfied, the boys and girls rnsh forth in search of the enjoyment that should be furnished them at home. The importance of indoor attractions at home are duly acknowledged; but these are expected to lose their power when the long evenings and inclement seasons are past. With the approach of spring there comes a longing for out-door exercise and amusement; and, for this, a garden, properly cultivated, with its different departments of fruit, vegetahles and flowers, is amply sufficient.

Iu order to induce people to give the subject the consideration that it demands, we have been led to indulge too freely, perhaps, in generalities; bnt as it is to the amateur, and not to the old stager, that our hints are offered, what more should he expected on this occasion than a few generalities? It is more to set the readers of the PRESS thinking on the subject of gardening than to teach them how to gardeu—to arouse an interest in the art and not to make them adepts in it, that the above is written. But having practiced amateur gardening through a period of more than thirty years, we have had abundant opportunity to test its merits, as a source of substantial, wholesome and profitable enjoyment. The farmer, who causee two blades of grass to grow where only one grew before, has our sincere and hearty co-operation; hut we have also a portion of this admiration and sympathy in reserve for the gardener, amateur or profeesional, who causes one vegetable to grow where only two hlades of grass formerly grew. We ehall, therefore, in order to arouse a more general taste for gardening, and to diffuse a knowledge of its rudiments, follow up the suhject in future numbers of the PRESS.



GOVERNMENT HOUSE AT SYDNEY.

CROP PROSPECTS AT SAN LUIS OBISPO.—Judging from the outlook presented to us in this county, we are to have a feast, for a bountiful harvest is being reaped and gathered in on every side. Good reports reach us from the north, south and central portions of the county. Barley will he far more than an average crop. Some little damage has been done to the late barley hy the grasshoppers. In the northern part they seem to have committed more depredations than elsewhere. If the crops had been two weeks further along. these long-legged, molasses-mouthed marauders would have done no injury to speak of. They have an appetite for late barley, it seems. When the grain is nearly ripe, all the milk concentrates in the stem, just below the head. They drill for the milk, and cut the head entirely off. It falls to the ground, and of course cannot be recovered. There are, perhaps, 4,000 acres in grain directly adjoining San Luis Obispo. The wheat is good, and will average as high as 40 bushels per acre. The barley will go considerably above that figure. A great deal of grain has already been cut, and is now ready for the threshing-machine. Some of the steam threshers are already shelling out a stream of golden sand. The facilities for moving the grain are better now than ever before. The grain surplus in the northern part can he shipped from San Simeon, Leffingwell's, Cayucos and Morrow landings, while the southern portion naturally finds an outlet through San Luis Obispo harbor, which is the safest and most conveniently arranged landing along our county front. —*Tribune.*

IDAHO has a malformation in the shape of a lamb, whose head and neck are covered with what might be called feathers, while it has but one eye, which solitary optic is set in the center of its head.

Olive Growing.

When will the list of California fruit productions be complete? Pomona, like the rest of her sex in California, is mighty hard to please. The more she has, the more she wants. There is no portion of the earth that can vie with this in variety of fruits, and probably there is no place where more experimenting is done in introducing new varieties. The olive is among the anticipated acquisitions to the California fruit-list, and experiments in localizing it are observed by many with a good deal of curiosity. To such, the following from the San Diego *Union* will he of interest:

Last week we had the pleasure of visiting the beautiful place of H. M. Higgins, on the Sweetwater. Many of the things seen there are worthy of special notice; but at present we shall speak simply of the young olive-trees. Not many had been planted—only enough for an experiment; hut the experiment is worthy the attention of all our landholders. The trees are of only two years' growth from cuttings, and yet they have already hegun to bear. Another year will give quite a good crop; and each succeeding year the yield will increase until the trees have attained full maturity. The prevailing impression has been that the olive will not hear until 10 years old, this being the ordinary time of bearing in other portions of the world, with most of the varieties cultivated. But in California, with the varieties here planted, the case is different. Colonel Hollister's extensive orchard, four miles back from the coast, at Santa Barbara, was in bearing three years after planting. The Kimball Brothers. also, have two-year old trees full of fruit, on their lands at National City, upon the Bay of San Diego. Mr. Higgins' place is farther off the coast, being about eight miles inland, where the air is less saline, and the winds from off the ocean are very much moderated. At these three places the trees are not planted in valley land, bnt on the *mesa* or table land. By mulching, for a yard or more, all aronnd the trees, or hy covering the surface with sand from six to eight inches deep, the nnder-soil is kept loose and moist; so that only occasional and moderate irrigation is required during the first three or four years, until the roots have struck sufficiently deep to reach permanent moisture. At the Mission of San Diego, the old trees, planted hy the missionaries, a hundred years ago, are in valley land, and they probably never were irrigated. Their present flourishing condition, after many years of neglect, and the vigorous growth and healthy appearance of the trees at the Hollister, Higgine and Kimball places, show that from Santa Barbara down to the Mexican boundary, all along the coast, and for at least 10 miles back, the soil and the climate, on upland and in valley, are peculiarly adapted to the growth of the olive.

FROM farmers living in the vicinity of Soquel and Aptos, we learn that the late sown grain is a failure this year, from rust and blight. Wheat, barley and oats, that had not a fair start before the cold rains set in, followed hy the hot sunshine, drooped and died. On the Salinas plains, in the vicinity of Deep Wells and Soledad, a similar misfortune befell the late-sown wheat.

THE NEW LOCAL OPTION ORGAN.—The *Daily Independent Californian*, now in its third week of publication, has entered the campaign with much earnestness and vigor. It evidently had its birth in the Local Option movement; but its publishers announce their determination to make it a permanent publication.

Fair of State Agricultural Society, 1874.

We have received a premium list of the California State Agricultural Society for the fair of 1874, at Sacramento. The fair commences on the 21st and ends on the 26th of September. Over $20,000 are appropriated to premiums. The departments are comprehensive, embracing nearly everything of an industrial character, and much of art, and are judiciously classed.

In this initial but important move the State Board of Agriculture manifests a progressive spirit and careful judgment, that may be taken as a guarantee of a satisfactory exhibition. There is every reason to hope and believe that the Board will fill its portion of the bill in all its labors and arrangements; and there is no reason to doubt the interest of the public in the fair, and the number of spectators attracted thither will far exceed that of any previous exhibition. It only remains for the exhibitors to properly fill their portion of the programme, to insure one of the finest agricultural displays that the world has ever witnessed.

An opportunity is now offered for the ardent champions of special localities to prove their superior advantages. The outside world will now have a chance to judge each favorite spot by its fruits. In no way can a local paper serve the interests of its neighborhood so effectively as hy stimulating its readers to make the best possible showing of the products of the locality. No country is so closely scrutinized in this respect as California. The wonderful versatility or variety of its climate and soil are well known, and the question, In what part of California shall the new-comers locate? is as thoroughly ventilated as that of coming to the State at all. We hope to see each and every part so profusely and judiciously advertised at the approaching fair that whatever a man may want he will know just where to find it.

It is expected that the display of farm stock at the coming fair will excel that of any previous exhibition, as the past year has been remarkable for the increased enterprise manifested hy stock-breeders; especially in the cattle department. The exhibition is also looked forward to with the highest anticipations, as the growing crop gives promise of unusual excellence. The approaching fair will also undoubtedly do much toward solving the question of the disposal of our enormous amount of fruit, as the great improvements made in drying and canning will be properly represented there. A more complete list than usual of agricultural implements of California manufacture is also anticipated. The above, however, are mere items among the new points of interest connected with the coming fair; while the standard merit of our annual exhibition will, at least, be up to any former display.

There is a large and extremely interesting class of California industries, embracing those matters that as yet hold the position of experiments, which we hope will be exhibited each in their present degree of perfection. All of them will command attention, and some of them are of great importance, and are expected to become prominent among the great interests of the State. Let the ardent enthusiasts and patient experimenters in these matters show the world at what point they have arrived.

A Scene at Sydney.

A visitor to New South Wales thus describes the subject and surroundings of the engraving which we here present to the readers of the PRESS:

Sydney is really a magnificent place, and far superior to what I anticipated it to be. Surrounded, as it is, with numerous islands, hold, rocky cliffs, fine promenades, splendid gardens, and stately mansions—and among the most stately is the Governor's palace—the approach to which is the most delightful riding place I have ever seen—you may almost suppose that you are in "Merrie England." The comforts and every-day habits of the people make this still more apparent to the visitor. Unlike California, there is not a variety of population from all parts of the world. Neither is there to he seen the same business activity that you meet with all over that State, although this city of Sydney is fully as large as San Francisco. The climate somewhat resembles that of San Francisco.

BUTTER MADE BY STEAM.—Mr. C. S. Abbott, the owner of the Abbott House, has a dairy ranch on the Salinas river, three miles from the city. He has 1,500 cows, and makes butter altogether. He gets an average of 100 pounds per cow, and produces 150,000 pounds of butter anually. This, we believe, is the largest butter ranch in the State. The churning, and the regulation of temperature in the milk house, is wholly done by steam; and he makes, as we know, a number one article of butter.

THE wool shipment from Lake and Mendocino counties has commenced. It all goes through Cloverdale. The clip this year is larger and finer than any previous year.

Miscellaneous.

Man Five Hundred Thousand Years Old.

The New York *Nation* condenses from an English scientific periodical some interesting speculations of Dr. Alfred Russell Wallace, on the probable antiquity of the human species. They may well startle, it says, even those who have long since come to the conclusion that 6,000 years carry us but a small way back to the original home. In fact, in Dr. Wallace's reckoning, 6,000 years are but a day. He reviews the various attempts to determine the antiquity of human remains or works of art, and finds the bronze age in Europe to have been pretty accurately fixed at 3,000 or 4,000 years ago, the stone age, of the Swiss lake dwellings, at 5,000 or 7,000 years, "and an indefinite anterior period."

The burnt brick found sixty feet deep in the Nile alluvium, indicates an antiquity of 20,000 years; another fragment at seventy-two feet gives 30,000 years. A human skeleton found at a depth of sixteen feet below four hundred buried forests, superimposed upon each other, has been calculated by Dr. Dowler to have an antiquity of 50,000 years. But all these estimates pale before those which Kent's cavern at Torquay legitimates. Here the drip of the stalagmite is the chief factor of our computations, giving us an upper floor which divides the relics of the last two or three thousand years from a deposit full of the bones of extinct mammalia, indicating an Arctic climate.

Names cut in the stalagmite more than two hundred years ago are still legible; in other words, where the stalagmite is twelve feet thick and the drip still very copious, not more than a hundredth of a foot has been deposited in two centuries—a rate of 5 ft. in 100,000 years Below this, however, we have a thick, much older and more crystalline (*i. e.* more slowly formed) stalagmite, beneath which again, "in a solid breccia, very different from the cave earth, undoubted works of art have been found." Mr. Wallace assumes only 100,000 years for the upper floors and about 250,000 for the lower, and adds 150,000 for the immediate cave-earth, by which he arrives at the sum of half a million years that have probably elapsed since human workmanships were buried in the lowest depths of Kent's cavern.

Test for Alum in Flour or Bread.—According to *La Science pour Tous*, if a drop of alcoholic extract of logwood be allowed to fall upon pure bread or flour, a spot of yellowish-brown color will be the result. If the flour contain alum in the proportion of one or two per cent., the color is grey, blue, or grayish-violet; if five per cent., the spot is reddish-yellow, with an edge of greyish-blue, such spots of blue being detected in its disc by means of a lens. With 25 per cent., the blue border is no longer visible, but the spots may be discovered. This appears to be given as a recent French discovery, but Dr. Letheby used a decoction of logwood as a test for alum in bread more than 10 years ago. Mr. Crookes, after trying it, decided that it was of no value; but other chemists have commended it highly. Mr. Horsley's process is as follows: He makes a saturated solution of ammonia carbonate, and puts a teaspoonful of it, with the same quantity of the logwood tincture, into a wineglassful of water, in a white ware dish; a slice of bread is put in for five minutes, then removed, and allowed to drain; in an hour or two it turns blue if alum be present.

Gutta-Percha and Vulcanized Rubber.—These are entirely distinct substances. Gutta-percha is the gum of the "*percha*" trees, found in the Malay Peninsular, of which the *Icosandra gutta* is the chief. Vulcanized rubber is the concentrated gum of several kinds of plants and trees rendered hard by the action of heat. It usually has a certain proportion of sulphur compounded with it. Vulcanized rubber is not affected by boiling water. Gutta-percha, on the contrary, softens in boiling water, so that it can be molded into forms which it retains when cold.—*Am. Artisan.*

In a note to the French Academy upon the different conditions under which lead is attacked by water, M. Ad. Bobierre states that he has proved by numerous experiments the law that, with the exception of rain and distilled water, potable waters in general do not attack lead in a sensible manner except when the surface is alternately in contact with water and air. The author believes that a great part of the poisonous material in a plumbiferous water is often held in suspension, and can be removed by proper filtration.

M. Dumas has communicated to the French Academy some curious experiments of MM. Troost and Hautefeuille, on the hydrates of mercury or combinations of hydrogen with that metal. These combinations, it is said, so strongly resemble those which constitute the amalgams of mercury, with silver and other white metals, that it is hardly possible to doubt that they are themselves amalgams, and hence that hydrogen is a metal, a fact apparently indicated in many other analogies.

To Cut Glass Jars.—Fill the jar with lard oil to where you want to cut the jar; then heat an iron rod or bar to red heat, immerse in the oil; the unequal expansion will check the jar all round at the surface of the oil, and you can lift off the top part.

Preservation of Metallic Surfaces.

The great tendency of sheet iron to decay by oxidation has led to the employment of many methods of preventing it. The first and most natural seems to be a coating of some substance, and paint or oleaginous varnish has been much used. This is often employed where the exposure of the natural color of the iron is of no account, or where there is no desire to conceal the material of which the work to be preserved is made.

Asphaltum and black varnish are largely employed in many places, and a surface thus protected is susceptible of being gilded and elaborately finished, after the manner of tea trays, waiters, coffee cans, etc. Coating the sheet metal by immersion in a bath of melted tin is adopted, and is the most common, and perhaps the best, protection sheet iron can have. A familiar illustration is the numerous articles of household use that are so very common.

There is a process called galvanizing (but the term is not properly applied, as the process is not completed by the galvanic current), and this is very extensively used now. It consists in coating the iron by immersion in melted zinc, as in coating with tin. Articles of cast or malleable iron that are exposed to damp, or are for use under water, are coated in this way with advantage. Specimens of this method may be seen in the iron fixtures of washing machines, churns, wringing machines, etc.

There is also a process of enameling, in which the article is dipped into a gummy fluid, and the gloss or enamel, reduced by pulverization or grinding to a powder, is dusted on the gummy surface, where it adheres. The article is then put into a muffle and placed in a furnace, where, after a short exposure to a certain heat, fusion takes place, and a uniform coating is obtained, which is a good protection to such articles as breadpans, saucepans, etc. Enameled kettles and saucepans used by the housewife for boiling or cooking acid fruits are made in this way; and the application of such a coating should be more generally adopted.

To coat the sheets of iron with either tin, zinc or enamel, it is first immersed in sulphuric or muriatic acid for a sufficient time to clean them of grease or oxide; after that they are washed clean, and again dipped into a solution of muriate of zinc, and finally placed in a bath of tin or zinc, a thin coating of which immediately adheres to the surface.

By means of the electro-deposit process sheet metal may be coated with gold, silver or copper; but this process is used most for articles of ornament, and is intended to hide the metal of which they are formed. As the process is quite cheap, when but a light coating of the metal is required, it is extensively used, sheet brass or soft metal being chiefly selected for this purpose.—*Iron Age.*

Iron Architecture.—The use of iron as a building material has of late years been largely increased, especially in works of magnitude and importance, in consequence of the very great facility with which it can be manufactured into almost any required form, and the almost unlimited strength it possesses, if judiciously treated and applied. Yet, notwithstanding the enormous amount of iron construction that architects see constantly employed in all directions by engineers, it would appear that very few of them deem it worth while to learn anything about its capabilities and qualities as a building material. Architects do occasionally use iron in columns and girders, but they make but little effort to extend its use so that it might take the place of the materials which have been used from time immemorial, and with which they are more familiar, as brick, stone or wood. Hence it is that whenever any large building is erected, the whole credit of the design and execution is carried off by an engineer; although, perhaps, an architect may be called in to assist in the decorative features. And this state of things will continue to be so as long as architects are contented to take their knowledge of iron-construction at second-hand from the engineers. It is, however, a matter for serious consideration whether the architectural profession should be satisfied with simply endeavoring to imitate the styles and modes of building employed in former ages, rather than attempt to keep up with the rapid advance of the present age, and meet its requirements by adopting the use of a material of which our ancestors had but very limited knowledge.—*Builder.*

Nozzle for Delivering Water.—In a recent lecture on "Liquids," at the Royal Institution, Professor Tyndall mentioned that he had learned from Shaw, the head of the London Fire Department, that a scratch in the nozzle of a fire-engine delivery pipe, which an ordinary workman might overlook, will reduce its throwing power from 300 feet down to 150 feet. Our hydraulic miners in this State have frequently noticed strange and unaccountable variations in the force of the stream while the water remained constant; but we think that a falling off of one-half, resulting from an overlooked scratch, is rather heavy.

Type metal is composed of lead with ¼ or ⅛ of its weight of antimony, or: lead 2 parts, tin 1 part, antimony 1 part, or: load 15 parts, tin 1 part, antimony, 4 parts.

A Manch Chunk man, it is said, has invented a machine to separate slate from coal.

Needles.

So little we believe, is popularly known regarding the history and many elaborate processes necessary to transform a piece of simple wire into the beautiful and highly finished little implement so indispensable to the personal comfort of civilized beings, that we feel no apology is needed to our reader, if we endeavor in this short article to jot down a few interesting items of information respecting the needle, gathered from the *Iron Trade Circular*, London. In the first place there is the wire in huge coils, which are cut by immense shears. The wire is again cut into the different sizes required, each length being so divided as to make two needles. Several thousands of these lengths are then placed within two rings, about six inches in diameter, made of rough wrought iron, and are then straightened by being rubbed with a hot iron. The wire is next pointed at either end, a beautiful process to witness, innumerable sparks being emitted during the operation caused by the friction of the grindstone and wire, and which resemble a shower of golden fire. Some idea of the rapidity with which this is effected may be formed when it is stated that one man is expected to point 22 packets of 50,000 each in a week. The next process is that of brightening the middle portion of the wire, previously to stamping, that is, roughly shaping the head and eye, without actually perforating the wire. "Eyeing," as it is called, is the next stage, and is done by girls with extraordinary rapidity and accuracy; a smart hand can punch as many as 40,000 in a working day of 10 hours. They are now splitted, which consist in two thin wires being thrust through the eye; this operation is always allotted to boys. The reader must now suppose the needles in "sheets," which have next to be filed, that is, the flange formed by punching the eye is filed off, the sheets are broken in two, now first forming the distinct needle. The heads are now again filed and the needles then rubbed and hardened; next washed and "evened," that is, they are sorted into particular lengths, and are now ready for "tempering," perhaps the most delicate operation of all, and which is always superintended by one of the firm. Picking, straightening, and scouring follow, which latter operation, by the way, comprises about 14 different processes and extends over a fortnight.

Cleaning Brass.—A correspondent writes: The following is a recipe I have successfully tried in cleaning brass and copper: I make a mixture of one part of common nitric acid and one-half part sulphuric acid in a stone jar; then I place ready a pail of fresh water and a box of sawdust. I dip the articles to be cleaned in the acid, then remove them into the water, after which I rub them with sawdust. This immediately changes them to a brilliant color. If the brass is greasy, it must be first dipped in a strong solution of potash and soda in warm water. This cuts the grease so that the acid has the power to act. This is a Government recipe used in the arsenals. We will add to the above recipe that first washing in clean water, and second in water in which aqua ammonia has been placed to neutralize all trace of the remaining acid upon the surface of the brass, is an improvement upon the above process, which is, in all other respects, a good one. After dipping in the ammonia water and cleaning in the sawdust, if a good quality of lacquer be used, the effect is very fine. This process is excellent in preparing brass labels stamped from thin sheets.—*Artizan.*

Vulcanized rubber coated iron tubes are now manufactured in Philadelphia, which will bear over 300 degrees heat, the rubber being prepared at 400 degrees Fahrenheit. The pipes can therefore be used for either hot or cold water. Gas and water are said to have no effect on them, and the coating resists sulphuric and muriatic acids and caustic potash solution.

Transferring Pictures to Glass.—Coat the glass with a varnish of balsam of fir in turpentine, then press the engraving on smoothly and evenly, being careful to remove all air bubbles. Let it stand for 24 hours, then dampen the back sufficiently to allow the paper to be rubbed off by the forefinger, rubbing it till a mere film is left on the glass, then varnish again.

Two recipes are given in the *Scientific American* for removing tallow and white lead which have been applied to polished parts of machinery to prevent rust: 1. Use turpentine, and rub it in well. 2. Try a concentrated solution of caustic potash, scrubbing with an old scrubbing brush.

The Frog Barometer.—In some countries frogs are used as barometers; the species employed for this purpose is the green tree frog. They are placed in tall glass bottles with little wooden ladders, to the top of which they always climb in fine weather, and descend at the approach of bad weather. This is a cheap and highly interesting weather glass where the green tree frog is to be procured in its natural state.—*Science Gossip.*

Wood can be ornamented by punching down carefully in patterns, planing off a little, and then wetting; the parts punched down show in relief above the planed surface and make quite a puzzle.

Dredging upon the shores of the Baltic produced, in 1870, 14 cwt. of amber, value £60,000.

Straw Board.

The manufacture of straw board is a growing industry. Notwithstanding it is comparatively modern, its increase has been so great that it has nearly trebled the price of straw during a period of 20 years. Although based upon the same general principles as paper making, it differs from the methods employed for fine papers in several important particulars, some of the processes being omitted and others not required in the latter being necessary.

The first process consists in boiling the straw with quick-lime. This is done in a wooden digester which takes steam from a boiler. The straw is packed in layers with lime between them, and the whole boiled for from 10 to 12 hours, according to circumstances. Straw is composed of a tube of woody fiber and cellular tissue, having upon its outer surface a cuticle composed of silicates of potassa and soda, with some free silica. The woody fiber also contains some silica. To the silicious cuticle the straw owes, in great part, its strength. The same cuticle also covers the leaves of the different grains and grasses, and gives them the sharp cutting edge often observed in the coarser varieties.

The boiling process is therefore chemical in its effect. The reaction which takes place is the combination of the lime and the silica, which leaves the straw in a soft and pulpy state. The mass is now ground by a machine similar in principle to that used for grinding the ordinary paper pulp—namely, a revolving cylinder, upon which knives are fixed, which play between a series of fixed knives on a bed-plate. The straw is not chopped by these knives, but is gradually disintegrated until it is reduced to a uniform pulp.

The entire mass is now drawn into a vat, which contains water, and is kept constantly agitated by a series of revolving arms. A wire-gauze cylinder is so adjusted that it will revolve partially beneath the surface of the fluid mass. The pulp adheres to the gauze and is carried around to another cylinder, around which an endless belt of felt runs. The latter cylinder presses upon the gauze, and by this means the pulp is made to adhere to the felt, and condensed so as to give it enough consistency to be taken up by another cylinder, called a forming cylinder. The cylinder is one of a pair made of polished metal, and by them the pulp is strongly compressed. The pulp is wound around the former until the proper thickness is reached; this is determined by an indicator. Along the forming cylinder there is a groove planed out, through which the operator now passes a wooden knife, thus severing the soft board; and at the same time he unwinds the sheet and removes it. These sheets are cut so as to form other sizes, and then dried, which completes the process. Woolen rags are sometimes ground and mixed with the straw pulp. This makes a much darker-colored and heavier board, which is worth considerably more than the pure straw board.

The boards as thus manufactured are applicable to a great variety of useful purposes, among which book-binding, button-making and paper-box manufacture are most prominent.—*Furniture Gazette.*

The Age of Coal.

It seems probable that vegetable matter may, under favorable conditions, be converted into coal much more rapidly than most chemical geologists are in the habit of assuming. At least, a curious instance of an approach toward such conversion within the historic period has been brought before the German Geological Society. In one of the old mines of the Upper Hartz some of the wood originally employed as timbering has become so far altered as to assume most of the characteristics of a new lignite, or brown coal. It appears that certain of the levels in the ancient workings of this mine are filled with refuse matter, consisting chiefly of fragments of clay-slate, more or less saturated with mine water, and containing here and there fragments of the old timbering. This wood, when in the mine, is wet, and of a leathery consistence, but on exposure to the air it rapidly hardens to a solid substance, having most, if not all, the characteristics of a true lignite. It breaks with a well-marked conchoidal fracture, and the parts which are most altered present the black lustrous appearance characteristic of the German "pitch coals." At the same time, chemical examination of the same wood shows that it stands actually nearer to true coal than do some of the younger tertiary lignites. This instance seems, therefore, to prove that pine-wood, when placed under highly favorable conditions, may be converted into a genuine lignite, within a period which, from what we know of the history of mining in Hartz, can not have extended beyond four centuries.—*Athenæum.*

Albumen Extracted from Milk.—Schwalbe has found that if oil of mustard be added to cow's milk in the proportion of one drop to 1.1 drams, the milk does not coagulate even after being kept for a considerable period; but that the caseine is transformed into albumen. If this discovery, says *Les Mondes*, is confirmed, it will be of considerable importance in the printed fabric industry.

To remove tattoo marks from the skin, blister the part with a plaster a little larger than the mark; then keep the place open for a week with an ointment; finally, dress it to get well. As the new skin grows the tattoo marks will disappear.

How a Great Discovery was Made.

M. Claude Collas, a celebrated French chemist, communicates to *Les Mondes* an interesting paper on how discoveries are made. To M. Collas is due the honor of first recognizing nitro-benzol, or, as it is better known, essence of mirbane, a yellowish oil derived from coal tar, having a very sweet taste and an odor strongly resembling that of bitter almonds, which latter peculiarity has led to its extended use in perfumery. In telling the story of how he found this substance, he says that, during the year 1848, he was engaged in researches with a view of utilizing industrially the quantities of light oil which, having no employment, and hence very small value, filled up the cisterns in gas houses. It was at that time worth about one cent a pound. After vainly endeavoring to solve the problem for some time, M. Collas was about to relinquish the task, when it occurred to him to treat the oil in the same manner as gun cotton, that is, with a mixture of monohydrated nitric acid and sulphuric acid. "After the operation, the acids being separated by water," he says, "I was astonished to find at the bottom of my vessel a yellow button. The oil, at first lighter than the water, had become heavier, and hence sunk. I touched it with my finger and rubbed it on my hand, when the strong characteristic odor became at once forcibly apparent. I had found an essence which, at the cheapest, could replace a substance in great demand, and which was worth, instead of five centimes (one cent), fifty francs (ten dollars), a pound."

This discovery of mirbane was, however, only the prelude of the greater one, subsequently made, of the magnificent colors which could be derived from the aniline obtained by its deoxidation by means of nascent hydrogen evolved from iron filings and acetic acid. In 1856 Perkin obtained from aniline the beautiful violet color known as mauve, and since then the dyes thus derived have been produced to such an extent that their value to industry is almost beyond calculation. The little button of mirbane, however, in the modest laboratory of a Parisian apothecary, was the germ from which the whole grand series sprang.

There seems to be a kind of fatality about great discoveries which brings them forth in its own time. Men stumble across valuable ideas, and learn important truths too soon, which lie dead during their lifetime, only to be appreciated by the world after their death. The history of arts and sciences abounds in examples. Faraday, in 1825, found benzol in the tarry residues of gas works, but that illustrious chemist obtained neither fame nor profit for his discovery, which would doubtless have remained buried in the archives of the British Royal Institution until the attention of the scientific and industrial world was drawn to the chemical properties of the substance, almost forty years later. Again, it often happens that discoveries escape those who are, by accident, placed in the very position to seize upon them. M. Collas cites, as evidence of this, the case of a French chemist who, in 1846, made a yellow dye for silk by the action of nitric acid on coal oil. The peculiar odor of the mirbane, which he must have produced, escaped him, and he failed to recognize the new substance which he had obtained.—*Scientific American.*

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Fruit Preserving Company

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Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

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11v7-6m

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Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

Agricultural Notes.

ALAMEDA.

Harvest Time.—Alamsda *Advocate*, June 27: Barley-cutting in this nsighborhood is just commencing. The first reaper of ths season is at work on Mr. Fanholt's farm south of the railroad. The wheat harvest is expected to commence about two wesks hence.

Splendid Grain.—Livermore *Enterprise*, June 27: We paid a visit to the large ranch of A. D. Splivola, Esq., situated about two and a half miles south of Livermore; rode through some of the finest and heaviest grain ws have seen. The hillsides and tops are a perfsct mass of wheat, and in the valleys it was impossible to rids through it. One field of about 260 acres was the Chilanean or bearded wheat, and in many places it would msasure over seven feet in hight, and none less than five. We gathered a few heads, most of which will weigh over an ounce, and one Mr. Suñol had went over two ounces. Ws dare say that nowhsre in the State can a similar field of such heavy wheat be found. Thsre is upwards of 1,300 acres in wheat, and Mr. Suñol thinks that 20,000 sacks will not he sufficient to rsmove it from ths field. Nearly half of the sntire crop will give ovsr 60 bushsls to the acre, and not an acre will go lsss than 35 bushels. Ths harvesting commenced on Monday, and it is expected to finish in about 35 to 40 days.

Workmen.—During the week thers has been quite a dsmand for laborers in ths harvest fisld. Onr farmers are paying ths highest wagss, and good stsady hands find no difficulty in getting work.

BUTTE.

Help Wanted.—Butts *Record*, Juns 27: Farmers complain very much of scarcity of labor, it being next to impossible to find men to assist in harvesting. A large numbsr of sober, industrious men, can find employment about Chico for soms time.

CONTRA COSTA.

Fine Wheat Fields.—Contra Costa *Gazette*, June 27: Along the San Ramon road between Walnut creek and Danville, there are several fields that bid fair to yield 50 bushels or more per acre.

Favorable Weather.—The cool weather we have had for the past week or more has been rarely favorable to the matnring grain crops at the critical stage of growth, and most of the barley is now about ready for the reaper, while the early sown wheat is filling plumply and taking on the greenish golden hues peculiar to healthy ripening.

FRESNO.

Harvesting.—Fresno *Expositor*, June 27: Harvesting is progressing favorably throughout the county. The grain is yielding as well or b tter than was anticipated. The grain is averaging on various farms in this vicinity at from eighteen to twenty bushels per acre, and is plump and solid.

INYO.

Not the Army Worm.—Inyo *Independent*, June 20: It turns out that the reported army worm operating on Bishop creek and elsewhere in the county in places, is not the regular army worm, but is the usual volunteer to be seen on corn and cabbage more or less every season. But no matter hy what name, they are making unusual inroads on the crops here and there, nevertheless.

KERN.

Sweet Potatoes.—Tulare *Times*, June 27: Dr. Stockton, living about sixteen miles from Bakersfield, Kern county, informs us that he last year raised twelve hnndred pounds of the finest of sweet potatoes on the sixth of an acre of ground, and that this year he is cultivating four acres of the vegetable, and confidently anticipates a yield of four tons to the acre.

Salt.—A vein of rock salt has recently been discovered in our mountains. It is tinted with a pinkish color. Half a ton of it was shipped from Tulare this week to San Francisco. This will no douht prove to be very valuahle. The parties that discovered it have not yet revealed the exact whereahouts of the deposit.

LOS ANGELES.

Prosperous.—Los Angeles *Express*, June 25: But few sections of the State are in as prosperous and promising condition as this. Agriculturally we are flourishing beyond all comparison. Onr crops this season have met with no set-back of any kind, and our grain now harvesting is superior in every respect. The small fruits are ripening finely, and there will be a great abundance. The grape crop this fall will he very large. The viutners are looking forward to a vintage mnch more ample than we have had in any past year. It is believed that grape-growers in the vicinity of this city oan count on much more satisfactory rates for their crops than they realized last year.

From Gallatin.—Cor. *Express:* Crops will he, this year, one-third larger than any previous year. We estimate the acreage of this valley planted in corn at 7,000 acres, with an average of 40 hushels per acre (which, we believe, is not over-estimated), making a total of 280,000 hushels, worth 50 cents per bushel. Total amount, $140,000; while we have one-third of that amonnt of land in harley and rye, making 70,000 bushels of those cereals, worth, at present prices, about 40 cents per bushel, making a total of $28,000. This estimate includes the hay crop, for we are not posted as to what amount of grain has been cut for hay or harvested for grain; the value in money is about the same, giving a total valuation for corn and othsr cereals of $168,000. This estimats does not include vegetablss and fruit, of which there is a sufficiency of ths formsr for home consumption and to spare.

MENDOCINO.

For Crops.—Mendocino *Democrat*, Juns 27: With the excsption of a very few days of hot wsather, the growing season here could not be bettered, and has been marked with a cool tempsrature, calculated to fully mature and ripen grain and frnits to perfection. Our farmers havs reason to be thankfnl, and so have our peopls in general, for what bensfits the first insures the bsnefit of all.

The demand for herders this harvest is greater than the supply, and many farmsrs will be obliged to leave their grain standing several days longer than it should, awaiting the arrival of machines ordersd by tslsgraph, through dsalers, from the East.

MERCED.

Fire in a Grain Field.—Valley *Argus*, June 27: A fsw days ago a fire broke out in the grass a few miles from Plainshurg, and although the people of the neighborhood turned out with alaority to fight ths destroying element, it swept over a considerable tract of unplowed land, and into a grain field belonging to H. E. McClure. The grain being quite green, the forcs of msn gathered at ths scene soon sncceeded in arresting its progress and saving the orop from material damage. Fire has broken out in several places in this connty sincs the grain commenced to ripen; but so far, we have heard of no great damage being done.

From the West Side.—We learn that the crops on the west side of the San Joaquin river, though short, are turning out better than was sxpected.

MONTEREY.

The Harvest.—*Enterprise*, June 27: A slight shrinkage of some portions of ths grain in particnlar fields, will take from what, up to four weeks ago, was confidently expected would placs the yield up to, if not ahead, of previous years. However, the crop may be pronounced a good one, and with fair prices, the farmers can event 1874 as one of the prosperous years.

NAPA.

Haying.—Calistoga *Free Press*, June 27: Tbe farmers are getting pretty well through with haying. The yield, as anticipated, is very large. The crop is commanding about $12 per ton for loose hay in the field.

PLACER.

Farmers.—Placer *Herald*, June 27: The farmers of Western Placer have about all finished haying, and are now engaged in heading and reaping their grain. The yield of the hay crop to the acre was gcnerally light, although soms farms, situated on hilly or rolling ground, have produced a fair crop. The alfalfa fields have all yielded a good return. The second crop is now being cut, it having grown and matured in about six weeks. There is probahly a sufficient quantity of hay raised for home consumption. The grain crop, as to acreage, is more than an average. Some farmers have good crops, while others have comparatively nothing; bnt a greater number have what they term a half or two-thirds crop.

SAN BENITO.

Tobacco. — San Benito *Advance*, June 27: The tohacco plants look quite healthy on Geo. Headen's plantation, about five miles north of Hollister. He will have a very large crop. Five large drying houses are in course of erection.

SAN JOAQUIN.

Calamitous Fire.—Cor . Stockton *Independent*, June 27: A fire broke out this afternoon which came near burning the whole country around us. It started on the ranch of Philip Loney, through carelessness in hurning weeds near the honse. His whole 160 acres of wheat, which was in the stack, was burned. The fire then ran east and south over a large tract of sheep range, mostly owned by Aug. Munter, then to the ranch of J. F. and N. Harrison, occupied by William Campbell. The whole ranch, 640 acres, was in grain, and three-fourths of it was destroyed. From Mr. Campbsll's place it caught in a field of railroad laud, occupied by J. G. Schroder. Here 80 acres of wheat was hurned. The fire was stopped by back-firing from a road running north and south through Mr. Schroder's place. The yield of the greater part of the grain fields bnrned over is estimated at an average of about 20 hushels to the acre. Had it not been for the fact that but vsry little wind was blowing at the time, and from the almost superhuman efforts of at least 300 persons, there is no knowing where it would have stopped, for there is almost a continuous wheat field for miles east and south. The extent of the ground burned over is about four miles long, and from one and a half to two miles wide.

SANTA CRUZ.

From Watsonville.—Cor. *Sentinel:* If any one could see the valley at the present time, with the magnificent crops ripe for the sickle, he would realize to some extent that we are doing onr share toward placing the State of California in the front rank of agriculture. From the hill-tops to the beach, as far as the eye can reach, the valley represents an abnndance of everything that the hushandman can desire. No blight of any kind on either grain or potatoes is anticipated. On the contrary, there will he a larger harvest here than ever. Laborers are in demand, and soon the husy hum of the steam-thresher will resound through the valley.

SIERRA.

Sierra Valley.—*Mountain Messenger*, June 27: The prospects of farmers in Sierra vallsy are bettsr this season than they have ever been. The hay crop promises to bs unusually large and the arsa of grain sowed is greatsr than any previous year. Thsre is no lack of moisture, and irrigation of orops in many cases will not be necessary, to bring them to maturity. Ths principal kinds of grain growing ars barley, wheat and oats, the lattsr predominating.

STANISLAUS.

Barn Burned.—*Valley Mirror*, Juns 27: On Sunday afternoon last, the barn of Robsrt Dallas, situated on bis ranch on the south sids of the Tuolnmns river, near Waterford, was destroyed by firs, togsther with fifteen tons of hay. The fire is supposed to have bsen the work of an insans man. It was vsry fortunate that the wind was blowing from the south at ths tims, as otherwiss it would have communicated with the grain near by, and the amount of damage resulting therefrom would have been almost incalculable.

TULARE.

Linn Valley.—Visalia *Delta*, June 25: I havs just returnsd homs from a trip down Tule rivsr to Tulare City, and through Visalia and Portsrville. Plenty everywhere is the fruit of the farmers' labor. On Tule river haying is almost finished, hut the grain is not yet ripe enough to be cut for thrsshing. At the Eighteen Mile houss several headers were at work on the barley, and that being finished, the wheat will be ready to pour its abundance into the garner of the industrious husbandman. I saw on the ranch of Mr. James McCahsy, of Deer creek, a piece of alfalfa which was planted last year and yielded three crops. This year it has been cut once, and when I saw it it stood three feet high, commencing to bloom, and promissd a yield of one and one-half tons per acre, and for the year not less than five tons per acre—probably mnch more. There is hut littls in our own valley to communicate. The crops ars just beginning to head, though promiss a fair yisld. The grass is still gresn in the flat lands.

YOLO.

From Capay. — Cor. Yolo *Mail*, June 27: The farmers are all hard at work. Harvest is upon them, and the golden grain is ready for the header. All reports are favorable for a large return in grain for the labor bestowed upon the ground. All say that the berry this year is the heaviest and hest filled they have ever seen, particularly that of the winter sowing. The north winds of the past week have done considerable damage to the ripe grain.

Our town is improving rapidly. The new Grange hall, upon which work has heen commenced, will be an ornament to this part of the county. It will have a front of 30 fe€t, by 60 feet deep. F. S. Freeman & Co., of Woodland, will occupy the lower room as a store. Several other new buildings are going up.

Threshing.—The farmers in the regions of the foot-hills, and particularly in Hungry Hollow, in this county, have been threshing wheat for nearly a week. We have had reports from two or three parties, who represent that the berry is very large and plump, but that the yield per acre is not so great as was anticipated. We have not heard of any being marketed yet.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., June 30th, 1874.

For Week Ending June 16th, 1874."

Peach and Plum-Cutting Machine.—Philo J. Isbell, Placerville, Cal.

Amalgamator and Concentrator.—William H. Patton, Oakland, Cal.

Graining Machine. — Charles Rapp, S. F., Cal.

Bellows.—James Campbell, S. F., Cal.

Draft Equalizer.—Josiah Dodge, Grass Valley, Cal.

Combined Pump and Condenser for Steam Engines.—Charles O. Faricot, S. F., Cal.

Tank Roof.—Henry G. Fiske, S. F., Cal.

Vault Cover.—William Lynch, S. F., Cal.

Guiding Balloons.—Charles F. McGlashan, Truokee, Cal.

Artificial Stone.—Ernest L. Ransome, S. F., Cal.

Mold for Mending Cracked Bells.—Daniel L. Riggs, Salem, Oregon.

Design.

Centerpiece.—Samnel Kellett, S. F., Cal.

———*The patents are not ready for delivery by the Patent Office nntil some 14 days after the date of issne.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

One of our most valued exchanges is the Pacific Rural Press, published by Dewey & Co., San Francisco, California. Every number contains a vast amount of general news from the far west, besides much valnable information in the way of Grange news.—*The Farmer's Friend, Mechanicsburg, Pa.*

Recent Patents.

Among the patsnts recently obtained through Dswsy & Co's., Mining and Scientific Press, American and Forsign Patent Agency, ths following are worthy of mention:

Machine for Riving Shingles.—Danisl Shankland, Watsonvills, Cal. This invsntion relates to a machine for splitting or riving shakes or shinglss. Ths block of wood is secursd in a carriags which feeds it uniformly to the frow or splitting knife. An arrangement for giving the knife a twist whsn it has entered the block splits ths shingle off, and throws it clear of the machine.

Ore Concentrator and Washer.—Jonas B. Wilder, Sonora, Cal. Rslatss to a sluice section which is monnted on springs and given a peculiar motion and jar. Ths section has inclined diagonal grooves or channsls passing across it which extsnd through the sides of ths sluics. Ths tailings from the main sluics must pass through this mounted section. Ths peculiar motion and jar which are given to the section cause the snlphurets and heavy particles to travel up the inclined channsls and throngh the sidss of the sluice, whsre they are discharged.

Pruning Implement.—Rufus E. Farrington, Anaheim, Cal. This patent covers an improved handle for pruning instrumsnts by which they can bs more easily handled and operated while trimming the higher branches of a tree. It also covers improvsments in ths construction of ths pruning instrument.

Air Compressor.—Wm. H. Fauntleroy, Eureka, Cal. Mr. Fauntleroy proposes to compress air by hydraulic pressure so as to produce sithsr light, heat or force, and describes a systsm of connections with propsr reservoirs by whioh the air may be transmitted from one point to another for the purpose of providing power or force for various purposes.

Stage Ship for Theaters.—Samuel H. Chapman, Sacramento, Cal. This invention relates to an extension ship for spectaoular effects upon the stage of a theater. The ship is so constructed that whsn first seen by the audience it is quite small and seemingly in the distance; gradnally the hull of the vessel extends in length; gradnally the masts rise; nearer and nearer the ship seems to approach, nntil, finally, it stands hefore the audience a full rigged ship, filling the entire space upon the stage. All this is done by men in the hull of the ship, who by turning a crank operate slides which lengthen the ship.

Package for Axle Grease.—J. G. Hucks, S. F., Cal. This invention relates to an open top metal can, which Mr. Hucks provides with a wooden cover, the edge of wbich is bevelled. This cover is crowded into the upper open end of the can so as to fit tightly. When the cover is removed the entire top of the can is open, so that its contents can be easily removed.

Mechanism eor Moving Lumber.—Tothammer & Osborne, S. F., Cal. This patent relates to a machine for moving lumber from one place to another; bnt its principal use is for unloading lumber from ships and depositing it upon the wharf or in the lumber yard, as desired. It consists of a series of jointed sections, having rollers mounted transversely across them. The rollers are rotated by a belt or gearing, and are provided with spurs or projections, so that the lumber is moved along from one to the other until it arrives at its destination.

Button Hole Sewing Machine.—J. J. Graff, S. F., Cal. An improvement upon the Humphrey Button Hole Sewing Machine, by which the bntton hole is finished without taking the cloth from the machine, thus saving the trouble of finishing them by hand, as heretofore. The improvement is very simple, and accomplishes the finishing neatly and perfectly.

DURHAM STOCK AS BUTTER MAKERS.

The following letter is published at the instance of Peter Wall, Esq.

Green Valley Ranch, Marin Co., May 8th, 1874.

Mr. J. B. Redmond—*Dear Sir:* We have just churned the cream obtained in seven days from our three-year-old heifer which we bought of you, and the result is fourteen and a half pounds (14½ pounds).

Thinkiug that you might be interested in the matter I thought best to drop you a line. If any person thinks that your Durham stock does not milk well I would like to have them swallow this statement.

Last year after bringing her from your place (and of conrse as a two-year-old), and after four months from calving, she made, on dry feed in August, in one week, nine and a half pounds. Respectfully yours,

25v7-4t O. ALLEN & SON.

The End-Shake Thresher.—The following letter is from Wm. P. Harkey, Esq., Sheriff of Sutter county, referring to the value of the Lanfenberg End-Shake Shoe for threshing machines:

Yuba City, Cal., March 25, 1874.

Messrs. Treadwell & Co., San Francisco.—*Gentlemen:* In regard to the Lanfenberg End-Shake Shoe, which I bought of you last season, I will say I have given it a thorough trial, and if I conld not get another I would not take One Thousand Dollars for it. I used it throughout the season on a Russell Separator, which I had run previously with a side-shake, and it saved me a great deal of trouble and much loss. It savcs all the grain. I consider it the best and most valuable improvement on the threshing machine yet brought out. It is absolutely indispensable to the economical working of a good thresher. Wm. P. Harkey.

13v7-3m

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

[By our own Reporter.]

DOMESTIC PRODUCE.

SAN FRANCISCO, Wedneeday, July 1et, 1874.

We are now just entering the harvest season of the year. It is a time when the thoughts naturally turn backward to the season past, and with anticlpation forward to the future. Ae noted elsewhere, the last ehip carrying a cargo of Wheat of the crop year 1873-'74 has eailed. The harvests of laet year are at last so nearly marketed that in a very short time they will exert no perceptible influence on the market, and even now the trade in them is very nearly ended. The annual summing up will ehow in most quarters a favorable halance sheet. For the present year, we start with at least a splendid set of crops. To the State the gain must be large; though the increase in the quantity of grain is moetly due to additional acreage under cultivation, and so will not benefit the individual producers so much as a smaller yield, from lees territory, might do.

It is yet too early to predict with assurance the course of the grain market during the coming fall and winter. At the present prices for the new crops are quite low. What they will be, a few months hence, will depend entirely upon outside influences, and these are ae yet uncertain. It should bo noted, however, that quotations are not as low as might have been expected some time ago, when crop reports manifested such a tendency towards exaggeration.

The Fruits and Vegetables, as well as the Cereals, are now matters of great importance to the State. In these the difficulty is rather to find a market than to produce choice kinds and plenty. The cost of freight to this city cuts off the margin of profit protty closely, when Fruits that have every qualification are brought down to one, two and three cents ₱ lb.

Receipts

Of Produce at thie port during the past week were as follows: Flour, 6,900 barrels; Wheat, 32,200 centals; Barley, 18,100 centals; Oats, 4,840 centals; Corn, 2,240 centals; Beane, 620 sacks; Potatoes, 17,330 sacks; Onions, 1,445 sacke; Hides, 3,494; Wool, 820 bales; Hay, 1,460 tons; Straw, 42 tons; Lemons, 1,160.

Receipts of Oregon Produce for the month of June were as follows: Flour, 12,916 barrels; Wheat, 5,777 centals; Barley, 1,231 centals; Oats, 20,392 centals; Potatoee, 100 sacks; Hides, 4,526; Wool, 1,039 bales. Shlpments of Flour and Wheat from Oregon to San Francieco, since August 1st, 1873, reduced to the Wheat baeis, amounted to 681,900 centals; of which, however, most was reshipped to Liverpool.

Barley.

Several hundred eacks of the new crop changed hands yesterday at prices ranging from 92½c to $1.10. The latter price is the very best which can be obtained. When the Barley becomes old enongh for brewing purpoeee, the call for this object will he sufficient, alone, to bring up the price. During the past year receipts amounted to 1,115,000 centals, and exports to 484,300 centals.

Dairy Produce.

Butter is a trifle weaker to-day for Fresh, while Firkin and Pickled Roll hold their own. California Cheese is still lower, and stocks are accumulating in this city. It is difficult to obtain quotations for Eastern, as little is being done on account of the general depression of Cheese, and holders are naturally unwilling to sell at less than the price obtained at Eastern factories—a reeult which the present state of the market would seem likely to bring about.

Eggs.

Eggs are in very scanty supply, and prices are firm.

Feed.

Hay still ranges from $10 to $15 ₱ ton. Voluuteer sells at $11, and good Wild Oat at $14. What old Hay remains in market is rated at $20. Very little Straw has yet come in; but receipts will be large before long. Feed Corn Meal has again been advanced.

Hops.

Bueinees is still very dull, and quotations are almost nominal. The arrival of the new crop will create a movement, at all events. We extract from Emmet Wells,' New York, *Circular*, of June 18: A modorate demand has prevalled during the week for the better gradee of California and "State," the former meeting with the most favor, owing to superiority in quality. A large proportion of our brewers having secured supplies sufficient to carry them through to the new crop, the only busiuess now ourrent is that of supplying the immediate wants of those who are not stocked. The new crop, the world over, is looking too promising at this time to give any hope of a better market, and holders of last year's crop should lose no opportunity to sell. Although there is still conederable complaint of fly in the English plantations, the reports will have to prove more serious than they have at any time this season in order to affect this market favorably. Germany always produces a surplus, and from present appearances that country will be able to make good any deficiency there may be in England. The chances are that America aleo will be able to spare a few thousand bales for export.

Potatoes.

Sherman Island Potatoes have been added to the list, and other Sacramento River Potatoes will soon he in. Prices of all kinds have met a severe decline this week, and are now very low indeed. The falling off has been about 40c ₱ cental throughout the line.

Poultry.

There has heen no change in quotations. Turkeys are a shade firmer, at the same rates; while Chickens are slow of sale.

Wheat.

The export of Wheat to Europe for this year was 2,551,838 centals lees than that of the previous year; hut the difference of $1,004,776, in value, was in favor of the smaller crop. Going back one year further, to 1871-'72, we find the value of our Wheat export to have been only $3,172,127. This shows how much the increase in the production of this etaple is. Salee ol 3,000 sacks of old at $1.75, 500 do. of new at $1.70, and 400 tons, brought by the *Hattie Ficket*, at $1.65@1.67½ and at private rates have been made duriug the week.

Wool.

The Wool trade of this city hae fallen off during the week under reviow, ae the deliveries of the spring clip are nearly over for the eeaeon, So far, 53,714 bales have been received, as compared with 42,572 bales during the correeponding period of last year. New York and Boeton report a good business for the week.

GENERAL MERCHANDISE.

WEDNESDAY M., July 1, 1874.

Notwithstanding the large receipts of Bags just oome to hand, the demand is so urgent, owing to the large harvests, that quotations are very buoyant. We note a still further advance this week. It is said that the top of the market has not yet been reached, and that still higher prices may be looked for. Just now, the Bag and Bagging trade is very lively, and has been entered as a speculation by parties outside of the regular business. The imports of Ooffeo from January 1st to June 16tb, were as follows; Java, 248,636 lbs.; Central Am., 6,730,780 lbs., Manila, 154,400 lbs.; La Guayra, 12,000 lbs.; Hawaiian, 11,000 lbs.; total, 7,157,662. Sugars sold very well at the auction of Monday.

BAGS.			
Eng. Stand Wht..	—14¼	@14½	
Detrick's Machiue			
Sewed, 22x36 E..	—	—@13½	
do 22x36, do E W—		—@14	
do 20x40, do A....	—	—@14¼	
Flonr Sacks ½s..	10½	—@12½	
" " ¼s.	6½	—@ 7¼	
Stand. Gunnies..			
double seam ...	—15	—@16	
single seam	—13	—@13	
" Wool Sacks.	65	—@—	
Barley Bags 24x36	—	—@15½	
do 23x40	—	—@15½	
do 24x40	—	—@16¼	
do 23x36	—	—@17	
Hessian 40-in.gds	9½	—@10	
do 45	10½	—@11	
do 60	—	@15	
CANNED GOODS.			
Asst'dPie Fruits in 2½ ₱ cans.	2 75	@ 3 00	
do Table do...	—	@ 2 75	
Jams & Jellies	3 75	@ 4 25	
Pickles ½ gl..	—	@ 3 50	
Sardines,qr hoxl	75	@— —	
do hf boxes.3	00	@— —	
COAL—Jobbing.			
Ans tralian ₱ ton	11 00	@—	
Ooos Bay.....	—	—@10 00	
Bellingham Bay.	—	— @ 8 50	
Seattle.....	—	—@11—	
Oumberl'd, cks..	22 00	@23 00	
do hulk...	18 00	@20 00	
Mt. Diablo.....	6 25	@8 25	
Lebigh.....	20 00	@22 50	
Liverpool.....	11 00	@12--	
West Hartley....	12 00	@14—	
Scotch.....	9 50	@10 00	
Soranton ..	15 00	@17 50	
Vanoouver's Isl..	11 00	@11 50	
Cbarcoal, ₱ sk...	75	@ —	
Ooke, ₱ bbl.....	—	@ 60	
COFFEE.			
Sandwich Island	—	@ 22	
Costa Rioa per ₱	23½	@ 24	
Guatemala.....	23	@ 24	
Java.....	30	@ --	
Manilla.....	22	@ 23	
Ground in cs....	—	@ 30	
Chicory.....	10	@ —	
FISH.			
Pac.Dry Cod.new	5	@ 6	
cases.....	6	@ 7	
do boneless.....	11	@ 12	
Eastern Cod.....	6	@ 7	
Salmon in bhls..8	50	@9 00	
do ½ bbls	5 00	@5 50	
do 2½ ₱ cans	—	@3 25	
do 2₱ cans..2	80	@3 00	
do 1₱ cans .2	00	@2 25	
Do Col. R. ½h...	—	@—	
Pick. Cod, bbls.	22 00	@—	
do ½ bbls	11 00	@—	
Bos . Sm'k'd Her'g	40	@ 50	
Mack'l.No.1, ½bls	11—	@12—	
" Extra....	—	@12 50	
" in kits....2	75	@3 00	
" Ex mess..3	50	@4 00	
" Ex mess.½bs	—	@15 00	
Sm'k Herr'g, bx.	50	@ 55	
NAILS.			
Assorted size, ₱ lb.	5½	@ 7½	
OILS.			
Pacifio Glue Co. Neat F't No. 1	—	@1 00	
Pure.....	1 25	@ —	
Castor Oil, No.1..	—	@1 75	
do do No.2..	—	@1 60	
Cocoanut.....	45	@ 50	
Olive Plagniol..5	00	@ —	
do Possel....4	75	@ —	
Palm.....	9	@—	
do Bagicalupi.	—	@—	
Linseed, raw....	—	@1 02	
do boiled.....	—	@1 07	
China nut in cs..	—	—@ 80	
do bulk.... ...	70	@ 72	
Sperm, crude....	—	@1 40	
do bleached..	—	@2 20	
Coast Whales...	35	@ 40	
Polar, refined....	50	@ 55	
Sperm.....	1 40	@1 50	
Lard.....	95	@1 05	
Coal, refiued Pet	37½	@ 40	
Oleophine.....	—	@ 34	
Devoe's Bril't....	27	@ 29	
Long Island.....	—	@ 34	
Eureka.....	37½	@ 40	
Devoe's Petro'm	26	@ 29	
Barrel kcrosene	—	@ 26	
Olive.....	4 00	@9 50	
Downer Kerose'e	—	@ 45	
Gas Light Oil....	—	@ 34	
PAINTS.			
Atlan. W. Lead.	7½	@ 12½	
Whiting	—	@ 2	
Putty	4½	@ 5	
Ohalk.....	—	@ 2½	
Paris White.....	2¾	@—	
Ochre.....	—	@ 3½	
Venetian Red...	3½	@ 5	
Red Lead.....	7	@ 11	
Litbarge.....	10	@ 11	
Eng. Vermillion	1 00	@1 25	
RICE.			
China No. 1, ₱ ₱	6½	@ 6¾	
do 2, do.	5½	@ 5¾	
Japan.....	5½	@ 6	
Siam Cleaned...	7	@ —	
Patna.....	—	@ 6¼	
Hawaiian.....	7	@ 7¾	
Carolina.....	10	@ 10½	
SALT.			
Cal. Bay,per ton	10 00	@14 00	
do Common..	5 00	@ 7 00	
Carmen Island..	11 00	@13 00	
Liverpool fine...	23 00	@25 00	
do coarse	15 00	@20 00	
SOAP.			
Castile ₱ ₱...	10	@ 11	
Looal brands..	5	@ 8	
SPICES.			
Allspice, per ₱..	—	@ 18	
Cloves.....	—	@ 52½	
Cassia.....	—	@ 26	
Citron.....	—	@ 30	
Nutmeg.....	—	@1 07½	
Whole Pepper...	18	@ 19	
Pimento.....	—	@ 15½	
Gr'nd Allsp prdz	—	@1 00	
do Cassia do..	—	@1 50	
do Cloves do..	—	@1 50	
do Mustard do	—	@1 25	
do Ginger do..	—	@1 00	
do Pepper do..	—	@1 00	
do Mace do..	—	@1 60	
SUGAR, ETC.			
Cal. Cube per ₱.	10	@ —	
Partz' Pro. Cube bbl or 100 ₱ bxs	—	@ 10½	
do in 50 ₱ bxs..	—	@ 10¾	
do in 25 ₱ bxs.	—	@ 11	
Circle A crushed	10	@ —	
Powdered.....	—	@ 10¼	
Granulated.....	—	@ 9½	
Dry granulated	10	@ —	
Hawaiian.....	8	@ 9	
California Beet.	—	@ 10	
Golden C.....	9	@ —	
do Rey'g'grade	8	@ —	
Cal. Syrup in ols.	—	@ 27½	
do in ½ bls.	—	@ 30	
do in kegs..	—	@ 35	
Hawaiian Molasses.....	10	@ 20	
TEA.			
Oolong, Canton, ₱	19	@ 25	
do Amoy...	28	@ 50	
do Formosa	40	@ 80	
Imperial, Canton	25	@ 40	
do Pingsuey	45	@ 80	
do Moynne .	60	@1 00	
Gunpo'der, Cant.	30	@ 42½	
do Pingsuey	50	@ 90	
do Moyune.	65	@1 25	
Y'ng Hy., Canton	28	@ 40	
do Pingsuey	40	@ 70	
do Moyune..	65	@ 85	
Japan, ½ chests, bulk	30	@ 75	
Japan, lacquered bxs, 4½ and 5 ₱s	45	@ 67	
Japan do, 3 ₱ bxs	45	@ 90	
do pl'n bx, 4½ ₱	35	@ 65	
do ½ & 1 ₱ paper	30	@ 55	
TOBACCO—Jobbing.			
Bright Navys....	50	@ 60	
Dark do	45	@ 55	
Dwarf Twist....	57	@ 62½	
12 inch do	57	@ 62½	
Light Pressed...	65	@ 75	
Hard do ..	66	@ 70	
Conn. Wrap'r....	40	@ 50	
Penn. Wrapper..	20	@ 30	
Obio do ..	7	@ 15	
Virgi'a Smok'g..	60	@ 95	
Fine ct che'g, gr..	8 50	@9 25	
Fine cut chewing, buc'ts. ₱ ₱..	75	@ 90	
Banner fine cut..	—	@9 00	
Eureka Cala....	8 75	@9 00	
TURPENTINE.			
Eastern.....	70	@ 75	

LEATHER.

WEDNEEDAY M., July 1, 1874.

Medium Grades of Jodots are hard to obtain; there are plenty of light weight in this market. Buff Leather has declined 1c ₱ foot. The Leather trade is moderately fair.

City Tanned Leather, ₱ ₱	25@29
Santa Cruz Leather, ₱ ₱	25@29
Country Leather, ₱ ₱	24@28
Stockton Leather, ₱ ₱	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Beaumerville, 15 Kil	60 00@ — —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
Frenoh Kips, ₱ ₱	1 00@ 1 15
Oalifornia Kip, ₱ doz	40 00@ 6 00
French Sheep, all oolors, ₱ doz	8 00@ 15 00
Eastern Calf for Backs, ₱ ₱	1 00@ 1 25
Sheep Roans for Topping, all oolors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@ 5 25
Good French Calf Boot Legs, ₱ pair	4 00@ 4 75
French Oalf Boot Legs, ₱ pair	4 00@ — —
Harnese Leather, ₱ ₱	30@ 37½
Fair Bridle Leather, ₱ doz	48 00@ 72 00
Skirting Leatber, ₱ ₱	34@ 37½
Welt Leather, ₱ doz	30 00@ 50 00
Bnff Leather, ₱ foot	18@ 21
Wax Side Leather, ₱ foot	17@ 19
Eastern Wax Leather	—@— —

DOMESTIC PRODUCE.

WEDNESDAY M., July 1, 1874.

BEANS.			
Beans, sm'l wh. ₱	5¼	@	5½
do, butter.....	6	@	7
do, large, do...	6	@	7
do, bsyo.....	2¾	@	2⅞
do, pink.....	2¼	@	2½
do, pea.....	5½	@	5⅝
do, Lima.....	6	@	7
BROOM CORN.			
Per ton.....	$80	@200	
DAIRY PRODUCE			
Butter, Cal. choice ₱	30	@	32
do, good.....	27	@	30
do, inferior....	22½	@	27
do, firkin....	25	@	28
do, pickled....	30	@	32½
Cheese, Cal. new	9	@	14
do. Eastern ...	14	@	17
EGGS.			
Eggs, Cal. fresh	25	@	30
do, Oregon.....	22	@	24
do, Eastern....	—	@	—
do, Ducks.....	17½	@	20
FEED.			
Bran, per ton....	16 00	@17	00
Middlings	26 00	@27	50
Hay	10	@ 15	00
Straw.....	8 00	@—	—
do ₱ oale.....	95	@ 1	00
Oil cake meal...	—	@32	50
Corn Meal.....	43 00	@45	00
FLOUR.—Superfine & Extra.			
Alviso Mills, bbl	4 25	@5	75
California.....	4 25	@5	75
City Mills.....	4 25	@5	75
Oommel Mills..	4 25	@5	75
Golden Gate.....	4 25	@5	75
Golden Age.....	4 25	@5	75
National Mills..	4 25	@5	75
SantaClaraMills	4 25	@5	75
Genesee Mills..	4 25	@5	75
Oregon	4 25	@5	75
Vallejo Star....	4 25	@5	75
Venns, Oakland..	4 25	@5	75
Stockton City...	4 25	@5	75
Lambard. Sac..	4 25	@5	75
FRESH MEAT			
Beef, fr quality.. ₱	7	@	8
do, second do..	5	@	7
do, third do....	4	@	5
Veal.....	4½	@	6
Mutton	4	@	4½
Lamb.....	5	@	6
Pork, undressed.	6	@	6½
do, dressed....	9	@	9¼
GRAIN, ETC.			
Wh't Cal. c'st.cl.	70	@1	75
do new	67½	@1	70
do, shipping..	1 72½	@1	77½
do, milling....	1 75	@1	80
Barley, Feed....	37½	@1	50
do new.....	92½	@1	10
do, Brewing...	1 50	@1	65
Oats, good to choice	1 50	@1	75
do common ..	1 45	@1	50
Corn, White.....	—	@2	00
do, Yellow.....	—	@2	05
Buckwheat.....	—	@3	00
Rye	1 50	@1	60
HOPS.			
California, 1873.	35	@	37½
East'rn, '73, ch'ice	37½	@	45
MISCELLANEOUS.			
Beeswax, per lb..	25	@	27½
Honey, choice Northern.....	22½	@	27½
do Dark.....	8	@	10
do Strained....	8	@	12½
Pulu.....	—	@	9½
Onions.....	75	@	90
NUTS—JOBBING.			
Cal. Walnuts	14	@	15
Peanuts per lh...	6	@	7
Chile Walnuts..	12	@	12½
Pecan nuts.....	16	@	—
Brazil do.....	15	@	—
Coc'anuts, ₱ 100..	7 00	@	—
Alm'ds b'rd shell	10	@	—
do, soft.....	22½	@	—
Filberts.....	18	@	—
POTATOES.			
Sweet, per 100 lbs	—	@	—
Cuffee Cove	—	@	—
H. M. Bay..	1 00	@1	10
Pigeon Pt...	—	@	—
Humboldt..	—	@	—
Petaluma ..	—	@	—
Mission	1 00	@1	20
Salinas.....	—	@	—
Bodega.....	—	@	—
Sac. River..	60	@	90
S'taBarbara.	95	@1	15
Old Potatoes..	50	@	75
POULTRY & GAME.			
Live Turkeys, hens per ₱.....	16	@	18
do gobblers...	14	@	16
Hens, per, dz...	7 00	@8	00
Roosters, young, large.....	6 50	@8	50
Broilers.....	3 00	@6	00
Ducks, tame, doz	5 00	@6	50
Geese, per pair.	1 50	@2	00
Hare, per doz...	2 00	@3	00
Snipe, Eng., doz	—	@	—
Quail, per doz...	—	@	—
Mallard Ducks...	—	@	—
do small....	—	@	—
Wild Geese, gray	—	@	—
do white.....	—	@	—
Doves, per dozen	00	@1	25
Prairie Chickens	—	@	—
Grouse.....	—	@	—
Rabbits.....	1 00	@1	50
do tame.....	4 00	@5	00
Venison, per lb..	—	@	—
PROVISIONS.			
Cal. Bacon, Light	13½	@	14
do Medium....	—	@	12½
do Heavy.....	—	@	12
Eastern do.....	13½	@	14
Hams, Cal.....	13	@	13½
do Whittakers	—	@	16
do Duffield, ch	—	@	15
do Plankton & Armour.....	—	@	14
do Boyd's	—	@	14¾
do Stewart's..	—	@	14¾
Eastern Sbould's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard, Cal.....	13	@	14
do Eastern....	13	@	14
SEEDS.			
Alfalfa.....	13	@	15
Canary.....	5	@	6
Flaxseed.....	5	@	6
Ky. Blue Grass..	40	@	50
Millet.....	12	@	15
Mustard, white.	2	@	3
do. Brown....	3	@	4
Italian Rye.....	25	@	30
Perennial do....	30	@	35
Timothy.....	13	@	15
Sweet V Grass..	60	@	75
Orchard do....	30	@	35
Red Top do...	30	@	40
Hungarian do	10	@	13
Lawn do.....	50	@	60
Clover Red.....	—	@	—
do White	60	@	75
Aleike.....	—	@	—
Esparto Grassin	—	1	00
Packets.....	—	@	—
WOOL, ETC.			
Spring, short, ₱	22½	@	25
do cnoice Nort	24	@	28
Medium grades..	18	@	22
Fall clip.....	—	@	—
Burry.....	14	@	18
Hides, dry.....	16	@	18
do wet salted	8	@	9
Tallow, Crude..	6½	@	7
do Refined...	7½	@	9

FRUITS AND VEGETABLES.

WEDNESDAY M., July 1, 1874.

The Fruit market is well supplied with the summer varieties. There are as yet no Figs in first hands, all having been passed to the retailers. There are very few wild Blackberries to be had; cultivated have fallen to 10@15c ₱ lb. Strawberries are selling at 3@10c, but are not of very good quality. Currants are very plenty, and have touched 1c ₱ lb, though better samples run up to 3c. Apricots are also very low, and 3c to-day is the top of the market. Plums have declined to 2½@5c. Peaches are held at 3@5c, but as yet do not make a very good showing. The *Call* says: "The fruit crop of the State this season is probably the largest ever produced. Entire exemption from frosts with copious spring rains, has contributed to this result, and the quantities now coming forward are far in excess of the requirements of the trade. The market has been successively glutted with Strawberries, Gooseberries, Currants, and now with Apricots, while the supply of Peaches soon to come in, is expected to exceed all former experience in the trade. Under these circumstances will it not be manifestly to the advantage of the producer to dry a large portion of the Peach crop, and by so doing secure fair prices for the remainder? Dried Fruit of all kinds brought good prices last season, and the market was completely cleared of old stock and is now in good condition for the reception of new. The shipments to Eastern markets last season introduced the California product, and will doubtless be the moans of causing a renewed demand. Unless something is done to relieve this market of a portion of the surplus, producers may look for lower prices than they ever before received."

There are no changes to report in the Dried Fruit Market.

In Vegetables, Green Peas have advanced to 2½@3c; Cucumbers, now tolerably plenty, have fallen to 10c ₱ dozen; and Egg Plant, the first of which has just been received, sells at 12½@15c ₱ lb.

FRUIT MARKET.			
Tahati, Or. ₱ M	35 00	@40	00
Lorita, do.....	—	@	—
Cal. do.....	30 00	@50	00
Limes, ₱ M.....	—	—@15	00
Oal. Lemons, ₱ M—	—	@40	00
Australian do	50 00	@—	—
do per hox.....	7 00	@ 8	00
Bananas, ₱ buch	3 50	@5	00
Ooocoanuts, ₱ 100	9 00	@10	00
Pineapples, ₱ dz	7 00	@9	00
Apples.....	8	@	12½
Cherries.....	5	@	10
do choice	10	@	18
Blackberrics	10	@	15
do wild.....	—	@	—
Strawberries ₱ ₱	8	@	12
Gooseberries....	2½	@	5
Raspborries.....	5	@	8
Currants.....	1	@	3
Apricots.....	1½	@	3
Plums.....	2½	@	5
Peaches, ₱ ₱..	3	@	5
Pears, Eating...	1 00	@1	75
do Cooking....	—	@	—
do, Bartlett....	—	@	—
Crab Apples.....	—	@	—
Nectarines	—	@	—
Wat'rmel's ₱ 100	—	@	—
Cantelo's ₱ 100	—	@	—
Pomegran's, ₱ dz	—	@	—
Figs	—	@	—
Grapes, El'k H'g	—	@	—
do Muscat..	—	@	—
do Malavo'e..	—	@	—
do Sweetw'r.	—	@	—
do Mission	—	@	—
do Rose of Pern	—	@	—
do Tokay.....	—	@	--
do Morocco.....	—	@	—
DRIED FRUIT.			
Apples, ₱ ₱.....	6½	@	8½
Pears, ₱ ₱	10	@	12½
Peaches, ₱ ₱.....	11	@	12½
Apricots, ₱ ₱.....	—	@	—
Plums, ₱ ₱.....	8	@	10
Pitted, do ₱ ₱	15	@	20
do Extra, ₱ 1b..	—	@	—
Raisins, ₱ ₱.....	5½	@	12½
Black Figs, ₱ ₱....	8	@	10
Wbito, do	10	@	15
Prunes.....	6	@	8
do German....	12½	@	15
VEGETABLES.			
Asparagus.....	8	@	10
Beets.....	—	@	1
Cabbage, ₱ 100 lbs..	—	@	2 00
do new, doz.....	50	@	60
Carrots, ₱ 100 lbs....	1 00	@1	25
Cauliflower, doz....	50	@	60
Colery, doz.....	50	@	65
Garlic, ₱ ₱.....	12½	@	15
Green Peas.....	2½	@	3
Green Corn ₱ doz..	—	@	18
Sum'rSquash, ₱.....	4	@	5
Marro'fat Sq'sh, tn	60	00@	—
Artichokes, ₱ doz..	15	@	25
String Beans, ₱ ₱...	—	@	5
Lima Beans.....	—	@	—
Parsnips.....	12½	@	15
Shell Beans, Windsor	3	@	4
Peppers, ₱ ₱.....	—	@	50
Okra ₱ ₱.....	25	@	40
Okra, Green.....	—	@	50
Cucumbers, doz.....	—	@	10
Tomatoes.....	3	@	5
Egg Plant ₱ ₱.....	12½	@	15
Rhubarb	2½	@	3
Lettuce	12½	@	20

S. F. RETAIL MARKET RATES.

WEDNESDAY M., July 1, 1874.

Poultry is in good supply, but Hens have been slightly advanced. Farralones Eggs are now sold at the market stands, bringing 30c ₱ dozen. Game is very scarce. There are no more Snipe in the market. Salmon are 5c higher Smelts have advanced 2c ₱ lb. The range in size of young Salmon is larger. Tom Cod are selling at 8@10c. Sea Bass are again in market, and command 20c ₱ lb. Soles are lower.

POULTRY, GAME, FISH, MEATS, ETC			
Spring Chickens	50	@	75
Hens.....	75	@1	00
Eggs.....	—	@	35
do Ducks'.....	—	@	25
do Farralones.	—	@	30
Turkeys, ₱ ₱..	25	@	—
Ducks, Can Bk, pr	—	@	—
do Mallard, pr	—	@	—
Tame, do.....	—	@2	00
Teal, ₱ doz....	—	@	—
Geese, wild, pair.	—	@	—
Tame, ₱ pair..	3 50	@4	00
Snipe, ₱ doz....	—	@	—
Quail, per dozen	—	@	—
Prairie Ch'k's, ea	—	@	—
Pigeons, dom. dz	—	@1	00
Wild, do.....	—	@2	00
Squabs.....	—	@4	50
Hares, each ...	37½	@	50
Rabbits, tame, pr	75	@1	00
Wild, do, ₱ dz..	2 00	@	—
Squirrels do.....	10	@	15
Beef, tend, ₱ ₱..	—	@	20
Corned, ₱ ₱..	6	@	8
Smoked, ₱ ₱..	—	@	15
Porter House St'k	—	@	20
Sirloin do.....	12	@	15
Round do.....	8	@	10
Pork, rib, etc., ₱	—	@	15
Chops, do, ₱ ₱	15	@	--
Veal, ₱ ₱.....	10	@	15
Cutlet, do.....	12½	@	15
Mutton—chops.*	12	@	15
Leg Mutton, ₱ ₱	10	@	12
Lamb, ₱ ₱.....	10	@	15
Venison	—	@	—
Tongues, beef, ..	75	@	—
do, do, smoked	—	@1	00
Tongues, pig, ₱	10	@	—
Bacon, Cal., ₱ ₱	—	@	18
Hams, Cal., ₱ ₱.	16	@	—
Hams, Cross' s o	—	@	—
Choice D'field	18	@	—
Whittaker's..	18	@	20
Flounder, ₱ ₱...	—	@	15
Salmon, ₱ ₱....	12½	@	15
Smoked.....	—	@	10
Pickled, ₱ ₱..	—	@	6
do Spr'g p'k'd	15	@	18
Salmon bellies	30	@	35
Rock Cod, ₱ ₱..	10	@	12½
Cod Fish, dry, ₱	8	@	15
do fresh.....	—	@	15
Percn, s water, ₱	—	@	10
Fresh water, ₱	10	@	15
Lake Big. Trout*	25	@	30
Smelts, large ₱ ₱	—	@	10
Small Smelts... *	12½	@	—
Herring, Sm'kd.	75	@	—
do fresh.....	—	@	—
Pilchards, ₱ ₱..	—	@	15
Tomcod, ₱ ₱....	8	@	10
Terrapin, ₱ doz.	3 00	@3	50
Mackerel, p'k, ea	12½	@	—
Fresh, do ₱....	—	@	—
Sea Bass, ₱ ₱...	6	@	20
Halibut.....	50	@	75
Sturgeon, ₱ ₱...	—	@	5

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m



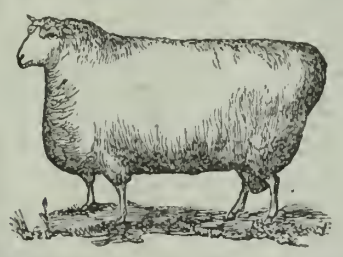
A. G. STONESIFER,

BREEDER OF

Pure Blooded French Merino Sheep,

Has for sale a choice lot of Rams and Ewes, on the Oristimba Ranch, six miles west of Hill's Ferry, Stanislaus County, Cal. 22v7-3m

B. W. Owens, San Francisco. | E. Moore, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

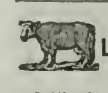
REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,

22v7-4t Jenny Lind, Calaveras Co., Cal.



U. S.

LIVE STOCK EXCHANGE,



COR. FIFTH & BRYANT STS.

Cattle, Sheep, Milch Cows, Hogs and Horses sold on commission or bought on farm for cash.

Our accommodations for Live Stock are the most convenient, complete and extensive in the city or State. Thoroughbred Durham Cows wanted. Address,

DAWSON & BANCROFT, 449 5th St., S. F.

Special rates to members of the Grange. m9

SOUTH DOWN RAMS FOR SALE.

The subscriber offers for sale in this city Six FULL BLOODED SOUTH DOWN RAMS, lambed in February and March last. Weight of oldest not less than 150 lbs. Will be sold at a bargain, and may be seen at the corner of Howard and Twentieth streets, directly opposite my residence.

RUFUS ROWE.

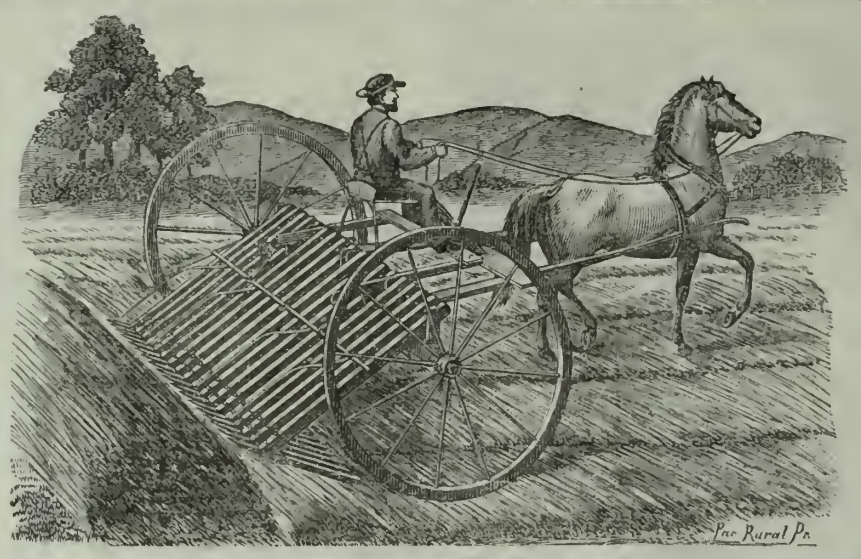
San Francisco, June 2d, 1874. jn6

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,

17v7-3m San Rafael, Marin Co., Cal.



BONNEY'S PATENT EXTENSION TOOTHED HAY RAKE.

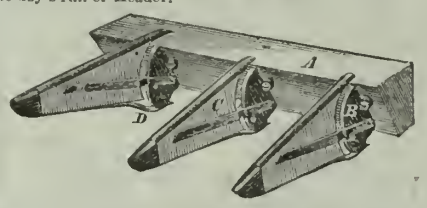
The only rake that gathers all the hay upon rough as well as smooth ground, free from dirt and dust, and does not roll or wad it together. The teeth can be used any length, and replaced without delay when worn out.

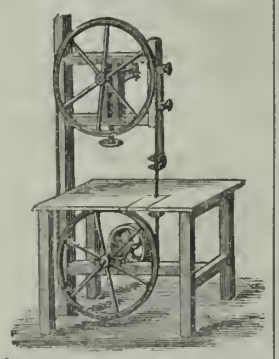
PATENT IMPROVED BAND SAWING MACHINE.

EQUAL TO THE BEST EASTERN, FOR LESS THAN HALF THE COST.

PATENT ADJUSTABLE GRAIN LIFTER.

The best in use, light, strong and durable. Can be run at any inclination to the ground, as seen at *D* in cut. Parties can save additional the cost of a set in one day's run of Header.





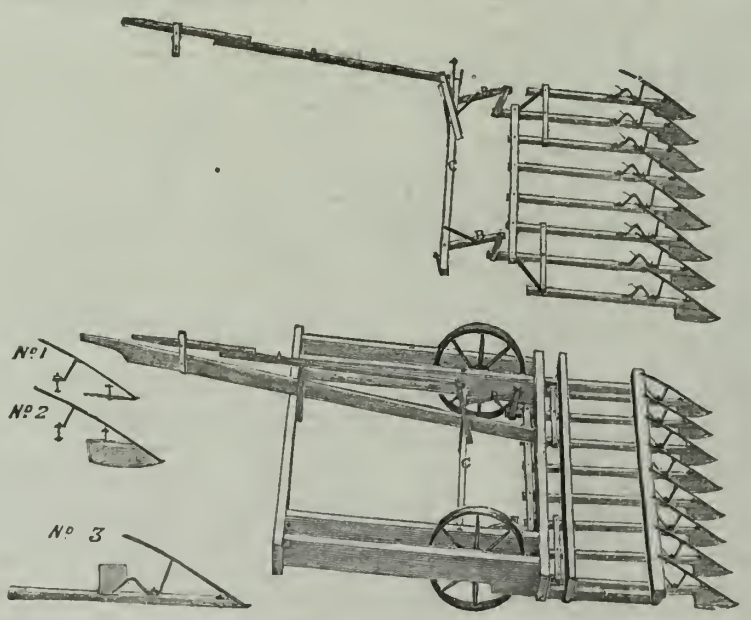
Also, HEADER APRONS, GRAIN BELTS and FARMING IMPLEMENTS Generally.

O. BONNEY, Jr., Manufacturer,

No. 221 Mission Street, - - - - - - SAN FRANCISCO.

14v7-1am-3m

W. M. JACKSON'S PATENT GRAIN LIFTER.



This is the only Lifter that has enabled the Header to cut all kinds of lodged grain. It has been in use several years and gives entire satisfaction, not only in cutting lodged grain, but in saving crinkled or straw fallen grain. The Lifter can be had by addressing W. M. JACKSON, Woodland. The price will be SIXTY DOLLARS for ten-feet headers; SEVENTY DOLLARS for twelve-feet headers. I will sell them to dealers when ordered the same as heretofore; also to the Grange Agent as a dealer.

W. M. JACKSON,

25v7-4t Woodland, Cal.

HIGHEST HONORS AWARDED TO THE WEED SEWING MACHINE!

AT THE

Vienna Exposition, '73.

Grand Medal of Progress!

Grand Medal of Merit!

AND TO CAP THE CLIMAX.

Grand Medal of Honor.

Mr. Geo. A. Fairfield, the Inventor and Superintendent of the Company's works, as co-operator for VALUABLE IMPROVEMENTS.



THE BEST

Sewing Machine

FOR ALL KINDS OF

WORK

THAT WAS EVER PUT BEFORE THE

PUBLIC.

Send for Descriptive Circulars and samples of work.

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152 New Montgomery Street, SAN FRANCISCO. 2v7-6m



SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,

eow El Dorado, El Dorado County, Cal.



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,

13v7-eow-tf Watsonville, Cal.

Kentucky Sales of Short-Horn Cattle for 1874.

	No. Head.
Hughes & Richardson, Lexington, July 22	50
Wm. Warfield & Co., Lexington, July 28	140
B. F. & A. Vanmeter, Winchester, July 24	80
J. V. Grigsby, Winchester, July 25	50
I. O. Robinson & Co., Winchester, July 27	40
Warnock & Megibben, Cynthiana, July 28	80
F. J. Barbee, Paris, July 29	60
C. M. Clay Jr., Paris, July 30	90
J. Scott & Co., Paris, July 31	70
J. Sudduth, Newtown, Aug. 1	40

The above sales comprise all of the most popular families of Short-Horn Cattle in America, and many imported animals.

Apply to the above addresses for their Catalogues.

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Short-Horned Cattle & Berkshire Pigs.

FOR SALE

A few fine young Bulls, one and two years old, got by Grand Turk, of Oak Home. Number of Bull in herd-book, 8,258. Also, pure Berkshire Pigs, Work Horses and Mules, to be sold on reasonable terms.

WILLIAM L. OVERHISER,

Oak Home Ranch, Waterloo Road, three miles from Stockton. 3v7-3m

JERSEY CATTLE.

A few head of very choice Jersey Cows—Heifers and and Bull Calves—for sale. Apply to

15v7-3m R. G. SNEATH, Menlo Park.

STANDARD SOAP CO.'S CARBOLIC SOAP FOR SHEEP WASH!



COMPOSITION—OLEIC ACID, NICOTINE, SULPHUR, CARBOLIC ACID & ALKALI.

It destroys and removes Scab, Ticks, Fleas, Mange, Scratches, Insects on Plants and Trees, Foot-Rot, etc., etc. Being strongly impregnated with CARBOLIC ACID, it is one of the best disinfectants known. Its healing, cleansing and disinfecting qualities are unsurpassed.

The STANDARD SOAP COMPANY also manufactures Laundry Soap, Family Soap, Hard Soap, Soft Soap, Marine Soap, Kane's Condensed Soap, Washing Powder, Washing Fluid, Liquid Laundry Bluing, Harness Soap, Thomas' Cool Water Bleaching Soap, Thomas' Patent Glycerine Soap, Mottled and White Castile Soap, Silicated Saponia, Bay Rum, Florida Water, Hair Oils, Extracts, Perfumes, Colognes, Cosmetics, etc., etc.

204, 206 and 208 Sacramento Street,

16v7-3m SAN FRANCISCO, CAL.

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,

Manufacturers of and Dealers in

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MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, San Francisco.

21v2-1y



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FOR THE HARVEST OF 1874.



☞ Hoadley Engines, Russell End-Sbake Threshers, Pitts' Powers, Treadwell's Single-Gear Headers, Whitewster Wagons, etc., etc. Send for our Illustrsted Price List, to TREADWELL & Co., San Frsncisco.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

Took tbe Premlum over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON, Stockton, Cal.

THE

CELEBRATED MITCHELL WAGON



15v7-3m

WATERHOUSE & LESTER,

IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

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ALSO AGENTS FOR

Woolsey's Patent Wheels,

The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has tbe metallic-shouldered band; and it can be repaired as easily as the common wood wheel.

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122 and 124 Market street, and 19 and 21 California street, SAN FRANCISCO.

17, 19 and 21 Seventh street, - - SACRAMENTO.

21v7-3m

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It ia pronounced hy all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

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Patent, First Premium Windmills & Horse Powers,

W. I. TUSTIN, Patentee.

Pioneer and Largest Manufacturer of Machinery (in this line) on the Pacific Coast.

FACTORY, Corner Market and Beale Streets,

SAN FRANCISCO.

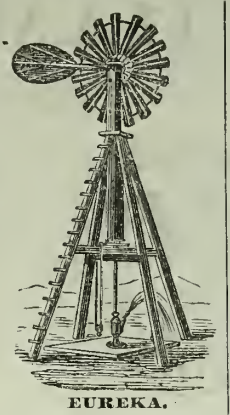
☞ Send for Circular and Price List. ☜



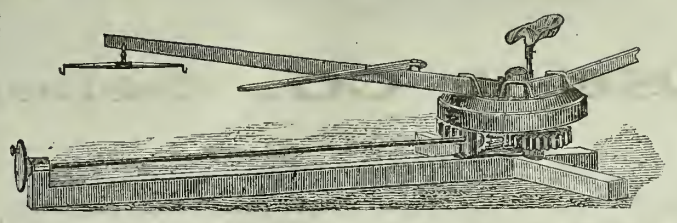
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ECONOMY—For One or Two Horses.



EUREKA.



EAGLE—For One or Two Horses.

We have made the manufacture of Pumping Machinery a specialty for the past twenty-four years in California. Received all the First Premiums awarded by the Mechanics' Institute for the past seven years, in our line.

Our Windmills are preferred by the great Railroad Companies of this cast, and are in general use along their line, giving perfect satisfaction, which csn be proved by reference.

9v7-1am

C. OREGO. S. C. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

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CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

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And other first-class makers, whicb we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

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No. 9 Merchants' Excbange, California street,

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General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built ouly at my establishment. Address, H. C. SHAW,

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NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

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SAMUEL HILL, General Agent.

18v7-3m



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The New Wilson SEWING MACHINE

Has points of superiority over all others. A reliable warranty is given with each machine for

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It is unequaled for light and heavy work. Examine and compare it with the highest priced machine in the market

G. A. NORTON, Gen. Ag't for the Pacific Coast.

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ap25-tf

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614, 616 and 618 Battery St., S. F..

OFFER FOR SALE

IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

RUBBER HOSE, ETC.

STOVES and RANGES,

THE RICHMOND RANGE,

THE HENRY CLAY,

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THE ALVARADO.

THE MONITOR, wrought iron body, cast iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

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BABBIT METAL.

Wire for Fencing and Baling.

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22v7-3m

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This machine is manufactured after an experience of tweuty years. It contains within itself every known improvement. It is the best because the simplest, easiest to understand and by far the lightest to run, and the equitable adjustment of all its parts makes it the most durable Machine in the market. Take the INTERESTED STATEMENTS OF NONE, but

EXAMINE for YOURSELF.

SEND FOR A CIRCULAR.

It uses a Shuttle, Straight Needle, Two Threads, and makes a stitch alike on both sides.

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We also continue to sell another machine, the

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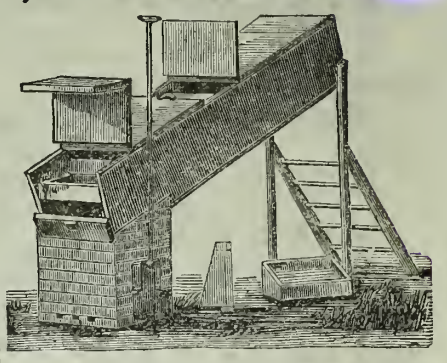
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FARMERS WANTING TO HIRE AN Engine and Engineer for the season, for threshing, can hear of one by calling at, or addressing,

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Ryder's American Fruit Drier.



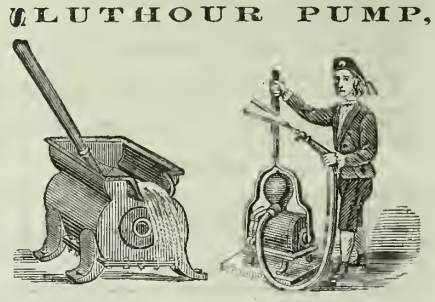
This DRIER is a perfect success in the East, and will be on this Coast when its merits are known. Its cheapness brings it within the means of every Fruit Grower. The uniformity and perfection of its work challenge comparison. The principle claimed for this Drier (and violated in all other Driers in use), is, that no moisture shall come in contact with the fruit after the cut surfaces are once sealed by the heat, to open the cells and allow the aroma and fine qualities of the fruit to escape, which makes it undeniably the most perfect, as it is the most simple mechanical method for cureing Fruits, Vegetables, Meats and Grains ever invented. This Drier can make Raisins and the most beautiful crystalized fruit confection, equal to any imported. Can any other Drier do this? The fruit cured on this Drier last season, in this State, took the premium at the State Fair. Our Factory Drier will cure 60 bushels of peacbes in a day. Send for Circulars. Farm, County and State Rights, and Driers with Heaters, sold by

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CLUTHOUR PUMP,



Now manufactured in the East, in the most perfec manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

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Commission and Forwarding Merchants.

Agents for Eastern Manufacturers, 306 California street, San Francisco.

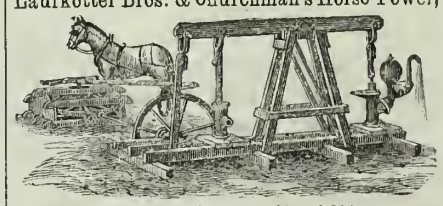
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TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

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THE CELEBRATED NEW DRAW-FEED WHEELER & WILSON

SEWING MACHINES

Are without exception the most desirable for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in public favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.

E. W. HARRAL, Agent,

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Address, W. H. & G. B. PEPPER,

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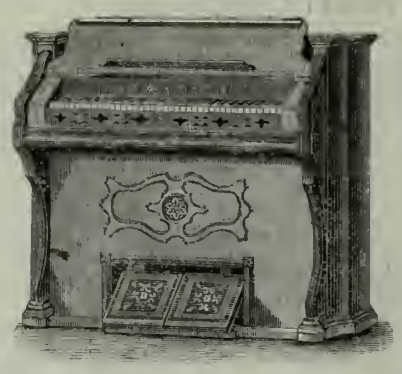
RECEIVED TWO MEDALS AND DIPLOMA OF HONOR

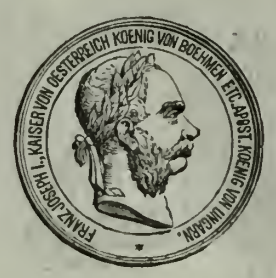
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NO OTHER American Organ deemed worthy of even a diploma.







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Being 25 to 50 per cent. lower than prices asked for any other Organ in the country.

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19v7-1am-3m-16p

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A. C. KNOX, City Soliciting and Collecting Agent.
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CHAS. W. OTIS—Solano County.
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Vegetable,
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ALFALFA!

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Grass and Clover Seeds.

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TIMOTHY,
MESQUIT,
RED CLOVER,
WHITE CLOVER.

FOR SALE AT WHOLESALE OR RETAIL.

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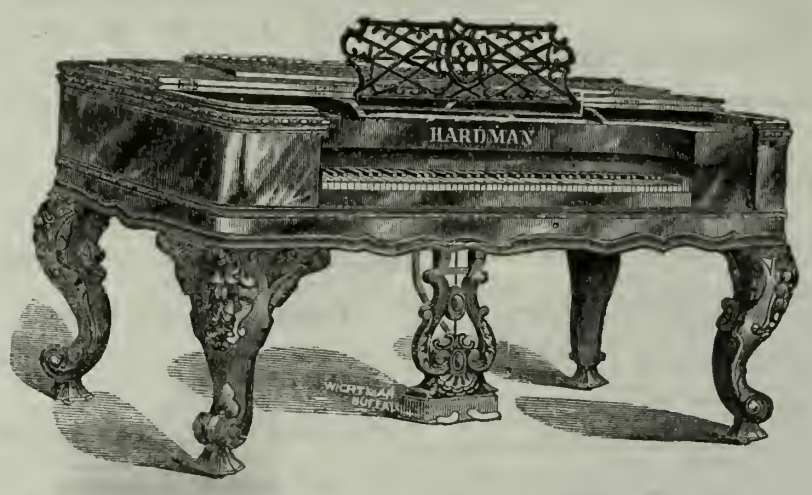


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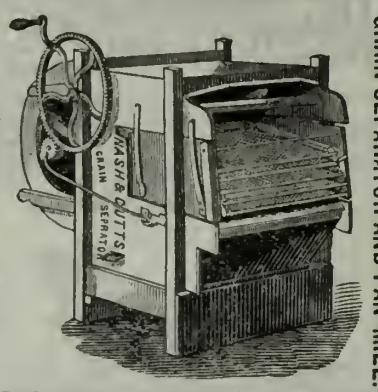
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THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $65 AND $75.

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Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

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Than any other machine now in use.

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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, JULY 11, 1874. [Number 2.

"Who is this that Cometh from the North?"

The Comet! He is on his way,
And singing as he flies;
The whizzing planets shrink before
The specter of the skies;
Ah! well may regal orbs burn blue,
And satellites turn pale,
Ten million cubic miles of head,
Ten billion leagues of tail!

Thus sang Holmes of a big fellow of a comet which visited our solar system many years ago; and now "Who is this that cometh from the North?" may well be asked by every one who, as deepening twilight brings out the "starry hosts," turns his eye to the north, and there, amid the old familiar stars, beholds a stranger flauntiug his fiery banner in the face of the venerable polar star, while "threatening a flank attack on the very nose of the celestial grizzly!" No wonder that such apparations have in past ages caused more or less consternation among people in the common walks of life, and perplexed and even frightened to desperate straits men of science, and powerful monarchs, even, with fears of physical or political change or calamity. But in the present age ot enlightenment and astronomical research, these sublime wanderers in the infinity of space are having their motions defined, their paths mapped out, and their masses scientifically interrogated, in such a manner that the scientist is not only able to determine their approximate weights, but so to analyze their substance, as to determine the very elements of which they are composed, and their actual conditions of existence.

Instead of the present appearance, all imposing and majestic as it is or promises to become, heing a oause of dread or fear, it is now welcomed as presenting a most unexpected and fortunate occasion to add a new and important leaf to the pages of science. How great is the joy, to-day, of the many patient night watchers ou their lookout towers, at the appearance of this celestial visitor! The busy world at large, which has no taste or opportunity for holding such intimate commnnion with the starry hosts, can not indeed conceive of the extent of this joy; but all who have any general knowledge of the opportunity which is now for the first time presented to the astronomer of applying the recently devised instruments and newly discovered principles of research to this class of heavenly bodies, must feel a marked gratification at the probability of soon finding a new lesson in the science of astronomy, prepared and spread out hy the patient star gazers for their leisurely and ready comprehension.

The present aerial perambulator promises to become the comet *par excellence* of perhaps the age. Although we know not whence he comes or whither he goes, his rapid increase of brilliancy and extent of caudal appendage, which his course evidently proves must yet be greatly increased, cannot fail to soon render it one of the most remarkahle heavenly wanderers which have visited our system for many centuries—if, indeed, ever before. Its approach to the earth will be amply near for the most careful application, in all its details, of that most wonderful instrument, the spectroscope, which, in its present high state of improvement, has never before been applied to a comet, under anything like the present favorable circnmstances.

Comets' Tails—What are They?

There is nothing abont a comet, or in all nature, more mysterions than the appearance and motion of the tail or train of a comet. Theories by scores, and wild enough to make one's hair stand on end, have been suggested to account for these phenomena, but almost invariably the propounders soon find themselves utterly disregarding all the workings of known physical laws, and are compelled, one after another, to abandon the theories they have conceived.

When a comet is first seen by the telescope in the far off regions of space, it is generally without any tail. That appendage is developed and grows more and more conspicuons as the body approaches the central luminary, and is always observed upon the side opposite to the sun, or pointing away from it.

Of what does that appendage consist? Is it matter? If so how can we account for the inconceivahle rapidity of its motion, especially when "swinging round the circle" at its perihelion passage. If these appendages do consist of matter, emitted from the comet's hody, it must he under the control of forces incomparahly more energetic than gravitation, and of a nature entirely different. Professor Pierce and Prof. Bessel have each, independently of the other, offered the suggestion that they may consist of electricity. Some have supposed they might be simply the result of light—that the snn's rays, in their passage through the unknown substance of the nucleus of the comet, may acquire some new power, analagous perhaps, to polarization, by which they become visible; while those rays which simply penetrate space, are, as we know, invisihle. This latter theory has received a powerful impetus in connection with some marvelous results which Prof. Tyndall has obtained in his researches npon the actinic power of light. By passing a beam of light through a certain chemical substance—the vapor of liquid, hydrochloric acid—the Professor found that in even the most attennated form to which he could reduce the amount of that vapor, a luminons white actinic cloud was formed, resembling in all known respects and phenomena the substance of the tail of a comet—and particularly in its absolute transparency and luminosity. The cloud, which was formed within a glass tube, did not present the smallest conceivahle obscuration to any object placed behind it. And still the cloud itself gave off a large amount of light. Nothing could give a better idea of the snbstance of the tail of a comet than such an actinic cloud.

The Phenomena Explained.

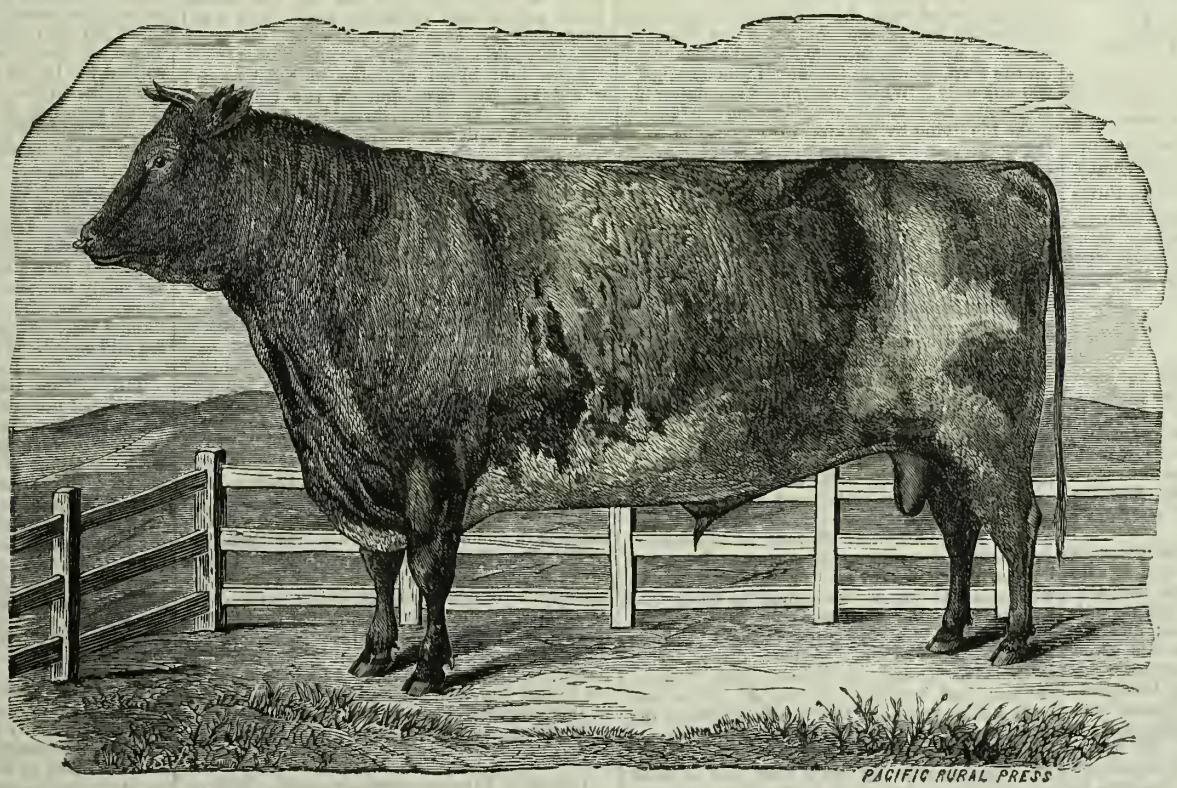
The application of Professor Tyndall's discovery to the explanation of the cometary principle under discussion is as follows: A comet is held to be a mass of vapor, decomposable by solar light—the tail being an actinic cloud, resulting from such decomposition, and projected into space. The tail is therefore not matter projected from the comet, hut simply a heam of *actinic light* (the other rays being mostly absorbed by the comet) projected from the sun into space, and upon which interplanetary matter, or cosmic dust, is precipitated, and thus made visible, precisely as the atoms of dnst are made visible hy a beam of light passing through a dark room.

This explanation, of course, supposes that the sunlight has a different power, on being passed through a vapory comet, from that which it possesses when it has not traversed such a medinm; otherwise all space would be lit up like a comet's tail. It seems to be the *actinic* rays alone which possess this power, the other rays heing absorbed by the vapory mass upon which they have fallen, rendering that mass even more hright than the cosmic dust illuminated in the track of the peuetrating actinic rays. Thns the caudal appendage of a comet is in a perpetual state of renovation, as is a heam of light thrown into a dark room hy means of a movable lens. The beam of light only is in motion, not necessarily the particles of dust, either in the room or in space.

The curvilinear form of a comet's tail is also thns readily explained. If the body is moving in a direct line, or one approximately so, the tail would be straight. If in a curvilinear line, the tail would necessarily take a curvilinear form. This fact may he shown by projecting a firebrand rapidly in a direct or curvilinear line, and observing the line of fire painted upon the retina. Of course, there may be comets whose constitution may he such that their vapor cannot be so decomposed by the sun as to allow of the formation of the actinic cloud or tail. Hence such comets will have no tail—as is often the case. Moreover, the length of the tail will be varied hy the greater or less degree in which the sun's rays are enabled to act upon the substance of the nucleus.

In fact, nearly all the phenomena observed in these mysterious bodies are readily accounted for by Professor Tyndall's theory, which will undoubtedly he carefully studied, and, if possible, verified during the continuance of the present illnstrious stranger within our reach of vision.

A child of D. McNulty, living near Yreka, died last week from the bite of a scorpion.



PACIFIC RURAL PRESS

"GOVERNOR BOOTH," THE CELEBRATED SHORT-HORN BULL.

A Noble Animal.

On our first page to-day we give a fine cut, executed by our own artist, of the short-horn bull Gov. Booth. This animal is a member of the celebrated "Gabilan Herd," the property of J. D. Carr and W. S. Chapman, Gabilan, Monterey county. His sire and dam are both of the pure Booth stock, and were imported from England. This stock is noted for early maturity and fattening qualities. Gov. Booth is two years old, and is remarkably well formed. It is believed that he is the first pure Booth brought to the State; as sixth Lord Oxford is the first Bates. He is pure Duke on the sire's side, and pure Oxford on that of his dam. These are the two strains that brought such high prices at the great New York Mills (Camphell's) sale last year. Gov. Booth, although young, has already proved himself a good stock getter, having left a number of calves back in Canada. He won the first prize as a yearling at Montreal last fall. Is a grand handler and feeder. His pedigree is as follows: Governor Booth (late Cavalier.) Red roan, calved March 13th, 1872. Got by Royal Britton, (27,351.) Dam, White Rose, by Mountain Chief, (20,383.) 2d dam, British Rose, by Prince George, (13,510.) 3d dam, British Girl, by British Boy, (11,206) 4th dam, ——, by Leonidas, (10,414.) 5th dam, ——, by Leonard, (4,210.)

Mountain Chief (20,383), got hy Lord of the Hills (18,267) out of Soldier's Bride, by Windsor (14,013) Lord of the Hills by Sir Samuel (a son of Crown Prince) out of Red Rose, by Harbinger.

Prince George, got by Crown Prince, out of Monica, by Raspberry (4,875.)

British Boy, by Water King (11,204), out of British Qneen by Buckingham.

Monster Gooseberries. — One of our city seedsmen brought to our office this morning samples of the largest gooseberries that it has ever been our fortune to see. They were grown by a gentleman of Bolinas, Marin Co., in close proximity to Bolinas bay. They are from the standard English gooseberry stock, and have been cultivated up to their present size by the producer, whose name we are not at present permitted to give. They are said to have never suffered from mildew, a blight which has done much toward discouraging the cultivation of this old-time fruit. Possibly their proximity to the bay may save them from mildew, by imbibing a needed saline property from the soil and atmosphere. None of the herries presented to us were fully ripe; hut a few were sufficiently so to enable us to test their eating merits, which are quite satisfactory. This fruit should be widely disseminated, as it would be a decided acquisition to our market.

The Capabilities of Sandy Cactus Land.— The Los Angeles *Herald* of July 1st has the following: "Dr. A. B. Haywood, a fruit-grower from Orange, in this county, called on us yesterday and reports everything prosperous in his vicinity. He has a new place, 52 acres of tillable land; 1,300 fruit and nut trees set out in orchard; 2,000 two-year old vines, Muscat, in vineyard, and 30,000 cuttings in nursery; his barley and wheat crop yielded three tons to the acre; the corn on his little place looks well, the first planting will afford roasting ears in a week; his trees and vines grow well without irrigation. This is his second year on this place. It was sandy cactus land. Some of his friends laughed at him for buying worthless, barren land. He has proved what good cultivation does here."

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Important Questions.

EDITORS PRESS:—Can I, through your widely-circulating journal, elicit information in regard to these questions, viz.: What gang plow will do good in stiff, adobe soil? And what pump can be relied on to raise water from a well 110 feet deep?

For months I have been seeking information on these points by private correspondence, and have obtained nothing satisfactory. In most cases my letters have been referred to agents or manufacturers, who severally recommend their own plows or pumps.

I want a plow, the *best*, that will do good work in a stiff, adobe soil, wet or dry, and not of heavy draught. Is there any such? The plows that I have used do not scour when the soil is wet; and do not plow deep enough when dry. What plow will turn up the soil six or eight inches, wet or dry, and do good work with a force of four or six horses?

Again, after much inquiry among experienced men and dealers, when in San Francisco last July, I bought Hooker's deep well pump and put it into my well 110 feet deep, and could not make it work satisfactorily. I took it ont, informed the agent, who wrote me specific instructions in relation to setting the pump, pipe, piston-rod, etc., and requested another trial. I employed an experienced mechanic and put in the pump again, with no better result.

I want a pump that will do good work; not easily out of repair; and when so, can be repaired without lifting all out of the well, and that is capable of lifting water enough to supply a band of a thousand or fifteen hundred sheep, if need be, without running all day. Is there such a pump? Where can it be obtained and what is the most economical power to work it?

Messrs. editors, satisfactory information in regard to the above will be of great service to myself, and many others like myself, just opening ranches on these adobe plains.

Crops here near Deer creek are good.

Yours truly, S. A. BAKER.

Plano, Cal., June 29th.

[For the benefit of our correspondent and his neighbors, we hope that those who have any *practical acquaintance* with the implements mentioned above will give their experience, either through the columns of the RURAL PRESS or to Mr. Baker by private correspondence. Mr. B. evidently does not desire to hear from dealers in these articles, but from those who have tried them and have tested their merits.—EDS. PRESS.]

Sherman Island.

EDITORS PRESS:—Sherman Island contains 14,000 acres, and is situated above the junction of the San Joaquin and Sacramento rivers. It has been occupied for a number of years, but until recently has been subject to overflow from these rivers. A few years since the owners of of the island formed a company under the State law for the reclaiming of swamp and overflowed lands, to build a substantial levee.

Immense labor and thousands of dollars were expended before its completion; but at last its completion has placed the farmers in comparative security. It has stood the present high water with but one important break; and the experience gained in construction has given confidence and a feeling of security never before enjoyed. The final success of the enterprise is largely due to Mr. J. M. Upham, who owns 4,000 acres, and whose foresight and energy inspires the rest to activity. He has a large number of tenants, and his courteous bearing and genial manners and kindness to them have produced a feeling of confidence and good will, alike agreeable and advantageous. Would that the rich could ever be thus!

"Emmatown,"

So named, from Mrs. Emma Upham, is situated towards the upper extremity of the island, on the Sacramento river; and is wholly the result of Mr. Upham's enterprise. A good wharf affords ample shipping facilities. A store, blacksmith and wagon shops, hotel and poorly-patronized saloon and a few dwelling houses comprise the list. Two immense warehouses are in process of erection, to hold the immense crop now being harvested. Let other sections boast of heavy grain, but when acre after acre of wheat stands 6 ft. high; when an enormous crop of barley is followed by large crops of beans or potatoes, the same season, they may equal the products of this island. Nothing can excel the richness of the soil—of rich vegetable mould, resembling peat, in many places, and on the Sacramento side, of fine sand; nothing could be better.

The island needs more forest and fruit-trees. For the supply of the latter Mr. Upham has a nursery of 10 acres, which includes a large variety of trees, under the care of Dr. D. G. Perry, whose skill is well attested by the fine appearance of the nursery.

Our visit was full of interest and will be long and pleasantly remembered. C. W. O.

HORTICULTURE.

Cherry Culture.

C. W. Reed, of Washington, Yolo, produces this year about ten tons of cherries. W. H. Pepper, of Sonoma, produced, in 1872, about ten tons; in 1873, about eight and a half tons. This year his crop is not quite so large, on account of the cool, wet spring, but is better in quality. J. W. Cassidy, of Sonoma, in ordinary good years, produces about eight tons; this year not quite so many. Prices for cherries generally start at twenty-five to fifty cents per pound; they are now quoted at from eight to ten cents for common, and fifteen to twenty-five cents for choice. We do not now remember the number of trees in Mr. Reed's orchard, but Mr. Pepper has about 800, and Mr. Cassidy about 400. From these figures we learn that Mr. Pepper's trees average in good seasons about thirty-three pounds to the tree, and Mr. Cassidy's about forty. Placing the average price per pound at fifteen cents, it would make Mr. Pepper's trees average him, say, $5, and Mr. Cassidy's $6 a tree; or, would give Mr. Pepper an income, for his 600 trees, of $3,000, and Mr. Cassidy, for his 400 trees, an income of $2,400. Allowing 20 per cent. for rent of land and interest on cost of orchard and labor, it would leave Mr. Pepper a net income of $2,400, and Mr. Cassidy, $1,920. Allowing 200 trees to the acre, Mr. Pepper's trees, occupying three acres, and Mr. Cassidy's two acres, this shows that Mr Pepper's land brings him $800, and Mr. Cassidy's $960 per acre per annum. Now, we state these facts to show those who do not know what to do in this State how little capital is required to begin and build up a good business in a few years. Land just as good for cherry culture as that of Mr. Pepper's, Mr. Cassidy's or Mr. Reed's can be had almost any where in Sonoma or Yolo counties at from $15 to $50 per acre. Just as good and better land can be had in the foothills of the Sierra or Coast Range mountains, in Butte, Placer, El Dorado, Amador, Tuolumne, Mariposa, Stanislaus, or any other county in the State partly in the foothills, at from $1 25 to $5 an acre.

The trees will cost on an average, say 30 cents apiece, or $60 to plant an acre of land. They will begin to bear the third year after being planted, and at six years after planting will bring in a good profit. Here, then, is a plain, straightfoward road by which an industrious man or boy can in the course of six or eight years, by an outlay of $300 or $400 at the most on the start, secure an income of $3,000 to $4,000 annually. While his orchard is coming into bearing he can, besides attending the same, make his living by working for wages, by raising poultry and vegetables, or strawberries, or other berries, or all on the same land, without injury to his cherry orchard. With such openings before him in California no one need be without something that will pay to do. We should mention that the varieties principally cultivated in this State for the market, and which pay the best, are Black Tartarian, Governor Wood, Napoleon Bigerron, White Heart.

TRANSPLANTING.—Many farmers imagine if they can plant the seeds of vegetables in the hills where they are to grow, that will gain some time which is lost in transplanting. But in some vegetables this is a mistake. Lettuce, cabbage and tomatoes are especially benefited by transplanting. And if they are carefully transplanted twice, they are improved. It makes them more stalky and robust in their growth. Florists have also found that it improves some kinds of flowers to transplant. And trees, especially evergreens, are benefited by yearly removal for two or three years. In this removal we do not intend to imply that careless bruising and breaking of plants or trees of any kind will improve them. Plants and trees must be removed with dirt adhering to them, protecting the fibrous roots. Celery, cabbage and tomatoes should be cut around with a knife from one to three inches from the stem, according to age, and carefully transplanted without checking their growth. Garden vegetables do not grow wild, and without care and labor, but when carefully nursed they always pay the bill. It is all wrong to permit a bed of cabbage plants to grow up so crowded that they produce so slender a stem that it would be folly to ever look for them to bear large heads. So soon as they produce the second leaves they should be set out at least two inches apart, and the ground cultivated between them, which will insure strong and vigorous plants.

A SPLENDID SIGHT.—Upon the grounds of John R. Boyd, Ballymacool, in North Ireland, there bloomed the past year a monster rhododendron (*R. lancifolium*). It is about 16 feet high, 50 feet in diameter of branches and expanded upward of 400 spendid scarlet trusses of flowers. Mr. Boyd says the brilliancy of its color, the admirable shape of its blossoms and the way in which the foliage falls down about the trusses, so as to set off to the best advantage, render this the most beautiful rhododendron ever seen in this kingdom.—*Horticulturist.*

A PEACH orchard in Maryland contains 1,013 acres. At the hight of the past season 600 hands were employed in picking, paring and caning the fruit, and the daily work was about 4,000 baskets, or 30,000 cans.

NEVER allow flowers to be watered or sprinkled with cold water, especially in cold weather. Tepid water is always better, even in summer.

New Fruits.

Hon. Marshall P. Wilder, in his address before the American Pomological Convention, uttered the following sentiment:

"That as fine fruits can be raised from seed here as have been produced in any other country, there is no longer a doubt. That this is the plan prescribed by our bountiful Creator for their production and improvement, is equally true. That there is any limit to its progress and extent, we have no reason to believe. True, the number of superior fruits is small compared with the host of indifferent varieties that have come down to us from the past. One reason for this is, that our taste for finer fruits has been elevated to a higher standard, and those of an indifferent or medium quality fall out by the way; and we have no doubt that the old pears so highly lauded by historians were most, if not all of them, only coarse unmelting kinds.

"When we reflect upon what has been accomplished in the improvement of animals and vegetables in our own day, and how many splendid acquisitions have been brought forth that command the admiration of the world,—when we reflect upon the many fine American fruits already obtained with but comparatively little effort,—we surely have cause for great encouragement and perseverance. There is no limit to progress now or hereafter, and we believe that the fruits of this earth are to become more and more perfect as time advances."

Cracking in Pears.

We know that lime and potash are specifics for pear-trees, even if they do not accomplish all claimed for them by "H.," in the *Gardeners' Monthly*, whose assertions we copy:

Pears do not crack when the soil is sufficiently supplied with lime and potash; and they crack most where those salts are deficient. Common wood ashes contain these salts nearly in the quantity and proportions that pear trees on such soil require—.40 per cent. of potash and .30 per cent. of lime. Reasoning from these facts, I applied wood ashes at the rate of 400 bushels to the acre, after the fruit had formed and cracked. Many of them healed up and made perfect fruit the same season, others not until the next season. A friend, at my suggestion, applied it heavily to a favorite Butter pear-tree in his own garden for several years in succession, and has had for several years perfect and delicious pears; and I will guarantee it to cure any case, where the ashes are fairly and abundantly applied.

I was told by an experienced hand that I would kill the trees, but on the contrary, I cured them. Therefore, do not be afraid; if one application will not suffice, give them a larger dose next year. A moist atmosphere undoubtedly encourages the growth of the tree and fruit, while the insufficiency of proper food prevents the perfection of either; hence, cracked fruit and "rough old bark."

THE PINEAPPLE.—The history of the pine-apple dates back for three or four centuries. Columbus found it on the island of Guadaloupe in 1492. The Japanese cultivated it as early as 1599, and it is supposed that it was first brought to Europe from Java. It appears that this fruit was transplanted from South America to Asia and Africa, for in 1592 it was carried to Bengal and China from that country. It thrived in Brazil, and, according to Humboldt, grows wild in the forest of Orinoco. They spoil very easily, and sometimes during the voyage here the whole cargo of a vessel is spoiled. It is considered a good trip if three-quarters of the cargo is in good condition when the vessel arrives. This depends not only upon the length of the voyage, but also on the bad weather experienced, thunder showers being particularly destructive to them. It is estimated that 4,200,000 pineapples are brought into New York annually. The business of canning this fruit is becoming quite extensive, and likewise profitable in this city, and several firms are engaged in this preparation, and they put up at least a million pineapples in cans every year.—*Exchange.*

THE BEST VARIETY OF STRAWBERRY.—It is remarkable that a variety so old as the Albany Seedling, or "Wilson," as it is popularly known, should hold its own so many years, in spite of numerous new introductions. Gradually, however, it seems to be giving way to others. Last season the markets of Baltimore, Philadelphia and Washington had large quantities of other kinds, and it was noted that these varying varieties were much more abundant than in former years. Among the leading kinds which, by this test, are growing in popularity, were Downer's Prolific, Boyden's 32 Green Prolific, Jucunda and Charles Downing. Triomphe de Gand, which for a long time seemed to contest the ground with the Wilson, was not so often seen. Still for all this the leading kind in all these three markets was the Wilson. It bears so abundantly, and grows so well generally, without being choice about the character of the soil or situation, that in spite of some deficiencies, in other respects it will probably be in favor for some years yet.—*Ex.*

A MAIDSTONE, England, correspondent has this to say, in *The Gardeners' Chronicle*, of Conover's Colossal asparagus: "We find the new American variety rather earlier for use, and plants of the same age as the Giant are nearly double the size, so that we consider it a valuable addition, although it does not attain the gigantic dimensions of the 'Yankee' colored plate."

A New Peach Enemy.

As our readers know, our friends in the peach-growing districts never let a chance go by to "bull" or "boar" peach-stock, according as it may be their interest to do. If a little freeze come unexpectedly along, it is a capital chance to prepare people for high prices, and then we hear woeful accounts of the destruction of the peach-buds. Then, when it can be no longer a question that there will be a fair crop, it is the interest to keep distant growers out of the market, and then we hear that there is "such a tremendous crop that it will not pay to market them."

Now comes to us a sad and sorrowful tale of the attack on the young peach-trees, by myriads of energetic "black fellows," who in the course of a few days will leave thousands of peach-trees in the condition of dried sticks. Rumors of this have reached us for some weeks past, but in view of past experiences we hardly knew on which side of the stock-board we had better range ourselves. By a recent issue, however, of the Wilmington *Commercial*, we judge that the appearance of the insect is a real and serious trouble, and may have as marked an influence on the future of peach-culture as the Colorado beetle has had in some places on the potato crop.

By the account referred to we note that some of the insects and specimens of the injury caused by them have been submitted to one of our intelligent Germantown friends, who pronounces them to be an allied insect to the common black aphis, which at times so seriously affects the cherry tree. This cherry aphis, however, though once in a while very annoying to the cherry-raiser, comes and goes, and does not seem to be a settled pest; and it is possible this may be one of that class, and the trouble after all not be as great as apprehended. —*Germantown Telegraph.*

THE inhabitants of Sumatra produce great quantities of coffee which they export. They do not, however, make use of the berries, but their beverage consists of an infusion of the parched leaves. An Englishman who used this drink for a long time is loud in its praise. He drank it morning and evening, and found it invaluable, giving immediate relief to hunger and fatigue, and clearing the brain of cobwebs. The Sumatrans hold that the best liquor is obtained from leaves shed by the plants; but their usual method of proceeding is to take off the ends of the branches and suckers, and break them up into twelve or fifteen inch lengths. These are fixed side by side in a split bamboo, so that the leaves all appear on one side and the stalks on the other, by which means equality of roasting is ensured, the leaves being roasted together and the stalks together. After tying up the bamboo, the truss of leaves and stalks is held over a smokeless fire, and kept moving about, so as to roast without singeing it. The stalks are considered quite as valuable as the leaves, and when the operation is completed, leaves and stalks are rubbed between the hands into a coarse powder, and then they are ready for use. The infusion is of a deep-brown color, and extremely fragrant, its odor—like its taste—resembling that of a mixture of tea and coffee.—*Prairie Farmer.*

THE foreign papers state that at a recent meeting of horticulturists in Melbourne, Australia, the sparrow difficulty was the principal subject of discussion. To such dimensions have the losses of stone and small fruits attained that the growers feel themselves face to face with the most serious obstacle they have ever had to encounter. By the introduction of the English sparrow the balance of Nature has been completely upset; the native birds which used to visit the gardens at certain seasons—many of them insect destroyers—have been driven away by the pugnacious strangers, to whose rapacity fruits, grain and seeds are alike sacrificed.

Do not use fresh manure for bulbs; old, thoroughly decayed compost is preferable. Plant deeply, especially the tuberose. If the soil is naturally very stiff, remove it, place a few stones at the bottom of the bed for drainage, and fill in with light sandy mould. Stake at once and tie up the stem as it lengthens. Neat, plain painted supports make the flowers appear to better advantage. Green is the best color, with a small white space at the top on which to write the name. A shade of heavy muslin or paper spread over the flowers during the heat of the day, helps to retain their beauty.

THE rust on verbenas has possibly done more to discourage their cultivation than we are generally aware of, and yet it is weakness to be cast down by such trifles. A friend, especially successful in their culture, never uses cuttings for increasing his stock of this plant, but goes back to first principles and raises them directly from seed. If a good strain is procured, and seed saved from none but the very best color, and finest trusses of bloom, one can, he says, at all times have as showy a bed as Neighbor Highflyer, who wants "only the named varieties; seedlings are too common, Sir."

EFFECTS OF GAS ON PLANTS.—At a meeting of the Imperial Academy of Sciences at Vienna, Professor Bohm described experiments proving the injurious action of gas on plants. The plants of fuchsias and salvias, as examples, were put in pots, gas was constantly conducted to the roots, and seven died in four months. It was shown that gas does not, in the first instance, kill the plants, but that it poisons the ground.

Cattle Breeders.

Letter from Jesse D. Carr.

Editors Press:—Some days since I was informed that Col. Coleman Younger had given me a passing notice in the June nnmber of the *California Agriculturist*, a monthly journal pnblished in San José. I was unabled to obtain a copy of this paper until yesterday; but now take great pleasure in replying to the Colonel's enquiries.

1st. I procured the pedigree of "Butterdale" on the dam's side np to "Sally" from the gentleman that I purchased him from, viz.: Mr. Wm. Quinn, of Santa Clara county. From Sally 1st I traced it in the Herd Book myself.

2d. I did write to Colonel Younger under date April 25th, and have his reply thereto, but find no mention in the letter of either Forbes or Mayo, nor can I find any letter from Colonel Younger in which either of these gentlemen's names are alluded to.

3d. I did not make out Butterdale's pedigree in the office of the State Agricultural Society. I did examine the Herd Book there, and I think at the time mentioned by the Colonel; and it is from this fact that I presume he drew his conclusion that I "made up" the pedigree in question at that time and place.

I will here mention for the satisfaction of the Colonel and the public, that I forwarded the pedigree given me by Mr. Quinn to Mr. Lewis F. Allen, publisher of the American Herd Book, and that several letters were exchanged between us on the subject, the result of which was that Mr. Allen concluded the pedigree was correct, and admitted it to record. Dnring the following year, however, I learned that there was trouble about the pedigree on the side of his sire, Tyrone (bred, I helieve, by Colonel Younger), which determined me to dispose of the bull. This I did at the State Fair in 1872, selling him "on his merits," but not as a thoroughbred.

4th. I believe I did tell Colonel Younger that I considered Butterdale one of the finest bull calves that I had seen, for I certainly was of that opinion then, and am yet; and had his pedigree been pure or beyond dispute, I do not think that I would have parted with him. Up to the present day, I have never seen a hull calf raised in this State, which, pedigrees heing alike, I should have been willing to exchange him for. So much for Butterdale.

5th. As to the cow Maude, I do not recollect that I ever owned one by that name—certainly not a thoroughbred. I exhibited either two or three cows in 1872, and have their pedigrees; their names are Twin, Laura and Clara.

Now, as to the resolution offered by me and passed at our association's meeting, in May last, I ask for no better argument to prove that my resolution was proper and correct than Colonel Younger's own communication, that I am now replying to. His argument in favor of Short-horns fully sustains me in my view of the case, "that they are much more valnable than any others." The Colonel also accuses me of "having followed him with a vindictiveness unparalleled in Short-horn societies;" this is simply a stretch, and a great stretch of the Colonel's fanciful imagination, and too ridiculous to take the slightest notice of. If there is another breeder in this or any State who has so much to say in favor of his own, and so little in favor of his neighbor's stock as Colonel Younger has, I confess I have not yet met him.

I believe that I have replied to all of Colonel Younger's enquiries, and trust that my answers will prove satisfactory. If such be not the case, he has bnt to state what is still lacking and I shall hasten to satisfy him.

J. D. Carr.

Gabilan Rancho, Monterey Co., June 29th, 1874.

Form of the Ayrshire.—The proper form for an Ayrshire cow is that which would be regarded as a model form for a milk-producer as distingnished from a Short-horn or Hereford, which are *par excellence* beef-producers. The two special points which are regarded as of more significance than any other are the form of the body, which should be wedge-shape, or tapering from the hind-quarters to the head, and the udder, which should be capacions, not fleshy, should show well behind, and be carried broadly and squarely forward, retaining also a proper depth. The teats should be of good size and length, not "spiked," and should stand wide apart. It is not easy to convey a very clear idea in regard to the finer points of an animal, except in the presence of one or more specimens.

Jersey and Alderney.—The nnfortunate confusion of ideas as to the proper nomenclature of these cattle, will probably exist for some time to come, and make it necessary for this oft-repeated statement to be repeated a hundred times. Alderney group of islands, Jersey, Guernsey, Alderney and Sark. As the cattle are really distinct breeds, and have been very strictly kept so for many years, the name of each island is now, and has for some years been given to its own particular breed of cattle. Jersey and Alderney are therefore two distinct breeds. The same trouble is now laying np in regard to Dutch and Holland cattle, which are Dutch only when they are large, black and white, heavy-milking cattle from Holland, and Holstein when they are red, brown, and other colored beef cattle from Holstein.—*Ex.*

The Dairy.

How the Best Quality of Cheese is Made.

The editor of the Utica *Herald* recently visited the celebrated Weeks factory, the product of which has most of the time taken the lead in the Utica market. We make the following extract from his report:

The cheese is firm and meaty, and more than ordinarily fine-flavored. The manufacture is very even, and the cheese is as mnch alike as it could he. It is plain enough to be seen why this cheese demands top prices.

The factory does not seem to enjoy special advantages of any kind. There is no reason to suppose that the feed is better than that most factories have. Indeed, there is a good deal of swampy pasture in that region. It is claimed that the superiority of the cheese is the result of the careful manufacture.

We made inquiries about the process, and do not see that it differs materially from that of most factories, save that some of the operations are slower. The setting is done at the usual temperature, and the heat carried to 96° or 98° according to the condition of the milk. Rennet enough is added to cause coagulation to begin in fifteen or twenty minutes. The cutting is completed in one hour to one hour and twenty minutes. The heat is raised slowly to the required point, and the stirring is moderate and careful, though doue with a rake, which we much prefer to the hand, as cleaner, if nothing else. The curd is allowed to stand in the whey until ready to dip, and it is hardly necessary to say that it is dipped at the right point—that point on which so much depends, and which is so difficult to determine. When dipped there is no grinding, but stirring and airing, until the salt is added, at the rate of 2.7 pounds to 1,000 pounds of milk. It is then put to press, and kept under the screws until the next forenoon, when it is taken out and set on the ranges, where it is turned and cared for the ordinary way.

We noticed one peculiarity in the hoops, which does away with the trouble of pulling on bandages. The top of the hoop is cut off about four inches or so, and a band put around the lower edge, so that it will slip over the top of the hoop. The bandage is put into the hoop, the edge turned over the upper edge aud the movable top-piece slipped on, which holds the bandage in its place, leaving the hoop smooth and perfect inside. It is only necessary to take off the top of the hoop in place of taking out the cheese, and turn down the edges of the bandage. There is no patent on this, and factory men are at liberty to use it.

An agitator is used during the night, to keep the cream from rising, and cold water is kept running around the milk vat. The milk is all delivered twice a day.

Yield of Milk per Cow.—Professor Miles, in his address before the Northwestern Dairymen's Association, made the following statement: The last census showed that there were 10,303,500 cows in the United States, which were valued at $29,408,983. Most of these were of a very inferior kind. The average yield of milk, in the Northwest, was only 2,530 pounds per cow; but a dairyman in New York has succeeded in getting a yield of almost 8,000 pounds per cow from a herd. Mr. Fish, of Herkimer Co., New York, by judicious selections, obtained a herd of cows that averaged 834 pounds of cheese per cow each year. The cow "Red Rose" gave 2.956 pounds of milk from August 1 to Sept. 15, and one day gave 76 pounds. An Ayrshire cow, "Lass," gave in the same time 2,746 pounds, and bred till she was 19 years old. The cow "Nettie" gave 1,364 pounds in July, an average of 44 pounds daily. The cow "Beauty," belonging to E. T. Miles, of Massachusetts, gave, in 1870, 9,911 pounds of milk; in 1871, 7,922 pounds; in 1872, 7,555 pounds. At the last date she was 11 years old, and weighed 985 pounds.

Salt for Milch Cows.—Milch cows in the flush of feed reqnire more salt than at any other season of the year. Dairymen should look well to this matter at the present time. Saline matter seems to be required by their very natures, as is attested by the bovine tribes going long distances to ohtain it, when in an undomesticated condition. Dairy cows that are amply provided with salt when grass is fresh and vigorous, thrive better than they otherwise would, give a greater quantity of milk, and for the benefit of housewives, let us add, impart to cream an element which makes it more readily converted into butter.—*Ohio Farmer.*

The Ideal Milch Cow.—The characteristics of a good milch cow must be irrespective of breeds, in a general sense. Milk is created from the blood, and her vital energies which make blood—that is, the indispensable condition. The good milch cow must have a well developed chest, a healthy digestive apparatus, the mammillary glands must he perfect, and the udder must be soft and pliable, elastic as a piece of India rubber to the touch, whether the bag is full or empty.

The Swine Yard.

Treatment of Breeding Sows.

The first and most important point in the treatment of hreeding sows before farrowing is to supply such food as will produce the greatest snpply of milk for the expected litter. To do this the slop from the dairy is as good as any, if not the very best, while bran slop is also very good. Feed very little grain, and that which you do feed should be given in the form of slop, made hy boiling or steaming the meal. Green food is also very desirable when it can be ohtained, to he used in conjunction with the others; and, in lieu of this, boiled potatoes, heets, carrots or turnips can be advantageonsly used. They should be hoiled or steamed, and then mashed well while hot, after which a quantity of meal or bran should be thoroughly mixed with the mass and left until nearly cool, when the heat of the roots will partially cook the meal; then add water to make a thick slop. A smali quantity of salt should be added to make the mass more palatable. A couple of weeks before farrowing it is well to give the sow a tablespoonful of flour of sulphur, say three times a week. This can he mixed with the food.

If you wish to move the sow into any particular pen do not leave it until a week or two before farrowing, for if left until so late the sow is apt to become restless, and often causes the death of some of her litter.

After farrowing, feed nothing but milk or thin slop; or, at least, no grain food, as such food is too heating for her at this period. Keep the sty clean, and well supplied with short straw, and give green food or its subsstitutes as often as necessary.—*Live Stock Jaurnal.*

Kidney Worms in Swine.—A writer in the *Prairie Farmer* says: "Kidney worm" is not a common disease in hogs. Occasionally one or two in a number of hogs suffer from the presence of one or more worms in the kidneys; but the ailment is not often fatal, and becomes so only after a long time of suffering and consequent disease or degeneration in one or both kidneys. In a strong pig two drams of turpentine may be given in four ounces of linseed oil and a little gruel. Great care should be exercised in not killing the pig by drenching it improperly. Besides this the pigs should have sour food, or a little brine of herrings mixed in the food. When in season, sourkrout, radishes, unripe fruit, cucumbers, celery-tops, and especially acorns. Wood ashes should occasionally be mixed in the food. Hogs should have access to clean and fresh drinking water.

Buttermilk and Scurvy.—The *Colorado Agriculturist* says: A correspondent informs us that he finds buttermilk to be an almost unfailing cure for scurvy in hogs. To prove the fact, among other cases which have come under his notice, he says he owns several pigs which, a few weeks since, were suffering terribly from the effects of the disease, and that a speedy cure was effected by merely pouring the buttermilk over them a few times in the pen. Readers will do well to remember this simple remedy.

Sows Eating Pigs.—A veterinarian in the *Prairie Farmer* thus advises a correspondent: Watch the hog the first few days after the pigs are born, and if she evinces a desire to eat her pigs, give her an emetic composed of tartar emetic, three grains; powdered ipecacuanha and powdered white hellebore of each eight grains; mix and throw dry into the mouth of the hog.

The Apiary.

Observation in Bee Culture.

We have often reminded farmers that observation is the surest road to advancement. We are glad to see that the bee culturists are carrying on their business with observing eyes and understanding minds. When those engaged in any occupation will do this, they will be in no danger of going astray. One of the best illustrations of this was the prompt exposure of the errors of that most erudite Agassiz. If beekeepers had not for years past been studying, with almost the zeal of scientists, everything relating to the habits of the honey bee, the the statements of this learned professor would have passed unchallenged. We hope this careful ohservation of everything relating to beeculture will continue till all unsettled points shall be made clear. The honey product has become one of great importance in the food supply. We think the great losses in wintering bees will soon be better understood and guarded against. But this must be done by observation and study of facts, not by speculation. The bee conventions, held so frequently within the last few years, have given a remarkable impetus to this industry. At these conventions observations on all points are compared and errors detected, much better than they can be throngh communications to the bee journals. Here, any one may be corrected on the spot, and the suggestions made by so many minds, all looking at the subject from different standpoints, will be much more likely to effect a true solution. We wish every branch of agriculture was as well organized as bee-keeping; it would produce a wonderful advance during the next ten years.—*Live Stock Journal.*

Rich Soils best for Honey Producing Plants.—Mr. E. Gallup, of Iowa, has noted the conditions of soil and climate most favorable for the production of honey in flowers. The facts he gives are worth remembering: If the atmosphere is moist and warm, and well charged with electricity, then is the time our flowers produce the most forage. On the contrary, the air may be dry, warm or hot, and flowers produce nothing. But by heavily manuring a piece of land for white clover or buckwheat, we can cause it to produce honey in a dry or cool season. Manure warms up the land, and it also causes a vapor of moisture to arise from the soil, which does not arise from an impoverished soil. We have noticed this repeatedly. We have seen a row of currant hushes alive with bees, that had heen heavily manured the season previous, while a row that was not manured was not visited by the bees. We have seen a four-acre patch of white clover that had been heavily manured the season previons, covered with bees, while the clover field by the side of it was not visited by a single bee. We have had some buckwheat on poor land, and on rich land at the same time. That on the poor land was not visited, while that on the rich land was alive with bees, and fairly scented the air with sweet around. White clover on warm, sandy land, produced abundance of forage the past season, while on clay soil it produced nothing.

Fertile Workers.—I get rid of fertile workers thus: Change places with a strong stock and let them remain a few days. Then open the hive, and if no eggs are found, I introduce a queen. I succeeded once in rearing a queen, having her fertilized, aud remain in a stock with a fertile worker, and she did well. It was a stand of pure Italians, very quiet and peaceable.—*W. H. Nicholson.*

Granulaten Honey.—The Jews of Moldavia and the Ukraine, prepare from honey a sort of sugar, which is solid and as white as snow, which they send to the distilleries at Dantzic. They expose the honey to frost for three weeks, where neither sun nor snow can reach it, and in a vessel which is a bad conductor of caloric, hy which process the honey becomes clear and hard, like sugar.

Miscellaneous.

The Sex of Eggs.—In a late issue of the *Rural New Yorker*, a correspondent pretends to have settled the question of sex in eggs by studying their shape. Will you please insert the following paragraph copied from *Capell's Household Guide?*

Hundreds of years ago it was thought that the sex of eggs could he distinguished by the shape—the cocks being produced from those of elongated shape, and hens from the short or round. Others have pretended to discern the future sex from the position of the air bubble at the large end. We need scarcely say that these and all other fancies have hundreds of times been proved to be erroneous. There is not a breeder of prize poultry in England, who would not gladly give £20 for the coveted knowledge, and thenceforth breed no more cockerels than he really wanted; but the secret has never been discovered yet, and it is even impossible to say before an egg has been set upon a short time whether it will produce a chicken or not.—*Cor. Rural New Yorker.*

Poultry Raising.—The best time to commence keeping poultry is in the fall or early winter. At that time young hens can be purchased readily. In the spring farmers' wives are not anxious to sell their fowls. If they are fed well and a warm place provided, some of the hens may be set in February or earlier, and some early broods may he hatched out and sold for early chickens. On eight or ten acres 500 fowls might easily be kept, or if skillfully managed double that number. One variety would he found most profitable, unless fancy poultry were kept, when, of course, there must be a separate house and yard for each kind. A change of roosters should he made each year.—*American Agriculturist.*

Traveling on the Farm.—Did any of your readers ever think of the amount of travel it takes to raise a crop of corn? I never saw an illustration in print, and I thought I would give you one. I have a 20-acre field, 40 hy 80 rods. To break this up would take 166 miles. Harrowing it, about 40 miles. Furrowing out, 90 miles. Planting, 45 miles, if with a planter; and if dropped and then covered, 90 miles. Thus you will see it takes about 800 or 900 miles of travel to raise twenty acres of corn, not counting going to or returning from the field. Besides, there are replanting, thinning, rolling, etc.—*Ind. Farmer.*

Dr. Griffith, of Chico, has this year cultivated 3,000 acres of grain, which will yield an average of at least 30 bushels to the acre. He has also harvested 700 tons of hay. The Doctor sold a short time since 25,000 pounds of bacon in the Marysville market.

It is calcnlated that 2,600 Chinamen are now engaged in picking fruit in the vicinity of San Leandro, San Lorenzo and Hayward.

A short crop of potatoes in Oregon is reported this year.

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

Grange Rulings.

Worthy Master Hamilton has forwarded to us the following recent rulings in addition to those already published. It should be borne in mind by all members of the Order, that only those rulings which have been made by the Master of the State Grange of California should be recognized as binding upon the Order in this State. Upon this point Worthy Master Hamilton has instructed as follows: "The State Grange of California has elected a Master whose rulings on points of Grange law in this State are the *only* official ones that can be recognized as binding on us, and must remain as law until overruled by the Worthy Master of National Grange, or by the National Grange itself. The rulings of Masters of other States, while they are useful as precedents *from* which to form opinions or *on* which to base decisions, have no *official* force whatever here, and can never be used to override our own authority. To the rulings of our Worthy Master Adams, Masters and members in all the States must render a cheerful obedience, until an appeal may be sustained by the National Grange."

Rulings.

A married woman derives her eligibility to become a member of a Grange from the eligibility of her husband, and if he is not eligible and worthy of being admitted to the Grange, the wife should not be admitted alone.

It is not safe or good policy to admit married women to the Grange whose husbands are opposed to our Order, or who being eligible, have no disposition to join it.

Unless the by-laws of a subordinate Grange fix a time which must elapse before a *new* application can be made for a rejected candidate, there is nothing in the National constitution to prohibit the application being renewed at any subsequent meeting.

If the Master of a Grange has good reason to believe that some of the members have cast black balls by mistake, he should, before declaring the result of the ballot, make such statement and recommend another ballot. If, however, he declares the ballot, and the members themselves are satisfied a mistake has been made, it will be in order for some one to move for a reconsideration. And if a majority of the members vote to reconsider, the ballot may be taken over again and the result must be final.

A ballot can only be reconsidered at the same meeting the vote is declared.

A Grange Chromo.—We have received from the American Oleograph Co., Milwaukee, Wis., an oil chromo, published by them, 19 by 24 inches in size, giving a very correct illustration of the inner appearance of a Grange when at work. The center of the picture represents the Grange in session, officers in their places, etc. On each side of this picture are emblematic devices representing the first four degrees of the Order—on the right the female, and on the left the male—all of which will be readily understood by the initiated; but which to the outsider represent only pleasant and interesting farm and domestic scenes. The price, finished in oil colors, is 50 cents. When 12 or more are ordered by a club, they will be sent post free.

The Granges are doing more to project and establish substantial enterprises in connection with their organizations than all the efforts of legislation and capital have done heretofore. At Red Oak, Iowa, they propose the organization of a stock company for establishing a linseed oil mill, to consume the large amount of flax seed raised in that vicinity. We hear many instances of this kind every day, and hope that the good work may go on with redoubled energy.—*Omaha Union.*

A Patron says of the results of the organization in his neighborhood: "The discussion of questions of practical interest to Patrons, which form a feature of our Grange, is having a tendency to develop not only a better manner of expressing ourselves, but a greater willingness to make the effort. Great improvement has already been observed in even the little practice we have thus far had."

Appeal to Patrons.—The Governor of Minnesota, recognizing that the Patrons are ever ready to relieve the suffering and oppressed, has issued an appeal to the Patrons of Minnesota to forward relief to the farmers of the southwestern counties of that State, who have lost their crops by the grasshopper plague.

An Oregon Patron tells the public that he took the fourth degree at a certain time and place, and adds: "I have felt better ever since; my clothes hang better, and look like there was some one in them. I would like to have fourteen more fourth degrees."

The West Side of the San Joaquin.

Editors Press:—"Have we failed in our object?" was a question asked me the other day, and since then I have given it considerable thought, and have concluded that we have at least partially failed—particularly we of the west side of the San Joaquin. We organized in accordance with the laws of the Order, and have taken every step necessary to promote interest and enthusiasm, thereby enlisting nearly all that are engaged in agricultural pursuits on this side of the river. Our meetings have been promptly attended, and a general good feeling has prevailed throughout. There are those among us that are ready and willing to make almost any sacrifice for the good of the Order. But yet, notwithstanding all our endeavors, our strict adherance to the laws and regulations of the Order, and our willingness to act, we find that we are almost as much at the mercy of Friedlander & Co. as we were two years ago.

While we feel thankful that we have been able to procure our machinery and sacks at very fair terms, we find that freights are still high, and we have but one market for our grain, and that is Mr. Friedlander's agent at Hill's Ferry. Not that we wish to cast any reflection on Mr. Friedlander or his agent (for, from general appearances, if it were not for them we would be at the mercy of the north winds—without a market); but that we would like to persuade others to come forward, that we may have a little firmer market.

There are at present writing one or two hundred tons of grain going to Hill's Ferry daily, and we may safely say that three-quarters of that grain must be sold on arrival. You may wonder why it is that we do not ship or store and hold our grain; the reason is simply this: I may safely say four-fifths of us are in debt to the merchants of Hill's Ferry and elsewhere, and the very moment our grain is in the sack, the storekeeper *must* have his money. Consequently we are compelled to sell our grain no matter what the price may be. We have been visited with a few attachments already, and I know of others who scarcely know what to do, for they hardly have enough grain to save them if properly handled; but let the merchants get it in their charge and all hopes of salvation are dispelled, for by the time they ship it *via* Stockton, and make several transfers, the account they render is naught. Now, notwithstanding we may be compelled to sell, we are yet allowed (according to custom, I believe) the remote privilege of saying to whom our grain may be sold. If there is any speculation in our grain, we would by far prefer giving the benefit of that speculation to those whom we believe to be our real friends, rather than to those we know to be our friends for our money only.

Some of your readers may wonder why it is that we are thus so situated. The reason is plain enough to those that have been here four, five and six years. The first year or two we had good crops without farming, but since, (with but one exception) we have had no crops, but like most gamblers, we were winners in the beginning; and now that we are losers and behind the game we feel like playing forever. The majority of us commenced with but little, and that little is so fastened that it is impossible to leave without losing all. Besides, we have been assisted by that little word "Hope," and we have labored and toiled from January 1st to December 31st almost incessantly, with the fervent belief that that little word would be fulfilled; but alas! our expectations have almost proved futile. You may talk about "the patience of Job," but his patience is a very remote comparison to the patience of some of the San Joaquiners; for although they may not have been bodily afflicted as was the old Patriarch, yet they feel their strength, both physical and spiritual, very nearly exhausted. I am not aware of any other place in the State that is conditioned just as we are. True, we are compelled to acknowledge, our light crops are in a great measure owing to our poor farming; but then we always expect to do better next year, hoping that we may be able to induce some of our friends to come and make a slight opposition in our Hill's Ferry market.

I remain fraternally,

J. J. Doyle.

Cottonwood, June 30th, 1874.

Rising Star Grange, Fresno Co.—Secretary J. W. Craycroft writes: "Our Grange is prosperous and the members ready for every good work. Our hay crop is measurably good, and hay is selling for $20 per ton—the market being at New Idria and San Benito." Through some oversight this Grange, which was organized April 18th, has not found its way into our directory. Calvin Valpey is Master, and J. W. Craycroft, Secretary.

El Monte Grange has appointed a committee of three, to be present at the meeting of the Los Angeles Board of Equalization, and there to represent the value of land within their Grange district.

The frame of the new hall for the Danville Grange of the Patrons of Husbandry, 30 by 60 feet upon the ground, is already up.

A "Grange packet" is plying on the Mississippi between Galena and St. Louis.

The Fourth at Walnut Creek Grange.

Our worthy brethren and sisters of the Walnut Creek Grange, having invited the head of the household to address them on the 4th, when they made their harvest feast the occasion for a social and patriotic gathering, we took the opportunity to see a little of the country lying between Oakland and Mt. Diablo—under the weight of the still ungathered harvest. Surely that is a goodly land which after almost twenty years' continuous cropping of wheat, displays such groaning abundance, and we can think of no more enviable lot than the possession of a moderate estate well stocked and fenced, where fine scenery, an almost perfect climate, and proximity to the bay and city of San Francisco, enable one to combine all that is best in city and country life. The farmers, as they gathered with their plethoric baskets on the morning of the Fourth, seemed to realize that they had "about as good a thing as there is going." There were guests from Danville and Point of Timber Granges, and a general disposition was manifested to make the most of the only holiday they can get for many weeks. It will be no light labor to gather in this year's harvest, now just commencing.

The Granges have outgrown their hall, and now need a more commodious place of meeting. A class of some eight or ten were initiated in the fourth degree, when a procession was formed and marched to the grain warehouse, where the public exercises were held, Worthy Master Jones acting as President of the day. After the reading of the Declaration of Independence, singing of Grange and patriotic songs, the address was given, and then the real business of the occasion was transacted, in the attack of two or three hundred hungry patriots upon tables which resisted all attempts to clear them until late in the afternoon. Space was made at last for a few quadrilles; but we elderly people preferred the cool shades of Locust farm, and left the scenes of festivity to finish the day with the Locust farmer, his wife and numerous guests.

This farm is one of many charming hiding places in the hills, where one may escape for a few days or weeks from all the drudgery of business, and cares of housekeeping, and luxuriate in old clothes, easy shoes, early sleeping and late rising to their heart's content. There is a clear brook for children to paddle in; a wild cañon path leads to a fine cold sulphur spring where you may drink or bathe; there is no amusement or excitement except eating the freshest fruits, vegetables, cream, the fattest mutton, chickens and turkeys, and riding or walking half a mile to the post-office. There are no neighbors, and the newest news sounds old in the quiet of nature's exceeding peace.

Some 15 or 20 San Francisco and Oakland people are boarding with Mr. and Mrs. Jones, at this pleasant nook; if the house were larger, my tale would be longer.

It is the handiest and most comfortable place to be lost in, and forget the dust and heat with the little folks, that we have found in many a day.

We found many genial and wide-awake Grangers, who take and read the papers, and have their minds made up on the deep things in finance and political economy. It is needless to wish our Walnut creek friends prosperity—they have the keys of the great safe securely in their hands. Jeanne C. Carr.

Oakland, July 6th, 1874.

Hollister Grange, Monterey County.—J. D. Fowler, the efficient local agent of this Grange, writes the *Granger* that the harvest feast, on the 27th ult., was not as well attended as usual, on account of the farmers being at this time so busy with their harvest. The Grange has resolved to meet only twice a month, and to have initiations only on the fourth Saturday. Brother Fowler continues: "We are forming a joint stock company to build us a hall in Hollister, which we hope to get up soon, as we need a larger hall than there is in town, for as we grow in numbers we also grow in interest, and can muster enough to fill two such halls as the one we now occupy. There will be a delegation of our folks to go to Watsonville to spend Fourth with Watsonville and Pajaro Granges. Our Worthy Master, Brother Pomeroy, met with an accident some time since—while harrowing in his orchard, he had a harrow tooth run through his foot, which has caused him to go on crutches ever since; but he has enough zeal in the Grange to miss but one meeting.

"Our crops will yield about the same as last year. We have purchased ourselves an organ, which is quite an addition to our institution."

El Dorado Grange, El Dorado County.—C. G. Carpenter, Master of this Grange, writes as follows: We had a very pleasant time at our harvest feast on the 4th inst., after conferring the Fourth Degree upon a class of four (it being our first). All present seemed to enjoy not only the eatables which the ladies know how to get up so well, but the novelty and sociability of the whole proceedings. We are not progressing as fast as I could wish, but we are moving, sure and certain. Our numbers are small, but what we lack in numbers we try to make up in energy and zeal for the cause.

Temescal Grange, Oakland, holds a harvest feast to-day, the anniversary of its organization.

Schuyler Colfax and the Granges.

Schuyler Colfax, late vice-President, in a letter to the Secretary of the Wabash (Ind.) Grange expresses his opinions of the Granges and their mission as follows: Two things in your organization have struck me as specially auspicious. First, the admission of your wives and daughters to membership, enhancing doubtless the social interest of your meetings, and beckoning woman onward to wider spheres of usefulness in the community; and, secondly, the frank and outspoken declarations of so many of your Granges as to intemperance, the enemy of the workingman and the bane of society. I trust your organization will never speak with an uncertain voice on this great evil of the century. For all experience proves that where drinking shops decrease, crime and pauperism, with their consequent taxation, decrease, comfort and happiness in the abodes of the poor increase; and law and order, peace and quiet, industry and thrift more generally prevail. Your demands, too, for increased economy in public expenditures and greater watchfulness as to public moneys, cannot fail to do good. When you proceed from generalities to details you will find that, beside strict scrutiny as to national appropriations, you will need quite as watchful care as to home taxation. Governor Hayes, of Ohio, one of the best governors that State ever had, proved several years ago, in a message that attracted too little attention, that unrestrained local taxation was the heaviest burden, by far, the taxpayer had to shoulder. And that is so completely within your power locally, I have great hopes of beneficent results in that line from your organization.

Not being a member of your Order I am not sure that I understand your exact position as to "middlemen." If your object is to economize as far as possible, buying with cash from manufacturers or their agents, at their lowest prices, instead of on credit at higher rates, and thus saving the heavy percentage that the credit system absorbs from the honest poor, that is certainly laudable. But middlemen, as a class, are as necessary in the operations of trade and commerce and business as lawyers are in law, and doctors in medicine, and need a special education and adaptation to their work. If you could abolish all middlemen, with their experience, you would have to educate and train up middlemen of your own ranks to fill their places. And, as we cannot buy dress-patterns for our wives direct from Manchester mills, we must recognize that agents who contract at wholesale, and taking all the risks of shipments and sales, retail goods to us, are to a large extent a necessity. But no one can object to the policy of buying and selling direct for cash in hand, as far as it is feasible.

[Mr. Colfax is right in his understanding of the position of the Patrons towards the "middlemen." They "seek to economize, as far as possible, buying with cash from manufacturers or their agents at the lowest prices, instead of on credit at higher rates." They do not propose to do without "middlemen;" they only propose to do their business through a less number, and with men to their liking, and, so far as possible, with men more especially devoted to their interests than the generality of that class.—Eds. Press.]

Help him to go Home.—Ill health—and that worst of all diseases—homesickness, may sometimes seize one of our numbers, so that it seems that nothing but a return to the old scenes will raise his spirits or perhaps save his life. Or mayhap it is that had luck and ill health combine to make it impossible for him to meet his obligations on his property, and he must find a purchaser or lose all he has. In such a state of mind, a man loses his grip, and waits patiently in deep agony, for the sheriff to do his duty, or that grim monster whose summons we all must obey, to call him where titles are of little use. Aid that man. Learn his history—his old home. Open up a correspondence with the Grangers where he came from, and get them to go to work to prepare the way for his return home. State to them all the facts concerning the property he has and what he wants, and when loving, earnest, brotherly hands shall strive to aid him, it will not be long until he is fixed just as he wants to be. Use the Grange wherein it can be useful. Its power for good is immense, and we will say inexhaustable. Use it.—*Am. Patron.*

Dixon Grange, Solano County.—B. T. Kelley, Secretary, sends us the following resolution, passed by Dixon Grange, at their meeting July 4th:

Resolved, That the Grange withdraw their patronage from all business houses keeping open on Sunday.

The attempt of some sorehead politicians to involve the Patrons of Indiana in the movement that is to be placed in shape at the mass-meeting of June 10th, is generally denounced by members of the Order.

Westminster Grange, Los Angeles Co.—Henry Stephens, late Secretary of this Grange, has resigned. W. F. Poor has been chosen to fill his place.

Lone Cedar Grange, No. 231, Minnesota, denounces as an insult the sending of a political circular to its Master and Secretary with a request that it be read in the Grange.

An Abiding Principle of the Grange.

One of the most beantiful features in the Grange is the fellowship and brotherly feeling that it develops among its members.

It strengthens the bond of friendship, and brings neighbors and farmers generally into close bonds of union, which results in mntual profit and improvement. Anything that tends to foster charity and sympathetic kindness, and brighten the mystic chains that bind heart to heart, is a blessing.

Prominent among the objects of the Patrons of Husbandry is the development and cultivation of fraternal harmony. Its platform inculcates the doctrine of Charity, in these words: It shall be an abiding principle with ns to relieve any of our oppressed and suffering brothhood, by any means at our command.

The Grange, while cultivating the virtues, dispensing charity, and strengthening the bonds of good fellowship among its members, wages no warfare against any other interest whatever; but, on the contrary, as declared at St. Louis, all its acts and its efforts, as far as business is concerned, are not only for the benefit of prodncers and consumers, but, "also for other interests that tend to bring these parties into speedy and economical contact."

Let the Patrons of Husbandry abide by all the great principles enunciated at St. Lonis and the Order will continue to grow until it spreads over the whole country and takes in every farmer. But let it once go into politics as an organization, and it will die like a tree poisoned at its roots. No secret association can control the political destinies of the Republic. The attempt to do it will shipwreck any secret order. Recognizing this great truth, the St. Louis platform says: "We emphatically and sincerely assert the oft-repeated truth taught in our organic law, that the Grange, National, State or Subordinate, is not a political or party organization;" further, it declares that "no Grange, if true to its obligation, can discuss political questions, nor call political conventions, nor nominate candidates, nor even discuss their merits in its meetings."--*N. C. Observer.*

The Order in Pennsylvania.

The State Grange of Pennsylvania recently held its session at Mechanicsburg, at which more than three-quarters of all the counties in the State were represented. It was predicted by the Lecturer of the National Grange, who was present, that there would be over 1,000 Granges in the State by Jannary next—one county already numbering 40 Granges with a membership of 4,000. The same county had but a single Grange only four months previously. Indeed, the Order but barely had an existence in that State six months previous.

The resolutions passed by the State Grange appealed to agriculturists everywhere in the State to learn the objects of the movement from trustworthy sources without delay, and if favorable, to show the principles practically at an early day. The amendments to the constitution of the National Grange were, in the main, ratified. The Master's closing address congratulated the Patrons present upon the marvelous growth of the Order in Pennsylvania, as well as in other States. He admonished the members to show their principle, a part of true manhood, invariably, and to guard well their rights, at the same time remembering that all others have rights as well as themselves.

An Iowa Patron thinks "there is too much lawyer in our politics," and that as a nation we have gradually given up to the lawyer nearly every position of honor and trust.

The Granges of Williamson county, Tenn., at a recent meeting at Franklin, resolved to subscribe $200 each to purchase and hold the County Fair Grounds in perpetuity.

In Northwestern Missouri manufacturers are offering farm implements and machinery below cost to break down the Grange agencies.—Can't do it.

Care of Gold Fish.—Seth Green, who knows as much about fish as anybody, writes as follows to the Rochester *Democrat:* In answer to your inquiry how to keep gold fish, I answer that I am asked the question so many times it will save me many letters through the press if you will insert the following: Use any well, creek or river that is not impregnated with mineral. Change the water when the fish come to the top and stay there, and breathe part water and part air. Take out nearly all the water, leaving enough for the fish to swim in, and fill the vessel with fresh water. Never take the fish in your hand. If the aquarium needs cleaning make a net of mosquito netting and take the fish out in it. There are many gold fish killed by handling. Keep your aquarium clean so that the water looks as clear as crystal. Watch the fish a little, and you will find out when they are all right. Feed them all they will eat, and anything they will eat, worms, meat, fish water or fish spawn. Take great care that you take all they do not eat out of the aqnarium. Any decayed meat or vegetable matter in water has the same smell to fish that it does to you in air. If your gold fish die it is attributable, as a rule, to one of three causes—handling, starvation or bad water.

The Napa Plow Co. have commenced building operations.

Hydrophobia.

This dreadful disease is just now attracting a great deal of attention at the East; instances of bites from rabid dogs, and reported cases of death from hydrophobia being so nnmerous as to excito general alarm. The most eminent physicians of New York have been holding meetings and discussing the subject from scientific as well as common sense standpoints, and some of the opinions held by men who ought to know most about this disease and its cause are rather alarming, to say the least. Some of them are of the opinion that the bite of an animal entirely free from the disease himself may produce it; or that a dog may suffer from a mild form of it, and inoculate the deadly virus by snaps or even by means of fondling, and recover without a suspicion of his having suffered from so horrible a complaint.

Indeed, in view of some startling cases which have been lately observed, it is a matter of grave question whether all the members of the order carnivora do not habitnally and naturally secrete with their saliva a poison, or ferment of some mysterious nature, which only requires favorable conditions to produce hydrophobia when inoculated in the flesh by means of their fangs. Certain it is that dogs, cats and wolves have all been known to communicate rabies; and of late the genus *mephitis*, or the skunk family, have been accused on very good grounds of invariably producing this malady by their bite. Numerous cases have been placed upon record where wounds from these vicious little animals have been followed by a disease differing from rabies only in being, if possible, more horrible, and which will justly cause an enmity to be engendered against this family, which will tend to their nltimate extermination.

But how is it with those household animals—cats and dogs—so universally made the pets and companions of mankind? Are they about to be banished forever from the face of the earth? We hardly think so. Doubtless the excitement now being caused by the exceeding prevalence of the malady hss led scientific men to take too extreme a view of the subject; but the alarm they have sounded will have a beneficial effect in controling the morbid appetite which Americans have for surrounding themselves with hordes of mongrel curs. We can easily spare four-fifths of all the dogs in the country, and especially ought all those to be exterminated with any vicious habits of snapping and biting. Here in California we have almost, if not entirely, escaped this affliction, so we have no great canse for alarm; still an ounce of prevention is worth a pound of cure, and the hints of the New York doctors to keep dogs confined and *not* muzzled; and carefully watch and guard against any symptoms of disease which may show themselves, etc., are not altogether out of place here.

It is to be hoped that the renewed interest in this subject—evidently somewhat sensational—will not react and lead to a still greater degree of carelessness in regard to this question.

Shall We Ever Plow Profitably by Steam?—E. N. Marengo, of Illinois, asks this question. When the expense of horse power is considered, it is no wonder that farmers are looking forward to the use of a power which shall be fully adequate to the work and cost nothing when not in use. There seems really no practical difficulty in solving the problem of steam cultivation on all soils reasonably level and free from stone. The greatest obstacle has been in the weight of machinery necessary to obtain the power of twelve to fifteen horses, as five or six tons cannot well be carried over a yielding soil; and the English have solved the problem by using stationary engines on each side of the field, and drawing the plows back and forth by means of a steel cable, but this will not answer on our immense prairie fields. We must have a tractile engine which can pass over the land and draw a gang of plows, working a strip ten feet wide, and perhaps cultivating and sowing the grain at the same time. There have been a number of inventions, which seemed on the point of accomplishing the desired end, and had there been the same inducements offered for such an invention as for improvement in railroad machinery, we believe American ingenuity would have produced a tractile engine, capable of plowing and cultivating, at half the expense of horse power. Farmers are the most conservative of all classes, and are not ready to take any risks. The machine must be complete, and its success, under all difficulties, certain before they will give it a helping hand. We believe steam power entirely practicable for soil culture, for hauling loads, and travel on common roads. We believe the State Legislatnres would make a good use of $100,000 by offering that prize for the best machine propelled by steam, which shall be successful in plowing ordinary soils, eight inches deep, for $1.50 per acre, the tests extending through three years. The English use five horses on a plow, and find the Fowler steam plow, above mentioned, cheaper than horse power, but we must have something simpler and cheaper.

The secoud crop of strawberries in Santa Clara county is coming on slowly, and it is believed that the yield will be as light as the other was heavy.

The Walla Walla farmers havo got up a corner in hay, and will not sell at less than $14.50 per ton.

Straw-Burning Engines.

The London *Times*, of May 16th, describes at length the visit of the Czar of Rnssia, Grand Duke Alexis, the Duke and Dntchess of Edinburgh and others, to the Flemish farm, to witness the operation of a straw-bnrning engine, which is soon to be introduced npon this coast. The engine referred to is the joint invention of Mr. John Head, of the firm of Ransome, Sims & Head, England, and the late Mr. Schemioth, a Russian engineer.

The *Times* says: "Although it is only now that the Czsr has seen it in action, it has already obtained the approval of the most competent agricnltural authorities. We have already made mention of it in letters we published on the Vienna Exhibition, where it was one of the great centers of attraction in the agricultural machinery hall, and we have no intention now of entering into technicsl details. We shall merely say the engine is fed by a self-acting apparatus driven by a strap attached to itself. The straw is passed in between a conple of rollers, which spread it out lightly with a lateral and fan-like motion, exposing it to the full force of the fire. One man only is required to supply it, and it reduces the average consumption of straw to something like four times the weight of coal. It is exceedingly simple; and indeed its general utility must depend almost entirely upon its simplicity in a country where the laborers have been only acustomed to the most primitive implements, and where the most skilled artisan to be found within reach is probably an ordinary village blacksmith. The trial witnessed by the Czar went off most satisfactorily."

By means of this straw-feeding apparatus, it is claimed that almost any kind of vegetable product can be utilized as a fuel, and thus permit of steam being used as a cheap motive power in countries which are devoid of ordinary fuel, but which are covered with vegetable products. The spparatus for feeding the furnace with straw is self-acting, being driven by a belt from the engine; but if desired, the belt can be disconnected and the apparatus operated by hand; or, when necessary, the entire apparatus can be readily disconnected and removed, and the ordinary furnace door substituted in its place.

In getting up steam it is necessary to operate the apparatus by hand until the engine begins to work. One man can easily feed the straw to the machine, thus requiring no more men than an ordinary steam engine. It is claimed that the average consumption of straw or cotton stalks is about four times in weight to coal, and that about eight or ten sheaves of straw are required to thresh one hundred sheaves of grain.

The apparatns can be adapted to fixed as well as portable engines.

This invention has been secured by American patents. For further particulars, address Ernest L. Ransome, manufaoturer of artificial stone, San Francisco, Cal.

Sod as a Manure.—Every farmer has learned that the sod of his plowed land is the cream of the soil, but it is evident that all farmers do not fully appreciate the value of this substance. Something of an idea may be obtained from a statement made in a letter written by Prof. Kedzie, of the Michigan Agricultural College, to Geo. Geddes. In this letter the Prof. says that he took a square foot (of which there are 43,500 in an acre) of June grass tnrf, and washed away all the soil in running water; and then weighed the grass roots and surface grass, or the amount of green manurial matter usually contained in a heavy greensward, and found it to be five pounds to the square foot, or at the rate of more than 100 tons to the acre. In a letter to the N. Y. *Tribune*, Mr. Geddes adds: "One hnndred tons to the acre of clean grass and roots from the turf of an old pasture or lawn, is a very valnable mannring, when we consider how evenly it is spread, and accurately it is applied. But the roots of June grass rnn but a little way into the ground compared with the roots of red clover, that penetrate from two to four feet, and bring to the surface the fertility that lies deep in the soil. When a clover sod, that after being mown, has been allowed to stand a few weeks, and the new stalks are grown to be perhaps eight or ten inches high, there will be about all that can be plowed into a furrow."

The crops look nncommonly good between Cloverdale and Ukiah. An especially heavy hay crop has been harvested, and the grain could not be better, from present indications. Sanel Valley, fifteen miles from Cloverdale, is not only the prettiest but also one of the most fertile sections of the State. It is a center of the lucrative and increasing business of hop culture. The promise of this crop is unusually good. Near Sanel are located the farms of Jno. Knight, J. A. Knox, L. F. Long and others who make hop culture a specialty. They all report promise of an abundant harvest.

The Illinois legislature has passed a law providing that whoever adulterates milk with water, chalk or other snbstance, or sells such milk, shall be confined in the county jail not exceeding one year, or fined not exceeding $500.

Some weeks ago, in Virginia City, a child about a year old sucked a small gold ring off its finger and swallowed it. The accident caused its death Thursday. After swallowing the ring, it had spasms almost constantly up to the hour of its death.

The Vineyard.

Parasitic Growths in Wine.

When wine becomes acid, it has been invaded by the flower of vinegar, *Mycoderma aceti*, the function of which seems to be to transform alcohol into acetic acid by a sort of incomplete combustion. This has been seen into by most housekeepers, when they give the name of *mother* to the membranes found in jars which have contained vinegar; and a rapid way of making vinegar has been based on this observation. Another analogous mycoderm, the flower of wine, does not occasion any hurtful fermentations, but seems rather to favor the reactiou due to what is called the "bouquet." A worse malady has for its cause a growth which presents itself under the appearance of filaments of extremely slender aspect, and forms those slight waves which may be remarked when wine is shaken. This mycoderm has a strong affinity with that which produces lactic acid. Wines that are described by the growers as fat and oily, are charged by a fermentation which takes the form of globules joined together in a kind of entangled chaplets. What they call an old or bitter taste is a malady which chiefly attacks the finest wines, and also has its origin in a special fermentation, which reminds the palate of wine turned acid; nnder the microscope the floating particles are larger, and resemble the branches of dead trees. If the germs of these different mycoderms are killed by heat, the wine is safe from all change so long as it is kept in a closed vessel, but it is evident that these precautions are useless if new germs are brought with the air, or in unprepared wines which may be mixed with that which has been heated. After many experiments which have been made by the wine-growers ot Burgundy, it is decided that it is well to heat the vintages to the amount of from sixty to eighty degrees, if only for a minute, and that instead of losing their aroma and fiavor, they are in fact rather improved. For the same reason, a voyage to a hot climate has been recommended.

Use of Sulphur in the Vineyard.—M. B. Bateham, in the *Horticulturist* says of the reports made of recent experiments in the use of sulphur on Catawba vineyards on the Islands: It was stated by one of the grape-growers from there, that sulphuring the vines had been practiced to some extent for several years past, and that when judiciously done, it was found a certain preventive of mildew and rotting of the fruit, and also of the blighting of the foliage; and where this was practiced, in 1872, the vines ripened their wood so well as to suffer but little damage from the winter, and thus produoed a half crop, while vineyards not sulphured bore no fruit at all. These facts will cause a very general use of sulphur hereafter, and much improvement is expected therefrom. The practice is to mix the sulphur with an equal quantity of fine, air-slaked lime, and apply the powder with a bellows of which they manufacture a very cheap style for the purpose, The first application is made as soon as the blossoms are off in June, and repeat once a month or so during the summer. The labor and expense are quite small compared with the benefits; and the practice is recommended to grape growers generally, especislly for varieties that are subject to mildew or blighting of the foliage. Let us all give the experiment a trial and report the resnlts next year.

Mangel Wurzel vs. Sugar Beets for Stock. In a paper before the Little Falls, N. Y., Farmers' Club, Hsrris Lewis said: "I have finally concluded that the best varities of the French and German sugar beets are the most nutritious, the most acceptable to the cow, and produce the best flavored milk of all the roots I ever fed. But all these sugar beets go down to the crown in the soil, and cost three or four times as muoh labor per ton to harvest them as it does to harvest any one of the kinds of beets known as the mangel wurzel. Again, the sugar beets seldom yield more than twenty tons per acre, while the mangel wurzel often yields over forty tons per acre. I would, therefore, recommend the large mangel wurzel, such as the Norbition giant, long mammoth, red, yellow ovoid, and yellow globe, for general cultivation, as those kinds which will give the greatest yield per acre, and as cattle food, give entire satisfaction to all dairymen or cattle feeders, who may grow and feed them in connection with hay, or other dry fodder, during our long winters. The moro I feed beets to dairy stock, the greater value I place upon them, as good, nutritious, health-promoting cattle-food.

G. W. Campbell, a well known horticulturist of Deleware, Ohio, describes a method by which he olaims to be able to ascertain in advanoe the qualities of seedling grapes. He says that in the taste or flavor of the green tendrils of the vine may be found a true index of the character of its prospective fruit. He further declares that the tendrils of each variety possess a distinguished flavor, by which it may always be detected from any other, and a seedling with this peculiarity of character may be at once set down as good, even in advance of its crop. His predictions have been verified in every instance, and frequently, too, when the appearance of the foliage would lead him to the opposite conclusion.



My Little Laborer.

A tiny man; with fingers *soft* and tender,
As any lady's fair;
Sweet eyes of blue, a form both frail and slender,
And curls of sunny hair;
A household toy, a fragile thing of beauty—
Yet with each rising sun
Begins his round of toil—a solemn duty
That must be daily done.

To-day he's building castle, house and tower,
With wondrous art and skill;
Or labors with his hammer by the hour,
With strong, determined will.
Anon, with little loaded cart he's plying
A brisk and driving trade;
Again, with thoughtful, earnest brow, is trying
Some book's dark lore to read.

Now, laden like some little beast of burden,
He drags himself along;
And now his lordly little voice is heard in
Boisterous shout and song;
Another hour is spent in busy toiling,
With hoop, and top, and ball,
And with a patience that is never falling,
He tries and conquers all.

But sleep at last o'ertakes my little rover,
And on his mother's breast,
Toys thrown aside, the day's hard labor over,
He sinks to quiet rest;
And as I fold him to my bosom, sleeping,
I think, 'mid gathering tears,
Of what the future may in store be keeping,
As work for manhood's years.

Must he with toil his daily bread be earning,
In the world's busy mart;
Life's bitter lessons every day be learning,
With patient, struggling heart?
Or shall my little architect be building
Some monument of fame,
On which, in letters bright with glory's gilding,
The world may read his name?

Perhaps some humble, lowly occupation,
But shared with sweet content;
Perhaps a life in loftier, prouder station,
In selfish pleasure spent.
Perchance these little feet may cross the portal
Of learning's lofty fane;
His life-work be to scatter truths immortal
Among the sons of men!

—*Ex.*

The Wrong Room.

Tom Bent was half distracted. He hated the cold, foggy city and the endless rows of staring brick blocks, and the whole race of landladies, his own landlady especially.

Tom sighed dismally when he thought of the cosy little neat his friend Hampton was blessed with; and Hampton was only a clerk, too, with a very limited salary and the "nest" could only boast of three rooms. But they were delightfully homelike; with the brightest of carpets and whitest of curtains; books on the tables and pictures on the soft tinted walls, and pots of fragrant flowers in the windows. One painting Tom remarked well, "Sunset on the Shore." The whole western sky was flaming with purple and gold; the white capped waves sparkled like diamonds in the glow. In the background was a fisherman's cottage; and framed in the low door was a girl with one dimpled hand shading her eyes from the blinding glow as she gazed over the dancing water.

Way back in his boyhood, Tom had loved just such a girl; years ago, before he had left the mossy old farm house to seek fame and fortune in the city. Again he could feel the fresh breeze lift the damp hair from his forehead, just as it did years ago when he sat and listened to the drowsy minister in the little brown church and watched the wild rose face at his side. Then the walk home in the Sabbath stillness, through lovely glens flaming with bitter-sweet and creamy curls of sweet-scented honey-suckle. But of all the "pictures on memory's wall," none could be clearer than that day of days when sweet Margery Dean promised to be his wife. The very hills seemed to rejoice, flaming in the fire-lit days of October. Ah! well, but that was long, long years ago. Now Tom was a comfortable old fellow, with no nonsense about him. Tom reached his hoarding house at last and found the hall as dark as usual. He groped the way up stairs, and in a desperate hunt after the match-box, succeeded in upsetting the ink over his best coat, and the hair oil over himself. With a—well not exactly a blessing on the heads of landladies in general—he concluded to retire in the dark. Now it so happened that the landlady was blessed with a hopeful young son, who took particular delight in tormenting poor humanity. On that particular evening, of which we write, he had chanced to pass Tom's room, and finding the door standing conveniently open, conceived the brilliant, and we hope original, idea, of placing some nice sharp briers under the sheets of the bed. In happy unconsciousness, Tom jumped into bed and jumped out again with a howl of rage and pain; "Thunder and Mars! what in the name of Satan can be in my bed this time? Some infernal machine to kill me, I haven't a particle of doubt. Shouldn't be surprised if I was a cripple for the rest of my life." And Tom jumped frantically about in quest of a chair and seated himself in the slop-pail, which the thoughtful boy had placed there conveniently. That was the last feather.

The next morning Tom interviewed the landlady. "Madam," said he, brandishing his lacerated hands, "I can stand this no longer! I have had dead rats, cats and pups put into my water pitcher, pins stuck into my chairs, and turpentine put in my hair oil. I said nothing. But if you think it's pleasant to go to rest on pins, needles, thorns, rusty nails and saws of the very jaggedest description, you are a trifle mistaken." Tom, like most men, could exaggerate a little when the occasion seemed to demand it. And it was a little exasperating to have the landlady look so smiling. (She had just taken a new boarder.) "I cannot stand it madam—I cannot. You *must* make that hobgoblin of yours quit his pranks or I shall leave the house—understand, madam?"—Yes, she comprehended matters perfectly, and would see to things. That evening, on Tom's return, he limped (pleasant effects of the thorns) up to his room, in the darkness, opened the door,—Lo, behold! was that his room? That with the pretty new carpet, round plump bed, shaded by dainty white curtains. Tom wedged himself in a low rocking-chair, and stared about in helpless astonishment. Books, magazines and evening papers on the table, pictures on the walls, a pot of flowers on a tiny stand. Tom concluded to take the goods the gods provided and be thankful, so he read the news comfortably, and then retired behind the white curtains to sleep tho sleep of the just.

Tom awoke rather suddenly to find the room flooded with light. Pulling the curtains gently aside, he peered cautiously out. In the low rocking-chair sat a little plump figure, brushing out long waves of dusky hair. Tom gathered a blanket hastily about him and jumped out on the floor.

"If you please, Madam, I've—I've made a mistake," Tom gasped.

Madam stared in blushing astonishment.

"What do you mean sir?" she demanded.

"I—I don't mean anything.—Deuce of a mistake—beg pardon," and he commenced to gather his clothes up feverishly.

"Seems to me you look a little like Thomas Bent," stammered the little lady.

"Heavens, you *can't* be Margery Dean?"

"Oh, yes, I am," dimpling and blushing.

"Thunder and Mars! I never was so delighted in my life.—Thought of you for five years; I was a terrible fool in the old days, Margery."

"You—you are hardly properly attired for conversation with a lady," blushingly hinted the little woman.

Tom glanced at his blanket, and rushing for the door, gasping something about "to-morrow morning—interview."

Well, there was an interview in the morning and a quiet, delightful wedding in the fall. Tom declares that the most fortunate thing that ever happened to him in his life was his mortifying blunder of getting into "the wrong room."

An Anecdote of Mozart and Haydn.—Mozart's nose was a very long one, a great contrast to his friend Haydn's, who had almost a flat nose. Many jokes passed between them about noses.

One day in a numerous and grave society, the subject of music was being discussed, and Mozart, in reply to the compliments made him, laid a wager that no one, not even his friend Haydn, was capable of performing, at first sight, a piece which he had composed that morning.

Haydn accepted the wager. The piece of music was placed before him on the piano. Haydn easily played through the first portion of it, then stopped short, finding it impossible to go any further. The two hands must be at the furthest extremeties of the instrument, and one note in the music imperiously demanded that one of them should be in the center. Haydn confessed himself conquered.

As to Mozart, he took up the piece of music, and when he arrived at the puzzling note, touched it with his nose. Everybody laughed heartily, and not the least he who lost his wager.

Cause and Effect.—Noble county, Ohio, is said to have had no open dram-shop for several years past. The results are seen and felt. In a population of 20,000, only three persons have been seen drunk in a whole year. They were promptly arrested and fined. In two of the three terms of criminal court last year, there was no criminal case on the docket. There have only been six men in jail for the last three years, and there has been no one arrested or tried for a penitentiary offense for three full years. The criminal expenses before closing the dram-shops were $2,000 a year. Since—including cost of grand jury three terms—only $500. Was there ever a clearer or more convincing statement placed upon record? Can any one doubt the true relationship existing between "cause and effect?" Like causes will produce like results, and according to the seed sown will be the crop. So long as the advocates of license laws expect to gather grapes of thorns, or figs of thistles, just so long will they gather the bitter fruits of their folly—viz: crime, pauperism, taxation.

He loves most whose service is most constant, most zealous, most true. The rule seldom if ever fails. Love to God means work for God, and unfailing devotion to his cause. There may be some service with little love, but the best service waits on love the truest and best.

A Lesson for Women.

When one bitter word stirs up two more bitter—when the dove-eyed fairies take wing, and the unholy imps rush in to wink and blink destruction, it is at such a time as this the "soft answer" is to the troubled soul what oil is the troubled wave. Strike the harmonic chord of his nature—whether drunken or angry—"heap coals of fire on his head," after the manner of kindness, and if *one* grain of true manliness is in him, it may take root and bear tenfold.

One of the strangest things on record is that *man*, who is noble—how broad and fair, manner pleasing, hand betimes willing to scatter blessings at our feet—should so belittle himself as to wallow in his debauchery like pigs in the mire. And I suppose the woman who is specially interested in that man, whether she be mother, sister or wife, would quench rather than waken strife; the better angels of his being, wakening, might rally to beckon him back to the throne of his manhood. And the angry man—well, what of him? He is no doubt thoroughly in earnest, and if you can keep out of his way till his emotion cools off, you will feel as safe as if you had not been in his reach.

Of course we expect woman, in her weakness, to do many things which lack wisdom; but man—majestic, strong-minded, powerful!—drink not so deep from your cup of dissipation as to tumble your power and your majesty in the ditch. If you hold the scepter of superiority over the weaker vessel, then away that scepter with dignity, and let not your mother, your sister, your wife or your daughter blush at the record of your manhood. It was a tradition of the early Indians that over the destiny of all earthly beings, by guardian angel suspended, in each hand a crown, one made of thorns and the other of roses—that when we did a noble, self-sacrificing act, from the crown of thorns a thorn was plucked, and in its stead a rose was placed; and for each mean and petty act, from the crown of roses a rose was taken, and in its stead a thorn was placed. So the guardian angel kept their record. What are we doing? Are we filling our crown of roses with thorns, or otherwise?—*Our Home Journal.*

Little words are the sweetest to hear; little charities fly farthest and stay longest on the wing; little lakes are the stillest; little hearts are the fullest, and little farms the best tilled. Little books are the most read, and little songs the dearest loved. And when nature would make anything especially rare and beautiful, she makes it little—little pearls, little diamonds, little dews. Hagar's is a model prayer—but then it is a little one, and the burden of the petition is for but little. The sermon on the mount is little, but the last dedication discourse was an hour. Life is made up of littles—death is what remains of them all. Day is made up with little beams, and night is glorious with little stars.

Learning the Way.—An honest desire to know the way of life is the best qualification to learn of Him who spake as never man spoke. Become as a little child, conscious of weakness, and willing to be instructed, and you will easily learn from the Divine Teacher a higher wisdom than was ever taught in the most renowned schools of human philosophy. Receive the word of Christ as a personal message to your own heart; appropriate to yourself the merits of His death as fully as if you were the only sinner in the world for whom He died, and you will easily learn how to be saved.

Our Bodies and Souls.—"Two things a master commits to his servant's care," said one, "the child and the child's clothes." It will be a poor excuse for the servant to say at his master's return:—"Sir, here are all the child's clothes, neat, clean, but the child is lost!" Much so with the account that many will give to God of their souls and bodies at the great day:—"Lord, here is my body; and I am very grateful for it. I neglected nothing that belonged to its content and welfare; but for my soul, that is lost and cast away forever. I took little care and thought about it."—*Flavel.*

"Be content with little." There are many good reasons for this rule. We deserve but little, and so better is little with the fear of God than great treasures and trouble therewith. Two men were determined to be rich, but they set about it in different ways; for the one strove to raise his means to his desires, while the other did his best to bring down his desires to his means. The result was, the one who coveted much was always repining, while he who desired but little was always contented.

Leaning a Little.—A negro once said in a prayer meeting, "Bredren, when I was a boy I took a hatchet and went into the woods. When I found a tree dat was straight and big and solid, I didn't touch dat tree; but when I found one leaning a little and holler inside, I soon had him down. So when de debil goes after christians he don't touch dem dat stand straight and true, but dem dat lean a little and are holler inside."

Life is made, not of great sacrifices or duties, but of little things, in which smiles and kindness and small obligations given habitually are what win and preserve the heart and preserve the heart and preserve comfort.—*Sir H. Davy*

My conception of a perfect man is of one full of power and life, moral sentiment and imagination, but with all these subordinate to God. I have never seen that man.—*Beecher.*

The Good-bye Hospitality.

The half of hospitality lies in the speeding of parting guests. Lavish welcomes are easily enough bestowed, but the hospitality thought must be very genuine, indeed, which dares to leave the guest as free and welcome to go as to come. We all suffer, now and then, from undue urging to stop when we prefer to go, and nearly every one of us is himself a sinner in this regard, too. No sooner does the guest intimate a wish to terminate his visit than we fly in the face of his desire, and urge him to stay longer. We sometimes do this, too (do we not?), as a mere matter of duty, when in our hearts we care very little whether the guest goes or stays. We feel ourselves bound to show our appreciation of our friend's visit by asking that he prolong it. Now, true hospitality ought to learn its lesson better than this. Our effort should be, from first to last, to make our friend's visit thoroughly pleasant and agreeable to him. We strive for this result in welcoming him. It is the desire to do this which prompts us to offer him the most comfortable chair and to set out the best viands, if he break bread with us. It is that he may enjoy his stay that we take pains to talk only upon agreeable topics. In short, from the time he crosses our threshold until he rises to leave, we courteously endeavor to make the moments slip by as pleasantly as possible. But the moment he asks for his hat our courtesy fails us. Hitherto we have studied to anticipate and gratify his every wish. Now that he wishes to go, however, we endeavor to thwart his pleasure. We selfishly try to turn him from his purpose to ours. We wish him to stay, while he wishes to go. Courtesy would prompt us to give his wish precedence to our own, but, as a rule, we ask him to sacrifice his own to our pleasure.—*Hearth and Home.*

General Mackenzie, when commander-in-chief of the Chatham (England) division of marines, was very rigid in his duty, and among other regulations would suffer no officer to be saluted by the guard if out of his uniform. One day the general observed a lieutenant of marines in plain dress, and though he knew the young officer intimately, he called to the sentinel to turn him out. The officer appealed to the general, saying who he was.

"I know you not," said the general; "turn him out!"

A short time after that the general had been at a short distance from Chatham to pay a visit, and returning in the evening, in a blue coat, claimed entrance at the garden gate. The sentinel demanded the countersign, which the general not knowing, desired the officer of the guard to be sent for, who proved to be the lieutenant whom the general had treated so cavalierly.

"Who are you?" inquired the officer.

"I am General Mackenzie," was the reply.

"What! without a uniform!" rejoined the lieutenant. "Turn him out! turn him out! The general would break his bones if he knew he assumed his name."

The general made his retreat, but the next day, inviting the young officer to breakfast, he told him "he had done his duty with very commendable exactness."

Charles Lamb, riding home one evening (after dining with a friend) in a crowded London omnibus, had his attention attracted to the vociferous inquiry:

"All full inside?" on the part of a gentleman at the door. Charles waited some time (being much afflicted with stammering) to see what notice his fellow-passengers would take of the unsuccessful applicant for a seat. None deigning to give the individual an answer, Charles replied, on a repetition of the inquiry:

"I d-d-don't know how it is with the other gentlemen, but that last piece of oyster pie that I took did my business."

The evidence of a witness in a life insurance case involved in the blowing up of a steamboat on the Ohio, is droll, just because it is characteristic. The witness knew the missing man, and saw him on the deck of the steamboat before the explosion. When asked by the lawyer,

"What was the last time you saw him?"

He answered,

"The very last time I ever set eyes on him was when the biler burst, and I was going up, I met him and the smoke-pipe coming down."

Cruelty to Animals.—Brute beasts are defenseless, and to torture them is despicable; the assassin at least risks his life, but the torturer of animals risks nothing; and I do not hesitate to place him lower still in the scale of humanity. There are men who have committed great crimes, and yet in whom the spark of humanity is certainly not extinct; but he who takes pleasure in the sufferings of a dumb animal, and prolongs them regardless of its groans and of its supplicating looks, I pronounce—without a heart; and when the heart is dead all is dead.—*Comte de Gasparin.*

The faithful, patient performance of any duty which is distasteful to us is a great achievement, no matter how ignominious it may appear; and it always brings a rich and unexpected reward.

A gentleman met a half-witted lad in the road, and placing in one of his hands a sixpence and a penny, asked him which of the two he would choose. The lad replied that he "wouldn't be greedy; he'd keep the littlest."

The Baby's Death.

There came a morning at last when the baby's eyes did not open. The Doctor felt the heart throb faintly under his fingers, but he knew it was beating its last. He trembled for the mother, and dared not tell her. She anticipated him.

"Doctor," said she—and her voice was so passionate that it might almost have belonged to a disembodied spirit—"I know that my darling is dying."

He bowed his head mutely. Her calmness awed him.

"Is there anything you can do to ease him?"

"Nothing. I do not think he snffers."

"Then you will please to go away. He is mine—nobody's but mine, in his life and in his death, and I want him quiet to myself at the last."

Sorrowfully enough, he left her.

The mother held her child closely, but gently. She thought in that hour that she had never loved anything else—never in this world should love anything again. She wanted to cry, but her eyes were dry and burning, and not a tear fell on the little upturned face, changing so fast to marble. She bent over and whispered something in the baby's ear—a wild, passionate prayer that would remember her and know her again in the infinite spaces. A look seemed to answer her—a radiant, loving look, which she thought must be born of the near heaven. She pressed her lips in a last despairing agony of love to the little face, from which already, as she kissed it, the soul had fled. Her white wonder had gone home. That which lay upon her hungry heart was stone.

A story told by Dr. McCosh, of Princeton College, is seasonable. A negro in a religious gathering prayed earnestly that he and his colored brethren might be preserved from what he called their "npsettin' sins." "Brudder," said one of his friends, at the close of the meeting, "yon ain't got the hang of dat word. It's 'besettin',' not 'npsettin'." "Brudder," replied the other, "if dat's so, it's so. But I was prayin' de Lord to save us from de sin of intoxication, an' if dat ain't an upsettin' sin, I dunno what am."

The ways of women are past finding out. It is said that the ladies of Jacksonville, Tenn., have a fashion of tying up their taper fingers when young gentlemen are expected to call, and when they very naturally ask the cause, they blushingly remark, "I burned them broiling steak this morning." The result is that several young gentlemen have burned their fingers by believing the story.

In speaking to his father's coachman of a neighboring family, a young man remarked that "they were happy until sorrow suddenly came and left her traces there." The coachman looked puzzled, but finally responded, "Indeed, sir! an' what did she do with the rest of the harness?"

An Oswego paper describes a fire by saying that "the red flames danced in the heavens and flung their fiery arms about like a black funeral pall until Sam Jones got on the roof and doused them out with a pail of water.

Impertinent dandy (a stranger).—"May I have the honor to accompany yon, miss?" Cool young lady.—"Certainly; but keep behind, in your proper place. I discharged my last footman for impertinence."

A down Easter believes there is nothing like advertising. He lost his pocket-book recently, advertised his loss in the local newspaper, and next morning went down into his own cellar and found it on the floor.

The following advertisement appeared recently in an English paper: "St. James' Church—On Sunday next the afternoon service will commence at half-past three and continue until fnrther notice."

"Patience is always crowned with success. This rule is without an exception. It may not be a splendid success, but patience never takes anything in hand that it does not succeed with in some form."

"Father, forgive them for they know not what they do," was Dean Stanley's text when he preached to the newly-wed Duke and Duchess of Edinburgh, soon after their arrival in London.

The mayor of a Portugese city once ennmerated, among the marks by which the body of a drowned man might be identified, "A marked impediment in his speech."

The following appeared in an Edinburgh paper: "We regret to find that the announcement of the death of Mr. W. is malicious fabrication."

An exchange tells of a little child who watched the snow flakes in the late storm, and after a moment of thoughtful silence said, "Mamma, is it next winter?"

A Boston Dorcas Society fines gossips one dollar for each offense. The proceeds therefom will be used to pay the national debt.

Our graces, like evergreens, grow most in the low vale of affliction, even as the stars are most luminous and lovely when nearest the horizon.

Young Folks' Column.

Saturday Night.

Placing the little hats all in a row,
Ready for church on the morrow, yon know;
Washing wee faces and little black fists,
Getting them ready and fit to be kissed;
Putting them into clean garments and white,
That is what mothers are doing to-night.

Spying out holes in the little worn hose,
Laying by shoes that are worn through the toes,
Looking o'er garments so faded and thin—
Who but a mother knows where to begin?
Changing a button to make it look right—
That is what mothers are doing to-night.

Calling the little ones all 'round her chair,
Hearing them lisp forth their evening prayer,
Telling them stories of Jesus of old,
Who loves to gather the lambs to His fold;
Watching them listen with childish delight—
That is what mothers are doing to-night.

Creeping so softly to take a last peep,
After the little ones all are asleep;
Anxious to know if the children are warm,
Tucking the blankets round each little form,
Kissing each little face, rosy and bright—
That is what mothers are doing to-night.

Kneeling down gently beside the white bed,
Lowly and meekly she bows down her head,
Praying as only mothers can pray,
"God guide and keep them from going astray."

"He Gets Drunk."

A Sketch for Young People.

"He's the smartest young man in our class."

"Yes, but he gets drunk."

"Oh, but he is so fine-looking, so noble and so talented withal! His composition yesterday was the very best in our division. He writes splendidly! They say he's writing for a magazine. Only think of it, writing for a magazine, no older than he is, and not out of school yet!—won't he be a great man, though, some day!"

"No, I don't think he will."

"Why not?"

"He gets drnnk."

"Oh, that's nothing; a good many smart men get drunk. Every young man has his wild oats to sow; and because a fellow gets a little boozy once in a while, I wouldn't condemn him forever; quite likely he'll outgrow it when he gets older and sees the folly of it."

"More likely *that* will outgrow *him*, and, as to his getting a *little* hoozy, I'm afraid he was a good deal so when the boys found him beside the walk the other night, and had to carry him to his room, dodging around street corners and skulking through by-ways so that none of the professors would see him. I tell you a person that drinks at all isn't to be depended on. The only young men that I have any confidence in are those who let intoxicating liquors entirely alone."

"Well, I don't care; he's good and smart, anyhow, and I like him."

"I don't; he gets drunk!"

So the conversation ran on between two schoolmates who were walking just ahead of me. Ah, how those words, "He gets drunk," kept ringing in my ears! Possessed of a noble manhood and a glorious intellect; blessed with the greatest and best of God's gifts; having the love and approbation of teachers; admired and looked up to by associates; the pride and hope of a fond father, intermined in the heart and life of a doting mother, united in close and tender bonds with brothers and sisters; holding in his hand the honor and good name of the institution with which he is connected, of the society in which he mingles, and yet—"*gets drunk!*"

As a natnral consequence that yonng man who drinks will generally blight the manhood that is within him, change to curses the blessings that are upon him, bring to the dnst whatever highborn aspirations, whatever longings for greatness, glory and immortality may be his; blast the fondest hopes of parents, put out the brightness of their future in the darkness of disappointment, pain and sorrow; bring shame and reproach upon brothers and sisters; trample upon the love and confidence of his fellows; shut himself out from all goodness, purity, usefulness and happiness; blot out the image of God that is stamped upon him, and drag himself down lower than the brutes. Aye, so surely does he shut himself out from Heaven, as "*he gets drunk!*"

Dogs' Language.—In Charlestown recently a large dog gave chase to a poor little "black and tan" whose hind leg had been injured, but, failing to overtake him, turned about and trotted slowly back. In a short time the small dog returned, followed by a large Newfoundland, who upon reaching the corner, "seemed to he looking for something," when the little dog gave two or three sharp barks, as much as to say, "That's the big dog who chased me," at the same time indicating by his actions the large black dog, who was then at some distance. Whereupon the little dog's ally immediately attacked and severely punished the aggressor, who was gladjenough to trust to the swiftness of his feet for safety. After this little affair the small dog and his friend returned down the street apparently much pleased with their part of the late transaction. How did the small dog impart the idea to the large one?

"He has left a void that can not he easily filled," as the bank director touchingly remarked of the absconding cashier.

Vegetable philosophy—Sage advice.

Good Health.

The Human Frame.

No. 5—The Lungs.

The lungs are two extremely vascular, porous organs, situated in each of the lateral cavities of the chest, and separated from each other by the heart. In shape, each lung is conical, with the apex towards the upper portion of the thoracic cavity, which is the cavity formed hy the hony frame-work of the ribs and dorsal vertehræ. They weigh ordinarily about three and one-half pounds troy; but so extremely spongy is their structure that, with only this comparatively light weight, they fill almost the entire cavity of the thorax. Externally, they are enveloped in a serous sack, the pleura, which is the seat of that common inflammation, pleurisy. Internally, they are lined with a very thin, delicate mucous membrane, through which the oxygen of the air and the carbonic acid of the blood pass during respiration. They are connected with the external air by means of the larynx and tracheæ; the former of which, a hox-like organ sitnated at the base of the tongue, will be the subject of a future paper; the latter is a cartilageno-membranous tuhe, about four and one-half inches long, separating into two smaller tubes called hronchi, which go to the two lungs. These tubes again divide and sub-divide; their caliber constantly decreasing as their numher increases, until they reach a diameter of about one twenty-fifth of an inch, when they terminate in little, cnrious shaped cells, which are again divided by partitions into tiny compartments of ahout one seventy-fifth of an inch in diameter. Into these little tuhes and cells the air is drawn with each inspiration, where the thinness of the lining membrane allows the hlood circulating throngh this net-work of cells to he literally bathed in the air which furnishes the life-sustaining oxygen; while at each expiration that deadly product of our decaying tissnes, carbonic acid, is expelled from the system.

It must not be supposed, however, that the entire amount of air in the lungs is changed with each respiratory movement; on the contrary, only some ten or twelve per cent. of the whole is renewed, which is called "tidal air;" the rest, or "residual air," remaining constantly in the lnngs; so that it requires some ten or twelve inspirations to completely renew the air in these organs. A cnriosity in respiration consists in minute hair-like bodies called ciliæ, which grow perpendicularly to the walls of the air passages, and which keep up a constant, waving motion always in the direction of the tracheæ, and thus, by the tiny currents they cause, assist materially in completely changing the impure for pure air.

The diseases of the lungs are numerous and formidable, and by the masses little understood. The hacking cough of incipient consumption is bnt too often mistaken for an ordinary cold; while, on the other hand, a chronic bronchitis, which is perfectly harmless compared with consumption, is mistaken for that malady, and the sufferer's life rendered miserable by groundless fears and nauseous nostrums. In the space allowed us here, it is impossible to even touch on this portion of our subject, so we will close with a few general hints on the care of these organs, which are as follows:

Close the mouth tightly, and breathe entirely through the nostrils whenever passing from a warm, moist air into that which is colder; as from a crowded assemblage into the open air, etc. This will warm the air thus breathed, reducing it nearer to the temperature of the lungs.

Avoid rooms too highly heated; especially where it is the result of crowding and packing. The warm, rarified air relaxes the lung tissue, and renders it donbly susceptible to injury. Avoid draughts, cold limbs, prolonged wetting, etc.; as anything which reduces the temperatnre and amount of blood at the surface of the body necessarily increases the amount sent to internal organs; thns rendering them liable to inflammation. The lungs usually suffer in these cases in fonr out of five instances; and a large majority of colds have their origin in this manner. Treat a common cold by hot foot baths, warm body baths, warm flannels, avoidance of exposnre for a few days, comfortable clothing, and no drugs, unless there is constipation, when a simple cathartic may be given. Beyond a simple cold, consult a reliable physician; never tampering with quacks or patent nostrums.

Rice Water.—Take of rice two ounces; let it be well washed, and add to it water, two qnarts. Boil it for an hour and a half, and then add sugar and nutmeg as much as may be required. To be taken *ad libitum*. Rice, when boiled for a considerable time, assumes a gelatinous form, and, mixed with milk, is a very excellent diet for children. It possesses, in some measure, a constipating property which may be increased by boiling the milk.—*The Druggist.*

Air and Bathing.—Children naturally weak should he compelled to play in the open air, and business men should leave work for a certain period each day and devote the same to exercise or other relaxation. Bathing is recommended in moderation as a check to consumptive tendencies. Surf bathing, however, shonld be cautionsly indnlged in hy all predisposed to pulmonary difficulties.

Milk as a Diet and its Effect on the System.

There is considerable difference of opinion on the subject of a milk diet. It is surrounded with a mass of whims, of prejndices, and of mistaken ideas, which are based more on individual fancies than upon certain facts. To one a glass of milk imbibed is helieved to be a sure provocation of a hilious attack; to another, a disordered stomach; to a third, drowsiness, and so on, through snch a category of simple though disagreeahle ailments that we look aghast at the farmer who drains cup after cup of the fresh pure liquid, time and again during the day, and wonder at the resisting powers which his organization must possess. The truth is, however, that milk is not unwholesome. On the contrary, it contains good substantial bone, muscle, flesh and hrain-producing snhstances, which, assimilating, quickly act rapidly in huilding up the body. Naturally, we assert, it is nourishing; that it does bring on certain troubles is nevertheless true, but the cause is in the individual stomach, not in the milk, provided, of course, the latter be frosh and sweet.—*Scientific American.*

Milk diluted with one-third lime water, it is said, will not cause any one hiliousness or headache, and, if taken regularly, will so strengthen the stomach as to banish these disorders. It may be taken with acid of some kind when it does not easily digest. The idea that milk must not be eaten with pickles is not an intelligent one, as milk curdles in the stomach nearly as soon as it is swallowed. When milk is constipating, as it is frequently fonnd to be by persons who drink freely of it in the conntry in summer time, a little salt sprinkled in each glassful will prevent the difficulty. When it has an opposite effect, a few drops of brandy in each gohlet of milk will obviate its purgative effect. As milk is so essential to the health of our bodies, it is well to consider when to take it, and how. It is a mistake to drink milk hetween meals, or with food at the tahle. In the former case it will destroy the appetite, and in the latter it is never proper to drink anything. After finishing each meal a goblet of pure milk should be drank; and if any one wishes to grow fleshy, a pint taken before retiring at night will soon cover the scrawniest bones. In cases of fever and summer complaint, milk is now given with excellent results. The idea that milk is "feverish" has exploded, and it is now the physician's great reliance in hringing through typhoid patients, or those in too low a state to be nourished hy solid food.—*N. Y. Commercial Advertiser.*

Statistics of Intemperance.

The testimony of competent judges is decided in the opinion that the use of ardent spirits is hurtful to health aud long life, and tho old-fashioned calculations of Neison, in his *Vital Statistics*, are confirmed by the researches of the General Life Office. According to these estimates, the probahility of death among drinkers between 21 and 40 years is ten times as much as among the whole population; hetween 41 and 60 years, four times as much; and among habitual tipplers over 60 years of age, twice as much as among the people at large. In England, 1850–59, more than 8,000 cases were reported of men who literally drank themselves to death. Neison has given us his investigations of 6,111 tipplers, that ont of 1,000, 58.4 die annnally, while out of 1,000 inhabitants of the same age only three die. Thus the mortality among drinkers is three times as great as in the community at large. He has carried out his calculations in all ages, and shown how this chronic self-murder marvelously diminishes the expectation of life. The highest point as to numhers is found in the years 1851–60, which report 192 men and 44 women intemperate out of 10,000 in England and Wales, and which reckon the diminution in the rate of expectation of life accordingly. This last statement is startling, and shows a falling off in the probable term of life for each 10 years, from 20 to 60, and upward, of respectively 28, 22, 17, 10 and five years, with fractions, and amounting to the fearful percentage, respectively, of 35, 38, 40, 51 and 63 per cent. of probable life, as compared with the population. Surely strong drink is slow fire, and intemperance is voluntary madness and chronic suicide.—*Harper's Monthly.*

In considering the best chances of a person having a tendency to consumption arriving at a good old age after a life of health, Dr. Bowditch discusses a few general topics and lays down a numher of plain rules for sanitary guidance, which are mainly generally applicable to every one. Under the snbdivision of residence, the first point urged is that the cellar should be always dry. No possibility shonld exist of drinking water becoming contaminated by refuse; and hence for the latter, closely cemented stone, brick or vitrified tile drains should be used, while the supply for drinking should be brought to the house from some distant spring or pond. The dwelling is hest located on an elevated knoll, open to the south and west winds, but somewhat shielded from the north and east. There should he means of allowing sunlight to enter every room. As regards temperatnre, abont 70° as a medium is the best, and this heat should be derived from open fire places connected with well constructed chimneys in every room.

Silence in the sick room is a splendid nurse.

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SAN FRANCISCO:

Saturday, July 11, 1874.

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Removal.

July 13th, 1874, the business office of this Journal will be removed just one block east of our present location, to No. 224 Sansome Street, southeast corner of California, over the Bank of British Columbia, where we have secured large and elegant quarters. This removal is made in consequence of the sale of the building in which we are now located, to parties who will proceed immediately to demolish the present structure, and erect a new and magnificent block in its place.

THE SAN FRANCISCO PRODUCE EXCHANGE.—The committee appointed by a number of the members of the Produce Exchange, to nominate a ticket of officers to be voted for, have reported as follows: For President, Horace Davis; Vice-President, E. G. Mathews; Treasurer. E. Ransom; Directors, D. Ballard, Wm. McCauly, Jacob Palmer, Thomas Newell, J. P. Hulme and George Morrow.

DR. STOCKTON, living about sixteen miles from Bakersfield, Kern county, informs the Tulare *Times* that he last year raised twelve hundred pounds of the finest sweet potatoes on the sixth of an acre of ground, and that this year he is cultivating four acres of this vegetable, and confidently expects a yield of four tons to the acre.

THE Trustees of the Farmers' Storage and Commission Company met last Saturday at Colusa, and elected Waller Calmes, President; Terrence Masterton, Secretary; J. W. Goad, Treasurer, and Richard Jones, General Superintendent. A large force of men are now at work on the warehouse.

Typographical Errors.

The proof-reader has the floor. It is so seldom that this much abused individual has an opportunity to speak for himself, that he may perhaps be forgiven if for once he becomes garrulous, and even a little spiteful. Any one who is acquainted with newspaper work understands the peculiar and not over comfortable position occupied by the proof-reader, but for the benefit of the uninitiated the situation is briefly reviewed. To describe it geometrically, a square may be imagined, in the center of which stands the proof-reader; at each corner are his natural enemies, the writers, the printers, the great reading public, and last and worst of all—himself. A crossfire is usually considered a very bad thing to get into; but when the cross is doubled, so to speak, it becomes more than human nature can well bear. The writers agonize if a word or a comma of their precious manuscript be altered; the compositors also row if "copy" is changed; the great public wonder how that stupid wretch of a proof-reader got things so mixed; and his own conscience troubles him because he has not been more relentless, even at the risk of offending the first two classes of critics. He stands alone, in that center of never ceasing fire. Truly it needs a martyr's courage, or a stoic's indifference, to maintain a calm front. But then, if he is thus assailed, he also has just grounds of complaint against at least two orders of foes. The writers perversely say what they evidently don't mean, or say what they do mean in a language that might as well be Syriac, or do their worst in covering errors of sense and of grammar under illegible chirography. And the printers are not much better. Time is money to them, if to any; and the first interpretation to the ofttimes cabalistic hieroglyphics they are called upon to "set" is accepted and acted on, regardless of the frenzy of the horror-stricken author, or the bewilderment of the long-suffering reader.

But as the contributors are generally the least merciful, our proof-reader proceeds to accuse them first. The most direct mode of conviction is to give a few instances of the manner in which they perplex and overwhelm both printer and proof-reader by carelessness in construction of sentences, etc., which have required only a moment's time, perhaps, to put upon paper; but which call for careful study or lucky guess-work, occupying much time, before they become intelligible to the reader. Such slips are most frequently owing merely to a want of care, but sometimes, and not seldom, are due to a perverse contempt for the simplest rules of speech. To begin at home:

An attaché of this office, whose manuscript unfortunately came to our proof-reader's notice, in a single article was guilty of the following: "Hats are manufactured in a dozen establishments, not more than three, however, being of any size. . . . . Two powder factories, or rather, we should say, explosive factories." Pretty rough on the hats and the powder factories, that. It is hardly necessary to specify which particular section of the ould country this editor hails from.

Another gentleman who writes for the PRESS is sometimes a little careless about his spelling. This don't matter much in ordinary cases, but when it comes to "stageerer," for staggerer, and almost illegible at that, it becomes a matter for five minutes' prayerful consideration, not always rewarded by success. In this connection it must be remembered that Andrew Jackson was accused of bad spelling, but John Randolph defended him by declaring that "a man must be a fool who could not spell words more ways than one."

In the PRESS office all of the editors would not be absolutely certain of carrying off prizes for penmanship; but so long as there is English at the bottom of the obscure pothooks and hangers, there is always a fair chance of getting at it, and nobody complains.

Occasionally, however, there is a muss; as when, for instance, a correspondent, in writing of the wonderful restoration of Chicago since the fire, grows classical and speaks of "*Neptune* rising from the ashes;" or when a reporting committee-man deliberately says: "Visiting members were invited to take seats on *the floor!*"

On the whole, it isn't a bad idea, after all, to write moderately plainly. This conclusion is reached on recalling a sentence of one of our Grange friends, which should have read: "We are not taking the rag-tag and bob-tails of creation into our Order," and which was so penned that the compositor was really justified in calling a *t* a *w*, and sending in a proof-sheet with: "We are *now* taking the rag-tag and bob-tsils of creation into our Order!" a piece of news which would certainly have astonished the Grangers at large, as well as the particular correspondent.

We noticed in *Moore's Rural New-Yorker* an account of the noble conduct of a Newfoundland dog, which bravely plunged, to rescue a drowning person, "from a bluff fully *fifteen* feet out of the water." It would be hard to say whether the compositor was to blame for his evident conservatism in the matter of figures, for probably the "copy" was here only a conundrum.

Punctuation is a matter for which the compositor and proof-reader are responsible; yet, in some cases, the fault, if there be one, should be attributed to the writer. The importance of correct punctuation was strongly illustrated, recently, at a meeting of the Ways and Means Committee, when it was shown that a comma in one place was worth $2,000,000. In the tariff bill which went into effect Aug. 1, 1872, the free list was extended by the addition of several hundred articles. Among the number added were "fruit plants, tropical and semi-tropical," for the purpose of propagation and cultivation. In engrossing the bill, or in the process of copying it for official printing, a comma was inserted after "fruit," and all fruit was thereby placed upon the free list. The custom officers, however, not noticing the change, continued to collect duties on fruit until the error was discovered. The Ways and Means Committee reported a bill to remove the comma, in accordance with the intent of the law of 1872. The amount of tax illegally collected is not far from $2,000,000.

The comma, like the tongue, is a little thing, and like it will make good sense or nonsense, just according as it is used. Take, for instance, the old nursery rhyme. With the commas misplaced, it is so nonsensical that it needs a commentary to explain it:

> Every lady in the land
> Has twenty nails on each hand,
> Five and twenty on hands and feet;
> This is true without deceit.

Alter the position of the commas and the meaning is clear:

> Every lady in the land
> Has twenty nails, on each hand;
> Five, and twenty on hands and feet;
> This is true without deceit.

The omission of a comma has frequently given a very awkward turn to a sentence. We remember an epitaph which suffered severely from such an oversight. It ran pretty much as follows: "Erected to the memory of John Phillips, accidentally shot as a mark of affection by his brother."

A printer meddling with the verdict of a Coroner's jury, struck out a comma after the word "apoplexy," making it read thus: "Deceased came to his death by excessive drinking, producing apoplexy in the minds of the jury."

A correspondent introduces a piece of poetry to the editor of an American newspaper in these words: "The following lines were written fifty years ago by one who has for many years slept in his grave merely for his amusement. A comma at "grave" would have rendered the sentence, at all events, comprehensible, though nothing would efface its absurd diction.

Wood Chopping in California.

A few years since, the writer, while on an Indiana railroad train, overheard some fellow-passengers conversing on the subject of Eastern and Western corn growing. They were evidently Western people, and of course could see nothing good coming from the East, and their comparisons of the two modes of corn culture were extremely disparaging to their Eastern fellows. They were particularly severe on the flimsiness of the New York style of corn growing, enumerating the stages of labor, and giving and exaggerating the amount of work bestowed by them on an eight-acre field of corn, supposing, in their Eastern simplicity, that this was really quite a large field. Then the Western side of the picture was given also; slightly exaggerated, of course. The eight-acre field in New York was placed beside one of eighty acres in Indiana, this being in the estimation of the Western eulogists a vast space to be devoted to a field of grain. But the eighty-acre fields of grain, of which those enthusiastic champions of Western farming boasted so much, are as nothing compared with those of California, which are estimated by thousands of acres, some of them being over twenty thousand acres in extent.

This, however, has nothing to do with wood-chopping; we only allude to grain-growing in California in order to show how it coincides with our scale of chopping; and the ocular proof of the magnitude of our wood-cutting operations which the remains of the mighty trees now fallen, and the monsters yet standing, will induce our Eastern friends to dispense with all allowances for Western "blowing." They can come and see for themselves, and note down these proofs among the interesting points in their tour; but there is little romance in a 20,000-acre grain field, and a proposed inspection of it would be anything but inviting. But sylvan romance seems to increase with the magnitude of the trees and the extent of the forests. Those of us who are at all acquainted with life in the woods, as it is passed in those of the middle or northern portion of the Atlantic States, will, we venture to say, look upon the time thus spent as among the happiest periods of their lives, and that they will also declare that the wintry seasons passed there, cold, bleak and barren as they are, bring with their memories associations even pleasanter than those of voluptuous June or "September brown."

The summer woods have been so over-dressed by the writers and painted fancies of artists, that the forest is, in reality, considered as most adorned when unadorned. A large percentage of the pleasure which a summer visit to the woods should afford is dissipated in the fear, on the part of the visitor, of being mistaken for a poet—an extremely damaging suspicion. But in winter, a man goes into the woods with a purpose; and whether this be labor or pleasure, it is followed with physical energy, and with a vigor of spirits, that insure hearty enjoyment, and make it pleasant to remember.

We thought we were performing feats of prowess in cutting down trees that were three feet through at the butt—and when a man removes the greatest obstacles that stand in his way, he may justly take some credit to himself—but when we go into the ordinary woods of California, and commence a campaign against trees that measure eight feet through the trunk, our former feats with the ax seem to us as mere child's play.

In order to convey an adequate conception of the magnitude of these chopping undertakings to our Eastern readers—and the RURAL PRESS has a good many readers in the Atlantic States—we extract from the Oakland *Real Estate Reporter* a few paragraphs from an interesting article, entitled "Logging in the Redwoods of California."

The choppers, especially, must be men of intelligence and experience. A great deal more than mere strength to swing the ax for eleven hours a day is required to make a good chopper. After the tree is selected the ground needs careful looking after, as a stump or fallen tree, or any inequality of the earth, would, as a gentleman of the profession remarked, "Knock the biggest on 'em into smithereens." It is a peculiarity of redwood to split into long and profitless thin strips upon small provocation, and the inexperienced eye, glancing over the ground that bristles with all sorts of obstacles, sees little hope of any tree escaping destruction. And it is only the extreme skill of the choppers that makes the disaster uncommon. They can drive a stake with the biggest tree in the forest when the ground is clear. When there is not sufficient opening in a direct line, a common expedient is to fell the tree so that it will strike in its descent the trunk of another. Calculating the bounce well, marks an accomplished chopper.

Felling a seven or eight-foot tree is half a day's work for three men. The choppers stand some six or eight feet from the ground, each on a narrow bit of board, one end of which is thrust into a notch in the bark, and this unsteady footing is all they have, while they hack away with their long axes hour after hour. When a ten or fifteen-footer is encountered, a platform of bark, with the standing boards for support, is built, and an extra chopper put on. Two cuts are made in the tree; that on the side on which the monster is to fall being much larger and somewhat lower than the one on the other side. Thus the weight of the tree is made to serve for its own overthrow. It is tremendously hard work, and wears the strongest man out in from three to four years.

When the tree begins to "complain," as the shrill, vibrating, cracking noise is aptly called, the choppers give a long warning wail that sends all the workmen in the neighborhood scampering to a safe distance. A second cry tells that the tree is wavering, and the choppers themselves leap from their perches and run for it. The giant yields slowly and with a mighty grumbling. Then, in spite of himself, he leans over painfully, and with a frightsome booming and crackling sweeps to the trembling earth, the foliage whistling and screaming like the rigging of a ship in a hurricane. The shock is terrific, and resembles nothing so much as an earthquake. Clouds of dust, mingled with flying fragments, are thrown into the air. Every branch is snapped off, and broken to splinters. The thud is heard and felt miles away.

The Harvest's Progress.

In our agricultural notes, and numerous other items which we have gathered for our columns, the readers of the PRESS will be able to form a fair estimate of the present condition of the harvest of 1874. It will be of interest to them, no doubt, to observe the progress of the grand army of mowers and reapers now marching through the rural districts. Still, the observations suggested by the figure of an army in progress are hardly in keeping with the feelings aroused by observing the career of the harvester. Plenty and not famine follows their course, and schools, universities, and churches are erected and embellished, instead of being torn down or desecrated. The harvest-field is a scene that the world gazes upon with an interest which nothing else can arouse: but, with the fear before our eyes of possibly being accused of "blowing," we assert that the harvests of California are objects worthy of even more interest and admiration than those of any other country; not altogether on account of their exceeding abundance, but partly by their long-continued and varying course, the fields of different districts changing from green to golden, arraying themselves timely and tastefully for the appointed call of the welcome harvester.

ALFALFA AS A DISINFECTANT.—We have been assured that the introduction of alfalfa on our low lands is destined to prove the great disinfectant of the malaria so much dreaded in our valley. Alfalfa will grow anywhere on Kern Island, and it smothers out all wild vegetation. Our sloughs are to be dried up and the waters thrown into channels which will carry it all off and leave no more green frog-ponds. Old slough-beds are to be seeded in alfalfa. This is the programme adopted for the future.—*Southern Californian.*

MOST of the sheep raisers in Oregon have sheared their last sheep. The wool clip is better than ever before, both as to quality and amount.

Hints on Hop Growing—No. 6.

On Picking.

In those localities where the season is most advanced, picking has already commenced. It is to be hoped that it has, if the hops are ready, for as we have stated in preceding articles, the sooner hops are picked after they are ready, the better for them. The grower should avail himself of every means that will expedite the harvesting of this crop, and whoever does the picking shonld be paid by the amonnt and not by time. In order to form a just estimate of the earnings of the pickers, and also of the yield of the progressing harvest,

The Hop Box

Will be fonnd the most convenient. It shonld be made of rather light stuff—three-qnarter inch is sufficiently heavy—and as they are to be the standard of measnre, the boxes of hop-growing districts shonld be of uniform size. Seven feet in length, three and one-half feet high, and the same in width is the size nsed at the East. Dividing this in the center by a thin partition makes two boxes three and one-half feet square. Each picker is to have one of these square boxes. In constructing them a narrow strip should be attached to each of the long sides, jutting out and forming handles at the ends, by which the box can be readily shifted and carried about the yard.

The hop-grower can not afford to pay pickers by time. They might seem to be doing, and really think that they were doing their very best, and at the same time be making slow progress. But let them pick by the box and the anxiety abont making wages, with the rivalry that must inevitably spring up in the busy yard, will develop a handiness and speed that will be alike advantageous to picker and grower. The picker is compelled to work rapidly, especially in filling the last half of the box; for the weight of the hops as the box gets nearly fnll will cause settling; and nothing but rapid picking can gain on it with any rapidity.

But while the grower or his overseer is endeavoring to secnre speed, care shonld be taken to prevent dirty picking; otherwise clnsters containing leaves and bits of vine will find their way into the box, thereby greatly injuring the qnality of the hops. This, however, can be readily detected when the box is emptied in the sacks in which they are conveyed to the dry-honse. These sacks shonld be fresh and clean; "rnn together" for the season; and the cloth cut to a size that will work to advantage in baling, when the picking season is over. If they are made abont three times the size of the California potato sack they oan be handled, even when full, very comfortably.

In handling the hops, from the pnlling of the poles to the baling prooess, care should be taken to prevent the crushing of the blossom, as it becomes damaged in appearance, and loses a portion of its strength by being bruised and torn, as the pollen containing the oil of the plant is partially lost by breakage and sifting.

A Good Pole-puller

Is an important aid in snccessful hop-picking. A poor one will break a good many poles; will shake and mangle the vines in loosening the poles; will keep the pickers poorly supplied with material to work on; and when placing the poles on their boxes will jar them nnnecesarily, thereby settling the hops to the dissatisfaotion of the pickers; while an expert will avoid all this, will see that the vines are properly stripped of their blossoms, and that nothing but blossoms goes into the box. A good deal of physical strength as well as responsibility is reqnired at the hands of the pole-pnller, as the number of poles to be lifted during the day is very large, each one requiring a fair amount of strength to raise it, while many demand all the mnscular power that he can bestow npon them, and this, too, when the impatient cry: "Hops!" will not admit of more than the allotted time being given to each pole. And when it is considered that in most cases a large portion of these clamorons pickers are women and girls, it will be realized that the poor pole-pnller needs strength of nerve as well as of mnscle to carry him through.

☞We propose to give in onr next issue some hints on hop-drying.

Death of Another Celebrated Short-Horn.—The two-year old heifer Duchess of Oneida died on Jnne 17th, on the Alexandria farm, Woodford connty, Kentncky. It will be remembered that W. J. Alexander purchased this valnable heifer for $19,000 at the famous cattle sale at Senator Campbell's farm in New York Mills last year. The disease of which she died was pnenmonia. Probably if she could have had proper exercise and exposure during her life, she would been less vulnerable to diseases of this class. We hear of no cases of pneumonia among the scrub stock of the conntry. We would take this occasion to again nrge npon the owners of choice stock the necessity of avoiding such treatment of their valuable animals as will tend to debilitate and sap the vigor of their constitution. The loss of the Duchess of Oneida is greatly to be regretted, as she was a very promising and beantiful animal.

It is expected that the steamer "Ventura," formerly the U. S. steamer "Resaca," will take the place of the "Prince Alfred."

The Lawns of San Francisco.

People generally are ready to acknowledge that the soil of California oan prodnce as fine a orop of grass here as can be grown on any portion of American soil; but the greatest admirers of this country will hardly claim that the meadows here are so lasting, or that we can show as good a sod as in some of the middle States. This being admitted by Californians, and San Franciscans, especially, being aware that this locality is partioularly unfavorable to grass, they have set themselves at work to overcome these natnral disadvantages, the result being snch as may often be found under similar circumstances. For it often happens that the labor and perseverance which the presence of difficnlties calls forth secures a degree of sucoess never reached by those who know nothing abont difficulties.

San Francisco would have her lawns, but she could only obtain them by a liberal outlay of money and labor, and can only keep them by continning a large portion of this outlay. It only needs a hasty glance while passing along our streets to see that the lawns of San Francisco are such as can not be excelled; but it needs a more extended observation to form a just estimate of the means by which they are bronght up and kept up to their present condition. In the first place, they have a liberal seeding on soil that is in the best possible condition to receive it; and as soon as there is sufficient growth to distinguish the weeds from the grass, the former are carefully plucked ont. The grass is allowed to attain a pretty strong growth before the first cntting, but is afterward cut more freqnently; this frequent cutting stimulating a root growth, whioh finally prodnces a compact sod. When this is secured the lawn mower is run over them every week—in many cases, oftener; and they are thns worked down to a clean, soft, velvety surface. Meanwhile, the daily supply of ample irrigation promotes a vigorous growth of grass, and gives to it that rich, deep green, which is so refreshing to the beholder.

The reader will perhaps say, "Why, anybody could produce a fine lawn in that way." Very true; and it is just what anybody who owns a plot of gronnd near their rosidences ought to do. The owners of fine residenoes in San Francisco have snrrounded them with lawns which cannot be surpassed; and there are also many of the smaller dwellings and cottages that have their tasteful little lawns, which cause the passer-by to slacken his pace and bestow npon them a "longing, lingering look." There should be many more of these pretty lawns. They would attach people to their homes—a most important point to be gained in social advancement—they would greatly add to the attractions and even the healthfulness of the city, and wonld materially enhance the valne of real estate.

A late telegram from Prestcott says the Hualapai Indians, who were compelled by an Indian agent to leave their ancient home in the mountains and move to a reservation in the Colorado bottom, are not thriving. They are unable to cnltivate the land, their horses are dying, and they are sickly and miserable. They protested earnestly against the transfer, and the military officers, who were familiar with their mode of life, predicted that the change would be disastrons.

The tornado season has commenced in the East, and the destruction of life and property thns far reported is most appalling. Honses by the hundreds have been nnroofed, crops destroyed, trees torn up by the roots, and people killed and maimed by scores. Truly these visitations are a hnndred-fold worse than earthquakes.

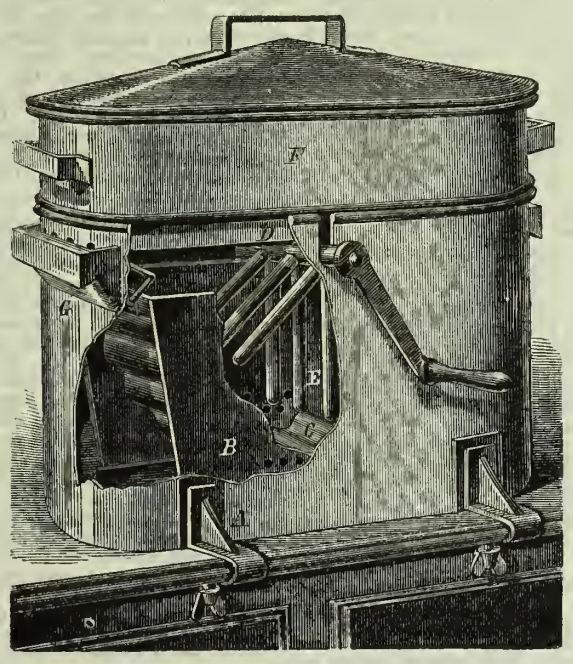
Combination Washer and Boiler.

The accompanying illnstration represents a washer and boiler combined, whioh is the invention of Mrs. Mary A. Barnes, of Olympia, Washington Territory.

The boiler proper is akin in shape to that usnally employed, and is supplied with clamps, *A*, so that it may be firmly secured to the edge of the top of the stove or range by means of set screws. Inside the main receptacle is a vessel, *B*, the sides of which are verticle and support a circnlar corrugated bottom, as shown at *C*. In the lower part are a number of perforations to allow of the free passage of the water. *D* is a shaft, one end of which is secured in a socket on the main receptacle, and the other passes through a vertical slot made in the edge of the latter, carrying at its extremity a crank. The shaft is provided with radial arms, *E*, which project from its lower part, so as nearly to touch the corrugatod bottom of the vessel, *B*. The water and soap being placed in the boiler, the clothes are laid in the inner receptacle, and the crank being rocked, are caused by the arms, *E*, to sweep the corrugations and are qnickly cleansed.

It is necessary to remark that the extension, *F*, does not constitute a part of the washer proper, but is used in rinsing to prevent the spattering of water, and the spout, *G*, is attached to a cleat to receive a wringer, the water pressed from the clothes being conducted by the spout back into the boiler. It is claimed that this is a labor and time saving machine, while its operation will not injure the slightest fabric. It is operated by merely vibrating a crank, and the garments may be washed, rinsed and wrnng ready for the line almost without wetting the fingers.

It is constructed entirely of metal so as to be dnrable, and as there is no shrinkage or warpage which wonld canse a necessity for repairs, the Combination Washer and Boiler presents several features peculiar to itself, among which is the gripper motion over a corrugated surface, the nearest approach to the old process by hand. It supplies, in one article, the place of three hitherto indispensable articles in every household—the boiler, the tub and the washboard. For further information in regard to price, rights, etc., address Mrs. Mary A. Barnes, Olympia, W. T.



A COMBINATION WASHER AND BOILER.

The Cincinnati Industrial Exposition.—We have received a copy of the report of the Board of Commissioners of the fourth Cincinnati Industrial Exposition of 1873, also the premium list for the exposition of 1874, both of which are fine specimens of workmanship. The Commissioners will please accept our thanks with our best wishes for the success of their approaching exposition, which will be open to the public on Wednesday, September 2d, and continue until Saturday, October 3d.

Longevity of Trees.—From an article by Elias Lewis, on the longevity of trees, published in the *Popular Science Monthly* for July, 1873, we learn the following facts of the greatest age of trees:

	YEARS.
Palms	500
White Pine	430
Wadsworth Oak, Genesseo, N. Y.	700
Cowthorpe Oak, England	1,800
Oak at Saintes, France	2,000
Chestnut, Tertworth, England	1,000
Linden, Wurtemburg, Germany	1,000
Evergreen Cypress, Spain	800
Cedar of Lebanon	1,200
Cypress of Montezuma, Mexico	2,000
Cypress of Santa Maria del Tule	4,024?
Ankerwyke House Yew, England	1,100
Brabene Churchyard Yew	2,500?
Sequoias, California	2,000?
Baobab, Africa	3,000

According to this, 500 years may be reckoned the longest life of a tree in the United States east of the rocky mountains.

The Day We Celebrated.

San Francisco came out into the street on the Fourth accompanied by all her children, young, old and middle aged, and celebrated in an extremely becoming manner the 98th anniversary of American Independence. In most parts of the country "weather permitting" is the great contingent upon which a snccessful celebration depends; but here in California no consideration is given to the weather. It is known beforehand that the day will be fine, and no postponement on account of the weather is ever necessitated here. Hence it is that the steryotyped phrase "the weather was all that could be desired," with which the accounts of public celebrations and out-door festivities are generally introduced, is never nsed in California. The only evidence of anxiety on this point was a general hope expressed by our citizens, that the wind would not blow quite as hard on the Fourth as it had blown on many of the preceding days.

These hopes were fnlfilled; for the nsnally hoodlumish San Francisco wind conducted itself in a very becoming manner throughout the entire day, and people could open their admiring eves to look upon the passing procession without having them filled with dnst. And it was a display worthy the commendation which it universally received. Judgment and taste were manifested in arranging the programme, and it was carried ont snccessfnlly. One of the points in the arrangement of the line of march of the procession was that each band of mnsic should play the Star Spangled Banner as it passed by the Lick House, in honor of James Lick, for his mnnificent appropriation for the erection of a statne to the memory of the author of this glorions national hymn.

Considering the immense turn-ont, the amonnt of powder burned, and the general character of the celebration, the day passed off in a remarkably quiet manner; accompanied with but few accidents, and those of only a trifling character. No distnrbance ocourred in the streets, and the oases of drnnkenness were remarkably few.

The police did well, though there was, apparently, but little need of their presence; but this very absence of occasion for their active service is proof of their efficiency. There was, however, one local annoyance particnlarly perceptible in the crowded streets on that day; an annoyance which no police force can do away with. We allude to the absenoe of all order among pedestrians while passing along the streets. In all other large cities the pedestrians, the steadily moving currents of passing crowds, confine themselves to distinct and never-conflicting oourses; always bearing to the right; one cnrrent on the inner edge of the sidewalk. the other bearing toward the cnrb-stone. Bnt here all system is ignored; and a man in passing along the sidewalk of onr principal streets is here, there and everywhere while walking—or rather capering—the distance of a block. Some of the jostling scenes enaoted here oould not be excelled in their Indicronsness by anything represented on the bnrlesqne stage of the city. On every Satnrday evening Kearny street, especially, is bnt a stage, and all the men and women and Chinamen there are merely players. Possibly the dread of being suspected of following after the oities of the East indnces San Francisco pedestrianism to continue in this primitive state, and to set its face against anything like street etiquette.

From onr exohanges and the press generally, reports come of the Fonrth having been celebrated with nnusnal enthusiasm in all parts of the conntry.

Nash's Grain Separator.—A good and reliable grain separator is one of the essentials to the complete outfit of a farm. By reference to onr advertising colnmns it will be seen that Nash, Miller & Co., of Sacramento, offer one which has been thoronghly tested and proven on this coast; and we believe that it was the only machine that took the first preminm at the State Fairs at Sacramento, for 1870, '71, '72, and '73. It is claimed that since the introduction of these machines npwards of 1,000 of them have been sold. It is said to work olean, well and with little trouble; which ends are gained not only by the principles involved in its construction, but also from the special care taken to pnt nothing into it but the best of well seasoned lumber.

Several expeditions have been sent ont to explore the Black Hills country, bnt they have all had more or less trouble with the Sionx Indians, and been compelled to retnrn without having accomplished that object. The force that has just started out, under General Custar, from Minnesota, will oross the alkali plains of Dakota, and on reaching the Black Hills will take a thorough topographical survey of that wonderful region, which is said to abound in precious metals.

The Chico *Northern Enterprise* of Saturday says: The harvest on the Reavis farm has begun in earnest. Nearly 4,000 acres of grain to be cut, and all of it is of great promise. Mr. Reavis gives his personal attention to the prosecution of the work, employing from 60 to 75 men, besides numerous teams.

Miscellaneous.

Etching Iron.

Prof. Kick, in Prague, has devoted much time and attention to studying the subject of etching iron with acids. This method is not a new one for srriving at a knowledge of the quality of iron or steel, having been used with some success for a long time. Some kinds of iron exhibit what is known as the passive state, and are unscted upon by acids until this state has been destroyed by heating; another disadvantage was that the surfaces thus prepared were inclined to rust very soon. After a series of experiments with nitric, sulphuric and hydrochlorio acids, and etching solutions of copper salts, Prof. Kick found that a mixture of equal parts of hydrochloric acid and water, to which was added a trace of chloride of antimony, was the best etching solution. The chloride of antimony seems to render the iron less inclined to rust, so that, after washing thoroughly in warm water, and applyiug a coat of Damar varnish, the etched surface may be preserved qnite clean. The smooth surface that is to be etched is surrounded with a ridge of wax an inch high, as is done in etching copper plates, and the acid is poured iuto the disc thus formed. At a temperature of 55 to 65 degs. F. the action soon begins as shown by the gas evolved; in winter the etching is poor. The time required is ususlly one to two hours, but the etching should go on until the texture is visible. Every half hour the acid can be poured off without removing the wax, the carbon rinsed off and the surface examined. If too mnch chloride of antimony is added to the acid, a black precipitate will soon form, which oan easily be distinguished from the carbon. One drop of chloride of antimony to the quart of acid is sufficieut. When the etching is finished, the wax rim is removed, the iron washed first in water containing a little alkali, then in clean water, brushed, dried and varnished. If in a few hours it begins to rust, the varnish should be removed with turpentine, which will also take off the rust, and then varnish again. The appearance of different kinds of iron when etched is essentially as follows: Soft or sinewy wrought iron of excellent quality is attacked so equally by the acid, and so little carbon is separated, even after several hours' action, that the surface remains bright and smooth. Fine grained iron acts the same; the surface is still smoother, but a little darker. Coarse grained and cold short iron is attacked much more violently by acid than the above. In 10 minutes, especially with the latter, the surface is black. After thirty minutes a black slime can be washed off, and the surface will remain black in spite of repeated washings, and exhibits numerous little holes. Certain parts of the iron are nsually eaten deeper, while others, although black and porous, offer more resistance. By allowing the acid to act for an hour or so, then washing, drying and polishing with a file, a distinct picture is obtained. Malleable cast iron, we know, rusts more easily than wrought iron, and it is interesting to know that the action of acids is also violent, the surface being attacked very violently. In puddled steel the color, after etching and washing, is gray, with quite a uniform shade, and the lines are scarcely visible. Cement steel has a very similar appearance, the lines being very weak. In Bessemer and cast steel the etched surfaces are of a perfectly uniform gray color, with few, if any, uneven places. The softer the steel the lighter the color. On etching, the finest hair-like fractures are rendered prominent. A piece of steel, which looked perfect before etching, afterward exhibited a hair-like fractnre throughout its whole length. Gray pig iron acts like steel; the etched surfaces have quite a uniform gray color. When different kinds of iron are mixed the acid attacks that for which it has the greater affinity, while the other is lesa acted upon than if it were alone. Etching also enables us to determine with considerable accuracy the method of prepsring the iron, as in case of rails, as well as the kinds employed.—*Iron Age.*

Preserving Iron.—Experiments on the preservation of iron snrfaces show the advantages of coating such surfaces with heavy mineral oil. The action of the oil is said to be twofold. It is detergent when freely and vigorously brnshed over an already rusted surface, seemingly loosening the bnlk of the rnst, while it also darkens that which remains; snd it likewise acts as a varnish, if applied after the cleansing has been effected, or to new and bright work. Its superiority to vegetable or animal oils depends upon the fact that the bulk of the oil in the latter case evaporates, and leaves only a very fine film behind. If the oil is light, and fully refined, it evaporates so completely as to do but little good; bnt if tinged, or "once-run" oil of sufficiently high gravity be used, the resinons or carbonaceous matter which gives the tinge to the oil remains behind, and forms a thin, protecting film of varnish. Ordinary varnish leaves far too thick and obvious a film, while the film of the once-run oi does its work of protection without displayig itself. As regards the density of the oi required for this purpose, that which star s between burning oil and good lnbricatin oil is found to ho the best.—*Technologist.*

Preserving Wood with Tannin.—A consideration of the various materials best adapted for preserving wood, leads Hat eld to conclude that substances containing t nin are the best preservatives.

Making Match-Sticks.

The process of cntting small, round sticks used for matches is an interesting one, and in writing this description we shall endeavor to make it clesr to the reader in as simple lsnguage as possible. It must be borne in mind that making mstch-sticks is one brsnch of busiuess—applying the composition snother. After the pine logs are reduced to plank, the next operation is to cut them into blocks four and five inches in length, by means of small circular saws. They are then assorted by boys, prepsratory to being fastened to the grest wheels, to be cut into match-sticks. Pine slabs, obtained from the sawmills, to manufacture blocks, are found to auswer the purpose well, as the lumber in them is of the best quality. In thus utilizing the refuse lumber there is great saving. Few people have a corrcct idea how match-sticks are made. In the first place, there is an immense wheel, 20 feet in diamcter, with two six-feet faces or bressts, much resembling an old-fashioned "overshot" waterwhcel, on which these blocks are fastened in rows by means of clamps or screws. The machinery is of such a powerful character that the frame-work on which this ponderous wheel is hung, is composed of heavy oak timbers, 12 by 16 inches, resting on a solid stone foundation, 25 feet by 12, and 5¼ feet deep, laid in cement. The necessity for such a firm foundation will be resdily seen, when the reader is informed that this wheel makes 21 revolutions in a minute, snd mnst not vary a hair's breadth in its motion. The face of the wheel being "loaded" with blocks, the process of outting the sticks is commenced. A rest, similar to an iron lathe, is placed in front of the breast of the wheel, which is moved right or left, on the lathe principle, by means of screws, etc., on which a number of small steel cntters, with holes like an eyelet, are fastened. These cutters are adjusted so as to face the blocks, and as the wheel revolves, each one cuts a splint out of the wood, and drops it below. There are 16 of these cuttors, or punch-like chisels to esch wheel, and the number may be increased to 32, if neccssary. The principle upon which the match-stick is msde is the same as that used in olden time for making rake-teeth round, which consisted in driving a piece of wood through a steel tool, having a hole in it with sharp edgcs. In this case the large revolving wheel serves as the propelling power, and forces the faces of the blocks, that are securely fastened to its outer surface, through the small steel eyelet-like hole in the end of the tool, and a splint is cut out almost with the rapidity of lightning, and dropped below. The machine is so perfectly adjusted, and works with such exact minuteness, that it cuts 100 splints from every solid inch of timber—no more, no less. This fact has been demonstrated. The delicate cutting tools are moved horizontally at right angles with the face of the wheel, by a screw which moves the row of cutters exactly the thickness of a matchstick, from left to right, at each revolntion of the large wheel. Each pair of cntters has a section of blocks to pass through, six, eight to ten inches, as the case may be, which, when performed, the tender, by the turn of a small wheel, brings them back to the starting point, sets the cutters by the tnrn of another small wheel, and they start agsin across the breast of the large wheel. As the rondd splints are cut ont of the face of the block, it assumea a corrngated appearance, not unlike the face of an ordinary washboard, and when the machine starts on the next cnt, the projections, forming one-half of the splint, are cut out, thus alternating the corrugations. The two machines thus in operation will cut 24 gross of sticks (7,200 to the gross), per minute, with 16 cutters to each, or, in the aggregate, 172,800 per minte, 10,368,000 per hour, or 103,680,000 per day of 10 hours.

[To be continued.]

Lacquer.—It has been generally supposed that the beanty of Japan lacquer work was due to ingredients derived from unknown plants, and that the secret was confined to the Oriental workmen. Reeentlu however, in Holland, objects of art have been produced, lacquered and covered with mother-of-pearl, in pieces *fac similes* of those made in Japan. The lacquer nsed is prepared from the hardest varieties of gum copal, principally that of Zanzibar, which is colored black with India ink. The articles are covered with several layers of this aubstance, upon which, while still wet, or rather pasty, the mother-of-pearl is inlaid. Drying in a furnace follows, another coat of lacquer is applied, then more drying and smoothing with pounce. These operations are repeated nntil the surfaces are perfectly united and smooth, when a final polish is given with tripoli.—*The Engineer.*

Sound.—In a paper on the duration of the sensation of sound, Prof. Mayer said that experiment proved that the residual sensation only occupied one five-hundredth of a second in the case of 40,000 vibrations per second; but in the case of forty vibrations to a second, the residual vibration was one-eleventh of a second. He concludes that the whole ear vibrates as one mass, and the durations of these oscillations of the whole ear are far too short to remain one-thirtieth of a second. He thinks that this explains our inability to distinguish the actual pitch of sound when that pitch exceeds certain well known limits.

Facts and Fancies about Heat.

Our scientific contemporsries, upon whose knowledge we hsng as lovingly as the infstusted and blind Cupid hangs npon the neck of Venus, will persist in belittling onr stupendous globe by instituting comparisons of sn odious chsracter. Professor Proctor made us feel mnch smaller than a Liliputisn gnst; and now Professor Lsngley, of the Alleghany Observstory, cites us as the representative of coal and iron, before his glowing and cslorific majesty, King Scl. The Professor says, in answer to the question, "How hot is the sun?" thst Sir John Herschell and Father Secchi plsce it at *at least* 10,000,000 degrees of Fahrenheit, while Sir William Thompson thinks it is something near thirty or forty times as hot as one of our blasting furnaces, which vaporizes a small portion of the iron it renders, while the aggregate amount of iron which annually passes ont of the Pittsburg chimueys in the vaporized state, may be estimated at 5,000 tons. This would appear to be a great waste, but when we come to compare it with that of the great furnace of the sun, whose fire-grate area is reckoned not in yards, hut in square miles, of which its surface includes 2,300,000,000,000, is a very small affair. The losrned gentleman then proceeds to show that, as a calculation of the exsct amount of heat given out from a furnace of known size can easily be made; so, likewise, can we caloulate accnrately how long a given amount of coal will last. Comparing the sun to snch a furnace, we ascertain the area; and adopting a probable value for the rate of emission, it becomes a simple problem in practical engineering to determine how long a given quantity of coal would last if burned st its surface at the rate of combustion which would just maintain this known heat. A careful computation based upon the above hypothesis shows that the entire coal fields of Pennsylvania would keep up the actusl solar heat *not an entire second.* The amonnt of fuel required to keep up the everlasting combustion that gives off the heat that even our little globe enjoys is inconceivable.—*Coal and Iron Record.*

The Moon and Vegetation.—A correspondent writes: "It is a popular belief among the mass of farmers that the influence of the moon has an important bearing upon various young plants as they happen to come forth either in her light, as full moon, etc., or in her wane. This idea is ridiculed and entirely dishelieved by what are called the mcst intelligent and soientific farmers. Is it not a fact that the light of the fnll moon on a young plant just come forth would have some effect on it, different from the darkness which prevails in the moon's absence, and do not these tender plants require extra sleep, as an infant does? And in the absence of it, does it not essentially change their chsracter and produotion?" When the moon is shining, the clouds are wholly or in a great part absent, and the effect of the absence of clouds becomes very evident when a thermometer is placed in the focus of a silvered mirror and turned towards the unclouded sky. The thermometer falls with great rapidity, its heat being radiated out into the abysses of space, which are cstimated to have a temperature vastly below the zero of our thermometric scale. When a cloud passes between the mirror and the sky, the thermometer rises rapidly, the loss of heat being interrupted. The clonds act like a woolen blanket, preventing the escape of heat. Now what the thermometer is in this experiment, so in nature is the plant. On a moonlight (cloudless or partly clonded) night, it may radiate so much heat that injnry may arise to its tender organization. The Earl of Rosse's grest telescope has detected the heat radiated by the moon, but it is an incredibly minute quantity, and can have no effect on vegetation.—*Scientific American.*

Naphthaline.—A recent English patent relates to the application of naphthaline. 1. As a substitnte for sulphur, wax, resin or other inflammable materials used for dipping or impregnating matches and firelighters. 2. As an addition to the phosphorus paste in which the ends of wax and other matches are dipped. 3. To increase the inflammability of candles, tapers, links and torches. 4. For burning in lamps in the form of a hollow candle, provided with an independent wick and douhle air current, the flame serving to melt the solid naphthaline to feed the wick. Naphthaline is a white crystallizahle substance evolved hy the distillation of bituminons coal. When crystallized it is a very delicate film, yielding to the gentlest tonch, yet, under favorable circumstances, it compacts and is capable of considerable resistance. It has a peculiar, faintly aromatic odor, not unlike narcissus; is heavier than water, and is readily dissolved by naphtha.

Flame.—W. Stein haa pnblished a criticism of Frankland'a statements concerning the illuminating power of flames. Frankland, abandoning the old theory of incandescent carbon particles, snggests that the illnminating power of flames is owing to very condensed vapors of hydrocarhons. The anthor of this article brings forward a number of known facts in support of the old hypothesis.

Tellurium.—On the side of a piece of arsenical pyrites, Harmay observed a metallic snbstance between which and the pyrites were a few scales resembling specular iron, but of a brownish color. The metallic-looking snbstance proved to be tellurium, and the intermediate mineral a tellnrium sulpharsenate.

Spurious Coins.—It seems that science is impartial in conferring her favors. Counterfeiters and philsnthropists make eqnal progress. Lately a new imitation hss appeared in England, ss we learn from the *Ironmonger.* That paper says: We regret to find it necessary to caution our readers against taking spurious gold coin, as it appesrs thst the usual tests of musical ring, milled edge, or even weight, sre no longer rcliable tests. That "all is not gold that glitters" is now clesrly demonstrated, for scientific reguery has now so far advanced thst tokens of plstinum alloy are being produced so exactly resembling the precious metal as to deceive the most careful and experienced bnsiness men. So close, indeed, is the imitation, thst a specimen taken recently by a London tradesman was only suspected on olipping the edge, and specimens, being shown to the officials at the Bank of England, were pnt through the ordinary tests and admitted to be perfect in form and weight. The discovery isanything but pleasant, and the natural question arises—How are we to guard sgainst snch scientific smashing?

Ozone.—That ozone is not oxygen is proved hy the contrast in some of their properties. Oxygen has no taste, ozone tastes, as one writer expresses it, like lobster, and might make the fortune of some enterprising caterer who shonld provide it cheaply as an adjunct of salad. Oxygen has no smell; ozone smells like —, well, we will leave that to the imagination of the reader—not like heliotrope or rose. Oxygen has no action on gases, ammonia, phosphoretted hydrogen or muriatic acid, in its free state in the atmosphere; ozone acts strongly upon all these. Ozone colors litmus paper, ruins India rubber, tarnishes silver, bleaches; which are not powers of simple oxygen as it is found in the atmosphere. Dr. Andrews, who has made a study of it, says it is more than three times as heavy as oxygen, a difficnlt fact to prove. It colors metals with great force and rapidity, changes black to white in a compound of lead, yellow to red in a compound of potassium. It polarizes gold and platinum. Indeed, new experiments are revealing more properties of this energetic influence, and the scientific societies have in each meeting more wonderful things to say of it.—*Pettenkoffer.*

Fixing Pencil Drawings.—It is sometimes very desirable to fix delicate pencil or crayon drawings, and various methods have been snggested for the purpose of effecting this. Resinous varnishes are favorites with some people; the editor of the *Lens* advises the nse of collodion, bnt these, although acientific and elegant, are tronblesome and not always readily procnred. One writer recommends the use of saliva, but this is filthy and disagreesble. A quarter of a century ago we were taught by our old drawing-master to fix pencil drawings by means of skim-milk, and this simple and easily-procured article leaves nothing to be desired. The milk must be thoroughly skimmed and freed from cream, or oily spots will make their appearance on the paper. The best mode of applying it is by means of a camel-hair brush, bnt a soft sponge or rag may be used where snch a brush is not at hand.—*Industrial Monthly.*

Linseed Oil.—Linseed oil is obtained from flaxseed, by grinding the same under heavy stones, set on edge and made to revolve on beds of stone. Attached to the edge stone are scrapers, which throw the seed into the circnlar track of the roller. The ground seed is placed in strong, woven woolen bags, which bags are covered with mats made of horse hair and sole leather, of a proper and sufficient width to protect the bags in the operation of pressing. These mats with their contents are snbjected to an immense hydranlic pressure, and the expressed oil flows off into large iron tanks, where it is allowed to settle. What remains in the bags after the pressnre, is known as oil cake. About 8,000,000 gallons of linseed oil are used annually in the United States.

Sharpening Razors.—The following item is from our valued exchange, the Newark *Manufacturer*, on whose authority we reproduce it: It is said that the simplest method of sharpening a razor is to pnt it for half an hour in water to which one-twentieth of its weight of mnriatio or sulphnric acid has been added, then lightly wipe it off, and after a few honrs set it on a hone. The acid here supplies the place of a whetstone by corroding the whole surface uniformly, so that nothing further than a smooth polish is necessary. The process never injnres good blades, while badly hardened ones are frequently improved by it.

Spontaneous Combustion of Hay.—From the observations and experiments of Prof. Ranke, it appears that the charcoal resulting from partial combustion of hay is pyrophoric, but nnder what conditions the hay can so increase in temperature as to form this charcoal, has not been established. Fermentation doubtless produces the heat, which cannot be dissipated, owing to the bad conducting power of the material.

Water-Proof Cement.—Soak plaster of Paris in a concentrated solution of alnm, then dry it and bake in an oven at such a heat as is used to change gypsnm or alahaster into plaster of Paris; then grind to powder and use with water like plaster. It is white, but may of course be colored; sets very quick, becomes very hard, so as to take a high polish, and is nearly as cheap as plaster of Paris.—*Manufacturer and Builder.*

LANDS & HOMES FOR SALE

RANCHOS
FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Jndge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

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165 Acres ¼ mile from the town of Windsor; 1 mile from depot; 2½ miles from the famous Russian river. The place is beautifully situated; land all level, divided into three fields well improved. Good house of nine rooms and closets; good barn and outhouses; good orchard of superior fruit; vineyard 12 years old. An abundance of soft watsr; land well adapted to grain and vegetables; about 2,500 cords of black oak timbsr; and wood brings $5 per cord at depot. Three and one-half hours ride from San Francisco, on line of N. P. R. R. Title, United States patent. For partionlars apply to JOSEPH DIMMICK P. O. Box 22, Windsor, Sonoma Co., or to Dewey & Co., San Francisco, Cal. Price, $40 per acre. ap18-tf

FOR SALE.

A splendid HOP RANCH, in one of the best valleys in the State; good dry-house and machinery; about thirty acres of hops in good condition. Will be sold at a bargain; terms to suit.

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100 Acres of Good Land,

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A portion of the land suitable for Hops; the remainder good for grain or fruit. All fenced and in cultivation. Cheap and on reasonable terms.

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Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

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20v7-3m

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On Gift Map 4,

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TO LEASE ON SHARES.
1,000 ACRES,

Or any part of same, being levied and of similar character to that of SHERMAN ISLAND. Apply to

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No. 330 Pine street.....SAN FRANCISCO, CAL.

POISON! POISON!
WAKELEE'S PATENTED
Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRREL, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

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H. H. H.
HORSE MEDICINE.

Is unsurpassed for its efficacy in curing all for which it is recommended. All Lameness, Spavins, Callous Lumps and Blemishes of all kinds are speedily removed by it. WILLIAMS & MOORE, Prop'rs.

8v7-3m Stockton, Cal.

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—CELEBRATED—
Worcestershire Sauce.

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Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been snpplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

Ask for LEA & PERRINS' Sauce, and see name on wrapper, label, bottle and stopper.

Wholesale and for export by the Proprietors, Worcester; Crosse & Blackwell, London, &c., &c., and by Grocers and Oilmen universally.

1v8-1y

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—FOR THE—
GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

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SAMUEL HILL, General Agent.

18v7-3m

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TO PAINT?
THEN USE THE BEST.

THE AVERILL CHEMICAL PAINT WILLLAST THREE TIMES AS LONG as the best lead and oil, without CHALKING; is of any desired color. It is prepared for immediate application, reqnlring no Oil, Thinner or Drier, and does not spoil by standing any length of time. It is equally as good for lnside as outside work; over old work as well as new; in fact, where any paint can be used the AVERILL CHEMICAL PAINT will be found superior to any other. Any one oan apply it who can use a hrush, which truly makes it the FARMER'S FRIEND.

IT IS JUST THE PAINT FOR THE AGE.

IT IS SOLD BY THE GALLON ONLY.

One gallon covers 20 square yards 2 coats.

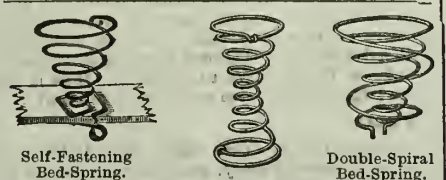
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Self-Fastening Bed-Spring. Double-Spiral Bed-Spring.

We manufacture all sizes of BED and FURNITURE SPRINGS, from No. 7 to the smallest Pillow Spring; also, the Double Spiral Spring, which is the most durable Bed Spring in use. It is adapted to upholstered or skeleton beds. We have the sole right in this State to make the celebrated Ohermann Self-Fastening Bed Spring. Any man can make his own spring bed with them. They are particularly adapted to Farmers' and Miners' use. Send for Circulars and Price List to

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Napa Ladies' Seminary.

The next term will commence on TUESDAY, AUGUST 4TH, 1874, and continue for twenty-two weeks. This institution offers thorough instruction in a quiet, healthful location, easy of access from any part of the State.

Instructions in Piano-forte, Guitar and Vocal music by a superior teachsr. French taught hy a competent teacher.

It is very desirable that pupils should be present at the opening of school, although they can enter at any time, and he charged from the time of entrance. For particulars of school apply to

MISS. S. F. McDONALD, Principal,
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DEPARTMENT
OF THE
CALIFORNIA STATE GRANGE,
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J. H. HEGLER, Manager.

We are now prepared to handle and dispose of all Dairy Prodnce, Eggs and Poultry.

This house is under the immediate control of the California State Grange; the Business Manager a thoroughly practical farmer and dairyman, Master of Bodega Grange and General Deputy for California for the organization of Granges in any part of California. Special rates to members of the Order; though any one may sell through our house and avail himself of our mode of doing business.

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A day and Boarding School for both sexes; the only Institute on the Pacific Coast where a thorough Academic and business education can he obtained.

The Business College Department

Is under the supervision of James Vinsonhaller, who for many years was at the head of Business Colleges of San Francisco.

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MEDICINAL
SHEEP PREPARATION,

WARRANTED FREE FROM ALL POISON.

A sure and positive cure for **Scab, Ticks and Lice,** and a sure promotive of the growth of the wool. It has been nsed in Tehama County for the past two years, with most gratifying results, and we have the pleasure of referring to the following gentlemen as to its merits, viz.: H. A. Rawson, Jas. Gooch & Bro., J. W. Montgomery, J. Ehy, Curtiss & Brown, H. Bosauka, Jos. Cone, J. W. Gate & Sons.

It is a liquid and put up ready for use in 2½ gallon tins, four tins in a case.

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Wholesale Fruit and Produce Commission House,

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No. 424 Battery street, southeast corner of Washington, San Francisco.

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4v25-1y

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19v7-3m

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FARMERS' LINE.
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MONETA,
621 Tons,
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The magnificent A 1 Clipper Ship,

SEA WITCH,
1288 Tons,
BAKER.....Master:

These fine vessels have nearly full cargoes engaged and will have very quick dispatch. Freights taken in lots to suit shippers.

Will he followed hy the splendid A 1 Iron Ship

GLENGARRY,
1769 Tons,

Due here in May; or hy other first-class vessels,

Liheral advances made on shipments of produce consigned to our Liverpool house, Messrs. Robert Rodgers & Co. RODGERS, MEYER & CO.

19v7-3m

IMPORTANT TO FARMERS!

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The New A 1 Clipper Ship

FRIEDLANDER.....1,638 tons register

Is intended to sail with dispatch.

Freight taken in lots to suit shippers.

Apply to E. E. MORGAN'S SONS,
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Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to he the best method known for preserving Fruits, Vegetables, Meats, etc.

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11v7-6m

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m **304 California Street.**

SEEDS. PLANTS.
OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINIS INSIGNIS, Etc.

For Sale, wholesale or retail, by

B. F. WELLINGTON,
(Successor to E. E. Moore).
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San Francisco Employment Office,
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(Successors to Wm. Vail & Co.)

COUNTRY ORDERS FOR MEN almost invariably filled with FIRST-CLASS HELP.

Farmers can always procure men in any number desirable hy giving a little timely notice. Hotels can always get the BEST OF MALE OR FEMALE HELP. on short notice. We have the BEST OF FACILITIES FOR PROCURING HELP. Have an Agent on the immigrant trains distrihuting circulars, upon the arrival of every train. Give us your orders and we will endeavor to give you the fullest satisfaction. ap18-tf

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St., bet. Montgomery and Kearny Sts., S. F.
14v7-m

Brittan, Holbrook & Co., Importers of

Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 171 J street, Sacramento.

Agricultural Notes.

ALAMEDA.

Fine Grain.—Livermore *Enterprise*, July 4: On Tuesday Mr. McCully brought to our office some fine bearded wheat. There were upwards of 50 stalks from two kernels of this remarkable wheat. Some of the heads measured over seven inches in length, and were very full. It is no use talking, we do not think there is a wheat growing section in the world that can beat Livermore. Everywhere the grain is turning out better than the farmers had any idea it would.

AMADOR.

Abundant.—Amador *Ledger*, July 4: If persons unacquainted with the productive capacity of the foothills, or who doubt the value of these lands, will put themselves to the trouble of visiting the orchards, vineyards and vegetable gardens in this vicinity, they will have all doubts dispelled, for at every orchard they would find the branches of fruit bearing trees literally loaded down with thrifty young fruit, and which will necessitate props, when the fruit becomes more matured. And the same may be said of the vineyards; every vine the present season is loaded with berries. and the grape yield of the coming vintage will be without precedent. Every variety of fruit, apples, peaches, pears, apricots, nectarines, quinces, plums, figs, pomegranates and every description of berry will be very abundant, showing the wonderful adaptability of foothill lands to the successful cultivation of all kinds of fruit, peculiar to northern and semi-tropical countries.

BUTTE.

Incendiary.—Butte *Record*, July 4: Some wretch set fire to George Hoag's grain field, a few days ago, but fortunately the fire was discovered before it did much damage. Farmers should give a stout rope and short shrift to an incendiary.

Briggs' Orchard.—Marysville *Appeal*, July 4: We found that the reported damage to this great orchard had been somewhat exaggerated. That part of the orchard lying next to the Feather river, and comprising about two-thirds of the immense forest, was not overflowed, and suffered no damage. There are several thousand trees next the slough which are dead, and will prove a severe loss to the proprietor. But the land will be leveed next year and the orchard replanted with the choicest variety of fruit-trees. But there is orchard enough left to keep Mr. Briggs very busy for the season, as the present bearing trees cover about 50 acres. The proprietor has 75 hands employed at the present time. Fourteen thousand boxes have already been received at the orchard, and many thousand more will be needed. There are three box-makers regularly employed on the ground, and from three to five teams engaged in hauling the boxed fruit to the railroad depot. The crop of May peaches will be all picked this week, and will aggregate about 6,000 boxes. The apricot yield will be about 5,000 boxes, and these will be followed by about 6,000 boxes of peaches of the Hale's Early variety, several thousand boxes of plums, June plums, etc. The gathering of this immense lot of fruit of every variety is carried on in a systematized order, and everything goes along as quiety as an orchard of a few hundred frees. The daily income of the orchard is immense, but the expense is also considerable, as may be understood by the number of men employed. The entire force board and lodge near the orchard. The buildings about the premises make quite a respectable sized country settlement.

CALAVERAS.

Tall Wheat.—Calaveras *Chronicle*, July 4: We have been shown some stalks of wheat, from a field now being reaped by Mr. John Donnallon, Bay State ranch, that measured upwards of six feet in length. Crops are generally good throughout the county this year, for the reason that the season has been wholly a favorable one, but it is a peculiarity of Mr. Donnallon's that he invariably harvests good crops, whether other people do or not. And the secret of the whole matter is he cultivates his land—the model farmer of Calaveras.

LAKE.

The Hay Crop.—Lake County *Bee*, July 2: Hay is probably the largest crop raised in Lake county this year. The yield has been good almost everywhere, averaging about a ton and three-quarters to the acre. In the field it is worth $7 a ton; stacked, $7, and baled, $12.

MERCED.

The Crops.—Merced *Tribune*, July 4: The grain crop of this county, generally, is not coming up to the expectations of the farmers. Fields that two months ago gave promise of from 25 to 30 bushels per acre, on threshing yield but half that amount. Mr. A. McCloud, who is harvesting 640 acres of summer fallow, which in the spring appeared good for 40 bushels per acre, informs us that it will not average 15. Mr. N. S. Rogers informs us that the same is the case as regards his crop. The grain crop of Merced county the present season will not nearly equal the yield of the year 1872.

The Cotton Fields.—San Joaquin Valley *Argus*, July 4: We paid a visit to Major Strong's cotton fields on Mariposa creek, on Tuesday last, and found the crop of 480 acres in good condition, the plants making rapid growth, with apparently sufficient moisture near the surface to mature them. Owing to the cool weather which prevailed throughout May and the greater portion of June, the plants have not attained the size that might have been expected, yet much of it is above knee high, branching well, and as full of squares as could be expected, and in a few days more there will be an abundance of blooms. The Major is confident of gathering the largest crop this season that has ever been harvested any season since cotton was cultivated in this State, and his success ought to satisfy all that this valley is peculiarly adapted to the growth of this valuable staple.

The harvest progresses finely throughout the valley, there being no complaint of a scarcity of men, machinery or teams, and the prospect is that the large crop will be all harvested and housed by the last of September. Preparations are being made for storing at all the stations along the line of the railroad the large crop of wheat, and for this purpose large warehouses are being erected by the Grangers and others, which will enable farmers to store and wait for a favorable turn in the market before shipping. At this place the Grange Warehouse company are building an immense structure 400 feet long and 60 feet wide, which, in addition to the large warehouse of Huffman, will afford room for perhaps all that it will be necessary to store this season. We are informed that the Grange Warehouse company have also contracted for the building of a large warehouse at Plainsburg Switch, and that workmen are now on the ground employed in its erection.

NAPA.

Napa Plow Company.—Napa *Reporter*, July 4: This company has commenced the erection of works that will before fall most probably extend all over that vacant piece of ground between the Star warehouse, which they now occupy, and the gas company's works. Castings that heretofore have been done East will be done in Napa, as it is found that it can be done as cheaply and at a saving of the freight, and also, that it can be loaded here at a cost a trifle less than at the wharf in San Francisco. The company has already one order to fill of five hundred plows, of the D. A. Manuel patent, which appear to have taken a firm stand in the agricultural implement market.

Rattlesnake Grass.—Napa *Register*, July 4: Napa county has an odd specimen of grass, known by the above name, which has a head much like a club wheat head, and bearing a striking resemblance to the rattles of a snake. It abounds near Mr. Hudeman's, and a boquet of it we saw on the street this morning, interspersed with flowers, had an unique and pleasing effect.

PLACER.

Hay.—Placer *Argus*, July 4: The hay crop has been saved in fine condition. It brings $19 a ton, which is thought a moderate price here.

SACRAMENTO.

Backward.—Folsom *Telegraph*, June 4: The early varieties of the peach, as the Early Hale and Early Parsons, which usually ripen in this locality about the 1st of July, will not ripen this season before the middle of the month. Most other kinds of early fruits are equally backward.

SAN JOAQUIN.

Beginning Harvest.—Stockton *Leader*, July 4: We received a call this forenoon from Mr. Amos W. Gove, who is ranching, about ten miles from this city, on the Upper Sacramento road, and who reports harvesting already commenced in that vicinity. The prospects for an abundant yield grain, he says, were never better. He informs us that one of his neighbors, Mr. A. D. Goodwin, has about 1,000 acres of wheat, some of which will yield at least 70 bushels to the acre, and more than 500 acres will yield from 45 to 50 bushels to the acre. Mr. Gove says that by next week harvesting will have begun universally in that section of farm-country.

SAN LUIS OBISPO.

A Good Showing.—San Luis Obispo *Tribune*, July 4: We were shown this week a specimen of wheat grown by J. Jatta, on the old Mauk place, Arroyo Grande. It was taken from a ten-acre field, which, we are informed by a disinterested and very competent judge, will turn out all of 80 bushels to the acre. Mr. Jatta also cut off an 8¾ acre lot adjoining, 40 tons of superior barley hay this season. We merely mention this to show what can be grown anywhere on the Arroyo Grande with proper cultivation. Mr. Leff, living one mile south of this place, reports 49 acres of barley as averaging 50¼ bushels per acre; also upwards of 100 acres of wheat which he expects will turn out 70 bushels to the acre. Messrs. Flint & Foreman, on the Laguna rancho, have several hundred acres of barley which will run up into the eighties to the acre all through. This is a glorious showing for San Luis Obispo; but nothing less would be expected almost any year, if our farmers would prepare their ground properly and plant in season.

The Crops in the Guadaloupe Valley.—Mr. Miller, of the Oso Flaco, brings very flattering reports from that section of country in regard to the crops. He asserts that there never has been such a yield of grain in the valleys as the present year. He says that certain tracts were blasted in the early part of the season; but taking the whole valley on an average it will yield 40 bushels to the acre throughout. He speaks especially favorably of the wheat sown in the upper part of the valley; that never since its first settlement has one-third of the amount of grain been raised to the acre that has this year. The great and only present trouble with them appears to be that they fear the projected railroad will not reach them in time to haul away the immense crop that they are about gathering, without which it will be almost impossible to transport it to the different ports.

SISKIYOU.

Poor Grain.—Yreka *Union*, July 4: We are informed by farmers from Scott valley that crops will not turn out anywhere near so well on the average, as it was supposed they would some weeks ago. In places they have been injured very seriously by the frosts. But while there are many fields from which the yield will be light, there are others which promise unusual crops. Four or six weeks ago the prospects for heavy crops were better than had ever been seen before, but the cold weather since has caused a great change in this respect.

SONOMA.

Tomales Items.—Petaluma *Argus*, July 4: The hay crop is about harvested, is of excellent quality, and the yield per acre above the average. The grain and potato fields are looking remarkably well, and everything now indicates a liberal harvest. The grass, also, is abundant, and as a consequence, dairymen, like Swimley's boarders, are happy and content, as, in fact, are all those whose lines have fallen to them in that favored region.

SUTTER.

Plenty of Good Fruit. — Sutter *Banner*, July 4: Reports from all our large orchards are very favorable. The fruit is much better than last year, and far more abundant. All the orchards along the Sacramento river are yielding more fruit than ever before. The little orchards, here and there to be seen on the plains, are doing splendidly, and not a few of them are already furnishing fruits for our markets. Our vineyards are also in uncommon good condition, and promise a heavy crop.

TEHAMA.

Harvest. — Tehama *Independent*, June 17: The encouraging reports we have made from time to time of the prospects of an abundant harvest are fully borne out, and as heading and threshing progress, the farmers find the yield to equal, if not exceed, our most sanguine anticipations. With the good season and the large amount of new land seeded this year, the yield will mount up to at least 25 per cent. more than usual. In all sections the crops are uniformly heavy and splendid. Such grain as is still standing looks clean and regular, not spotted here and there with thin patches. Much of the Scatterville wheat is already cut and threshed. The yield is as large as was expected, although some of it shelled out during the late north winds. The red land crops will reach 25 bushels to the acre all round. Barley has yielded well this season throughout the county.

TULARE.

Destruction of Squirrels.—Visalia *Delta*, July 2: Asa Anderson put out a batch of strychnine a few days since, prepared in the following manner: To a couple gallons of wet wheat, he added a small can of thoroughly pulverized strychnine, sweetened with fine sugar, and distributed in the morning near the burrows. On returning he found nine dead and dying squirrels. Later in the day he found 65 that had been slain. It is presumed that two-thirds of the poisoned animals died in their holes. Scarcely a squirrel has been seen on the premises since. Many of our farmers suffer a large percentage of loss on their grain crop by the ravages of squirrels, and this evil is evidently getting worse. We hear of some men's destroying them most effectually for one season by the use of strychnine or phosphorus. There are others less spirited who suffer a loss equal to the profit of the crop, nearly every year, and do nothing to prevent it.

Volunteer. — Tulare *Times:* Mr. G. H. Webb, of this immediate vicinity, has a piece of ground near his residence, containing eight or ten acres, which has not been plowed, sowed or harrowed this year, yet it has produced a crop of volunteer wheat that will make forty or fifty bushels to the acre. How is that for large returns from small investments?

YOLO.

Grain Crop.—Yolo *Mail*, July 4: Wheat is being marketed daily, and the farmers are beginning to realize something for their labors. We understand that the grain is well-filled—even the late sown—which it was feared would be shriveled on account of the north winds of three weeks ago, but the moisture in the ground seems to have protected it, and fed the stock, keeping it green and active. The amount produced in Yolo county this year will be greater than ever before, and the quality just as good as ever was known in this or any other country.

A Word of Advice to our Friends in the Country.

Zeehandelaar & Co. are now supplying a demand that has been heretofore sadly felt in the rural districts, and which has been quite a drawback, not only to the agriculture and mining, but also to all other industrial interests of the State.

The six years' connection of Mr. Zeehandelaar as Secretary of the California Labor Exchange, and the general knowledge of the wants of employers and employees, have established the great reputation of the firm for reliablity and honesty of purpose.

Send an order to their office for male or female; a book-keeper or an engineer, a farmer or a miner, a cook or a servant—male or female, of any nationality, in any branch of labor, skilled or unskilled—and you will be supplied at the shortest notice, and in a satisfactory way. They endeavor to fill all orders to PLEASE EMPLOYERS. Address or call at 715 Montgomery street, corner Montgomery Avenue and Washington street, San Francisco, California. It

Cheese Boxes.

One of the most prominent wants that have thus far been felt in the California dairy is a good cheese box. In the dairies of the East every cheese is sent to market in a box; though the nearness to home market there, and the transportation facilities possessed by them, render the boxing of cheese less essential with them than with us. Here, where the markets are more distant and more difficult to reach, our cheese is sent in bandage only, often becoming greatly damaged by breaking, and always more or less injured from want of protection and isolation. Every cheese should be kept by itself, as it is extremely liable to lose its delicate flavor and its fine consistency by even partial exposure.

A good cheese box affords a cheap protection during transportation, and is used to almost equal advantage while in storage. This has been a desideratum among our dairymen and dealers, and we were aware that Swan & Co., proprietors of the Union Box Factory, of San Francisco, have been for some time perfecting a cheese box; and being informed during the past week that it is now completed, we made a special visit to the establishment for the purpose of inspecting this new production. We have examined the boxes made by various manufactories at the East, and do not hesitate to pronounce that of the Union Box Factory the best article that we have seen. Some of the patents possessed by this firm are particularly applicable to this purpose. The process to which the wood is subjected before slicing, removes all woody odor from the material, leaving it as inoffensive to the smell as wood can possibly be; and also leaves it in so tough a condition that the box is less liable to break or split than those made in the ordinary way. The slicing machine leaves the sides of the box in as smooth a condition as though they were planed, giving it a neat and attractive appearance. The machinery by which the parts are prepared is so exact that the box when put together is so tight that no light can be seen through its joints. These boxes are made of any size desired, varying in diameter from six to 20 inches, and from 11 to 12 inches in hight.

Dairymen from the East, as well as those of California, have examined this box and pronounced it a very superior article, while the prices at which they can be bought are as low as those charged for the ordinary cheese box.

S. Larrison, of Cloverdale, hauled about two thousand white oak staves from Lake county within the past week, worth about $275 per thousand. Larrison is a cooper, and uses those staves in making wine pipes, of one hundred and fifty gallons capacity. He buys and cuts the oak trees in Soott's valley, splits them into staves, and lets them remain on the ground to season until the following year, when he hauls them to Cloverdale.

The farmers around Calistoga are getting pretty well through with haying. The yield, as anticipated, is very large. The crop is commanding about $12 per ton for loose hay in the field.

The Los Angeles *Herald* hears that it is the purpose of the Southern Pacific Railroad Company to complete the road from Bakersfield to Tehachepi Pass as soon as possible.

Fighting is going on near Estella, Spain, where Gen. Concha was killed, thus far without result. It is thought that the Carlists will be forced to abandon that place.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., July 7th, 1874.

For a Week Ending June 23d, 1874.

Hydraulic Hoist.—Martin L. Bassett, S. F., Cal.

Device for Releasing Horses—Operated by Alarms.—Robert Bragg, S. F., Cal.

Fiber Separating Machine.—Wm. M. Hughes, S. F., Cal.

Drill Tooth.—Henry H. Linnell and Leonidas Parker, Oakland, Cal.

Table for Vessels.—Edward P. S. Andrews, Havilah, Cal.

Transplanter. — Timothy Carroll, Anaheim, Cal.

Atmospheric Power Hammer.—Wm. Manson, S. F., Cal.

Atmospheric Hammer.—Wm. Manson, S. F., Cal.

Re-Issue.

Process of Separating Silver from Other Metals.—Conrad Wiegand, Virginia City, Nevada.

——The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

[By our own Reporter.]

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, July 8th, 1874.

The Produce market has improved in activity since the new crops have begun to come in. As yet receipts are not very large, and the most of the great Wheat fleet is still on the way. However, there is already sufficient movement to make quite a different showing from that of the last few months. Old crops are pretty much disposed of and business is mainly confined to the new. Besides the Cereals, the receipt of fresh Fruits and Vegetables have been very heavy and have made things lively.

The general business of the city and State present some anomolous features. While trade is by no means dull, as a rule, money is more plenty than has ever, perhaps, been the case heretofore. Rates of interest are low, notwithstanding the call for money with which to carry on the trade and manufactures of the State and to move our present crops. This is said to be due, in great measure, to the comparative stagnation of business in the Eastern States, which has liberated a large amount of capital. It was expected that rates of interest would appreciate when it became necessary to use so much money in handling the crops; but thus far no such effect has been noticeable. As it is, the anticipation of fair, if not large, profits from the crops has put life into all branches of trade, has increased the value of real estate, and has caused a general activity.

Barley.

Barley is moderately active for new. Receipts are still light.

Beans.

Bayos and Pinks have declined considerably; a falling off of ¾c in the former, and ½c in the latter being noticed.

Broom Corn.

Prices nearly nominal. Stocks full, and manufacture going on steadily, but no transactions being made.

Corn.

Corn is weaker, and has declined 5c. ₱ cental. Corn Meal is also lower, both Feed and Table.

Dairy Produce.

There is very little Pickled Roll to be had. California Cheese is still weaker, and skim-milk Cheese will in some cases go even below our bottom figure, 8c. It is difficult to obtain 15c for the best. Eastern Cheese also moves slowly. There is but little in this market, and the inducements to ship hither are small.

Eggs.

Fresh California Eggs are selling at 27@28c. A few Eastern are changing hands at 19@20c.

Feed.

Hay now ranges in price from $9 to $15 ₱ ton. Good Straw is held at $1 ₱ bale, but the price will fall when the new crop, now nearly due, arrives. Corn Meal is lower.

Flour.

Market quiet. The Oregon steamer brought 1,548 barrels. The range for lowest Superfine to best Extra is $4.25 to $5.75.

Fresh Meat.

Meats are low, but are moving quite freely, the packers taking up large quantities.

Hops.

Hops are slow of sale, and present rates are low. Prospects for high prices for the new crop, which will begin to arrive next month, are anything but encouraging. Emmet Wells' last Circular says that brewers are generally supplied, and few of them will have to make any further purchases until the arrival of new Hops. The crop everywhere is doing well, and the yield promises to be abundant. It is also said that at least one-eighth of the crop of 1873 in the Atlantic States is still in the hands of growers. Picking will commence next month, and the opening of the market or the new crop will be looked for with interest.

Nuts.

California Walnuts have declined 1c, and Chile 1½c ₱ lb. Peanuts are 2c ₱ lb higher. Brazil and Pecan Nuts are each 1c ₱ lb lower.

Onions.

The price has dropped again. We quote the range at from 50c. to 90c. ₱ cental.

Potatoes.

No new kinds have come in. Good Half Moon Bay will only bring $1.15 ₱ cental. Old Potatoes are almost given away.

Poultry.

Turkeys are more called for and not very plenty; the price has been advanced 2c ₱ lb for both Hens and Gobblers. Chickens have not changed. Ducks are a little lower.

Provisions.

California Bacon is firm at an advance. The market continues good for all kinds.

Seeds.

There is not much being done in Seeds at present. Prices remain as before.

Wheat.

The Wheat market is not strong. New Wheat will hardly bring over $1.65 ₱ cental, though sales have been made at $1.67½. There is nothing new in the English market. Liverpool rates yesterday were: Average, 12s 2d @ 12s 4d; Club, 12s 5d @ 12s 10d. Wheat is dull in New York.

Wool.

Wool is quiet. New York telegrams show a similar state of the market there. James Lynch, in his circular of the 1st, says that during the past month a good demand has existed for fine and middling grades of clothing Wool, domestic fleece and pulled. Good Spring clip California and fine Texas found ready buyers.

DOMESTIC PRODUCE.

WEDNESDAY M., July 8, 1874.

BEANS.			
Beans, sm'l wh. ₱	lb	5¼@	5½
do, hutter		6 @	7
do, large		6 @	7
do, hayo		2¾@	2½
do, pink		1¾@	2
do, pea		5½@	5⅝
do, Lima		6 @	7
BROOM CORN.			
Per ton		$80 @200	
DAIRY PRODUCE			
Butter, Cal. choice	₱ lb	30 @	32
do, good		27 @	30
do, inferior		22½@	27
do, firkin		25 @	28
do, pickled		30 @	32½
Cheese, Cal. new		8 @	14
do, Eastern		14 @	17
EGGS.			
Eggs, Cal. fresh		27 @	28
do, Oregon		22 @	24
do, Eastern		19 @	20
do, Duck's'		17½@	20
FEED.			
Bran, per ton		16 00@17	00
Middlings		26 00@27	50
Hay		9 00@15	00
Straw		8 00@	—
do ₱ bale		95@	1 00
Oil cake meal		—@32	50
Corn Meal		42 00@43	00
FLOUR.—Superfine & Extra.			
Alviso Mills, hhl		4 25 @5	75
California		4 25 @5	75
City Mills		4 25 @5	75
Comms'l Mills		4 25 @5	75
Golden Gate		4 25 @5	75
Golden Age		4 25 @5	75
National Mills		4 25 @5	75
Santa Clara Mills		4 25 @5	75
Gsneses Mills		4 25 @5	75
Oregon		4 25 @5	75
Vallejo Star		4 25 @5	75
Vsnns, Oakland		4 25 @5	75
Stockton City		4 25 @5	75
Lambard. Sac		4 25 @5	75
FRESH MEAT.			
Beef, fr quality.	₱ lb	7 @	8
do, second do		5 @	7
do, third do		4 @	5
Veal		4½@	8
Mutton		4 @	4½
Lamb		5 @	6
Pork, undressed		6 @	6½
do, dressed		9 @	9¾
GRAIN, ETC.			
Wh't Cal. c'st. cl.		1 70 @1	75
do new		1 62½@1	65
do, shipping		1 72½@1	77½
do, milling		1 75 @1	80
Barley, Feed		1 37½@1	50
do new		92½@1	10
do, Brewing		1 50 @1	65
Oats, good to choice		1 50 @1	75
do common		1 45 @1	50
Corn, White		— @1	95
do, Yellow		— @2	00
Buckwhsat		— @3	00
Rye		1 50 @1	60
HOPS.			
California, 1873		35 @	37½
East'rn '73, ch'ice		37½@	45
MISCELLANEOUS.			
Beeswax, per lb		25 @	27½
Honey, choice		22½@	27½
do Dark		8 @	10
do Strained		8 @	12½
Pulu		— @	9½
Onions		50 @	90
NUTS—Jobbing.			
Cal. Walnuts		13 @	14
Peanuts per lb		8 @	9
Chils Walnuts		10 @	11
Pecan nuts		13 @	15
Brazil do		12½@	14
Coc'annts, ₱ 100		9 00 @10	—
Alm'de h'rd s'bell		10 @	12½
do, soft		18 @	24
Filberts		18 @	—
POTATOES.			
Sweet, per 100 lbs		— @	—
Cuffse Cove		— @	—
H. M. Bay		1 10 @1	15
Pigeon Pt		— @	—
Humboldt		— @	—
Petaluma		— @	—
Mission		1 00 @1	20
Salinas		— @	—
Bodega		— @	—
Ssc. River		60 @	90
S'ts Barbara		95 @1	05
Old Potatoes		50 @	75
POULTRY & GAME.			
Live Turkeys, hens per ₱ lb		18 @	20
do gobblers		16 @	18
Hens, per dz		7 00 @8	00
Roosters, young, large		6 50 @8	50
Broilers		3 00 @6	00
Ducks, tame, doz		4 50 @6	50
Geess, per pair		1 50 @2	00
Hare, per doz		2 50 @3	50
Snipe, Eng., doz		— @	—
Quail, per doz		— @	—
Mallard Ducks		— @	—
do small		— @	—
Wild Gasse, gray		— @	—
do white		— @	—
Doves, per dozen		1 00 @1	25
Prairie Chickens		— @	—
Grouse		— @	—
Rabbits		1 00 @1	50
do tams		4 00 @5	00
Venison, per lb		— @	—
PROVISIONS.			
Cal. Bacon, Light		14 @	15
do Medium		— @	13
do Heavy		— @	12½
Eastern do		13½@	14
Hams, Cal		13 @	13½
do Whittakere		— @	16
do Duffield, ch		— @	15
do Plankton & Armour		— @	14
do Boyd's		— @	14¾
do Stewart's		— @	14¾
Eastern Shonld'e		9 @	10
do new hame		— @	—
Cal. Smoked Beef		10 @	11
Lard, Cal		13 @	14
do Eastern		13 @	14
SEEDS.			
Alfalfa		13 @	15
Canary		5 @	6
Flaxseed		5 @	6
Ky. Blne Grase		40 @	50
Millet		12 @	15
Mustard, white		2 @	3
do. Brown		3 @	4
Italian Rye		25 @	30
Perennial do		30 @	35
Timothy		13 @	15
Sweet V Grass		60 @	75
Orchard do		30 @	35
Red Top do		30 @	40
Hungerian do		10 @	13
Lawn do		50 @	60
Clover Red		— @	20
do White		60 @	75
Alsike		— @	—
Esparto Grassin		—	1 00
Packets		— @	—
WOOL, ETC.			
Spring, short, lb		22½@	25
do choice Nort		24 @	28
Msdium gradee		18 @	22
Fall clip		— @	—
Burry		14 @	18
Hides, dry		16 @	18
do wet salted		8 @	9
Tallow, Crude		6½@	7
do Refinsd		7½@	8

FRUITS AND VEGETABLES.

WEDNESDAY M., July 8, 1874.

California Oranges are abont out of market. Gooseberries are very ecarce in first hands, and hardly quotable. Raepberries are higher. Apricots are very plenty, and the market is supplied with large quantities of very fine quality. Currants are so low that there can be little profit to the grower, and prices are almost nominal; it is even stated that large lots have been sold below the cost of picking and freight. Even with the steady consumption for canning and drying it is expected that a great deal will be allowed to go to waste. The range in quality of Plums is very wide, very choice samples commanding as much as 15c wholesale, while common lots are sold as low as 2c. Peaches are being forwarded more freely. Pears are not yet at all plenty. Watermelons are in market, selling at the rate of $50 ₱ 100, though the dozen is still the measure. The first cams in from Putah creek Monday, the consignment consisting of only a couple of hundreds. Figs are in market, but neither very plenty nor attractive as yet. A few pounds of the little St. Peter Grape found their way here yesterday, but we only found them at one house, and the price (37½ @50c) is almost prohibitory.

There have been no changes in the Dried Fruit Market.

In Vegetables, Garlic has declined to 6@8c; Peppers have fallen off 25c., and Green Okra 30c. Shell Beans are selling at 5@6c., and Egg Plant at 12½@15c.

FRUIT MARKET.			
Tabati, Or. ₱ M		35 00@40	00
Lorita, do		— —@—	—
Osl. do		— @—	—
Limee, ₱ M		— —@15	00
Cal. Lemons, ₱ M		— —@40	00
Australian do	.50	00@—	—
do per box		7 00@ 8	00
Bananas, ₱ bnch		3 50 @5	00
Cocoannts, ₱ 100		9 00 @10	00
Pineapples, ₱ dz		7 00 @9	00
Apples		8 @	12½
Cherries		5 @	10
do choice		10 @	18
Blackberries		10 @	15
do wild		— @	—
Strawberries ₱ lb		8 @	12
Gooseberries		— @	—
Raspberries		10 @	11
Currants		1 @	3
Apricots		1½@	2
Plums		2 @	15
Peaches, ₱ lb		3 @	10
Pears, Eating		1 00 @2	50
do Cooking		— @	—
do, Bartlett		— @	—
Crab Apples		— @	—
Nectarines		— @	—
Wat'rmsl's ₱ 100		50 00 @	—
Cantelo's ₱ 100		— @	—
Pomegran's, ₱ dz		— @	—
Figs		12½@	15
Grapes, Bl'k H'g		— @	—
do Muscat		— @	—
do Malavo'e		— @	—
do Sweetw'r		— @	—
do Mission		— @	—
do Rose of Fern		— @	—
do Tokay		— @	—
do Morocco		— @	—
do St. Peter		37½@	50
DRIED FRUIT.			
Apples, ₱ lb		6½@	8½
Pears, ₱ lb		10 @	12½
Peaches, ₱ lb		11 @	12½
Apricots, ₱ lb		— @	—
Plume, ₱ lb		8 @	10
Pitted, do ₱ lb		15 @	20
do Extra, ₱ lb		— @	—
Raisins, ₱ lb		5½@	12½
Black Figs, ₱ lb		8 @	10
White, do		10 @	15
Prunes		6 @	8
do German		12½@	15
Citron		30 @	35
Zante Currants		8½@	8½
Dates		12½@	—
VEGETABLES.			
Asparagus		8 @	10
Beets		— @	1
Cabbage, ₱ 100 lbs		— @	2 00
do new, doz		.50 @	60
Carrots, ₱ 100 lbs		1 00 @1	25
Cauliflower, doz		.50 @	60
Celery, doz		50 @	65
Garlic, ₱ lb		6 @	8
Green Peas		2½@	3
Green Corn ₱ doz		.18 @	22
Snm'rSquash, lb		4 @	5
Marro'fat Sq'sh, tn		60 00@	—
Artichokes, ₱ doz		15 @	25
String Beans, ₱ lb		— @	5
Lima Beans		— @	—
Parsnips		12½@	15
Shell Beans		5 @	6
Peppers, ₱ lb		15 @	25
Okra ₱ lb		25 @	40
Okra, Green		18 @	20
Cucumbers, doz		10 @	15
Tomatoes		3 @	5
Egg Plant ₱ lb		12½@	15
Rhnbarb		2½@	3
Lettuce		12½@	20

GENERAL MERCHANDISE.

WEDNESDAY M., July 8, 1874.

Bags and Bagging are firm at noted rates. A lot of 75,000 second-hand English Wheat Bags changed hands, it is said, at 9@12½c; sale on private terms. An improvement has been made in Eastern Cod, while Salmon and Mackerel are nowhere. Spices are dull, and prices lower. The Sugar war seems to have ended, for a time at least; and during the cessation of hostilities rates are ½c higher throughout the line. Syrups and Molasses are also firmer.

BAGS.			
Eng. Stand Wht		—14¼@14½	
Detrick's Machine			
Sewed, 22x36 E		—@13½	
do 22x36, do E W		—@14	
do 20x40, do A		—@14¾	
Flour Sacks ½s		10½—@12½	
" " ¼s		6½—@ 7¼	
Stand. Gunniss			
double seam		—15 —@16	
single seam		—13 —@13	
" Wool Sacks		65 —@—	
Barley Bags 24x36		—@15¼	
do 23x40		—@15½	
do 24x40		—@16¾	
do 2½x36		—@17	
Oat Bags, 24x49		16 @16½	
do 28x36		— @17	
Hessian 40-in. gds		9½—@10	
do 45		10½—@11	
do 60		— @15	
CANNED GOODS.			
Asst'd Pie Fruits in 2½ ₱ lb cans		2 75 @ 3	00
do Table do		— @ 2	75
Jams & Jellies		3 75 @ 4	25
Pickles ½ gl		— @ 3	50
Sardines, qr hoxl		75 @—	—
do hf hoxes		3 00 @—	—
COAL—Jobbing.			
Australian, ₱ ton		11 00 @—	—
Coos Bay		— — @10	00
Bellingham Bay		— @ 8	50
Seattle		— — @11	—
Cumberl'd, cks		.22 00 @23	00
do hnlk		.18 00 @20	00
Mt. Diablo		6 25 @8	25
Lehigh		.20 00 @22	50
Liverpool		.11 00 @12	—
West Hartley		.12 00 @14	—
Scotch		9 50 @10	00
Scranton		.15 00 @17	50
Vancouver's Isl		.11 00 @11	50
Charcoal, ₱ sk		75 @	—
Coks, ₱ bbl		— @	60
COFFEE.			
Sandwich Island		— @	22
Central Amerio'n		22 @	23
Costa Rica per lb		23½@	24
Guatsmala		21 @	22
Java		28½@	30
Manilla		22 @	—
Ground in ca		— @	30
Chicory		10 @	—
FISH.			
Pac. Dry Cod, new		5 @	6
cases		6 @	7
do bonelees		11 @	12
Eastern Cod		7 @	8
Salmon in bbls		.8 00 @	—
do ½ bbls		4 50 @	—
do 2½ ₱ cans		— @3	00
do 2 lb canB		.2 65 @2	75
do 1 lb cans		1 75 @	—
Do Col. R. ½ lb		— @	—
Pick. Cod, hbls		.22 00 @	—
do ½ bbls		11 00 @	—
Bos Sm'k'd Her'g		40 @	50
Mack'l, No. 1, ½ bls		8 00 @8	50
" Extra		— @9	00
" in kits		.2 00 @2	50
" Ex mess		.3 00 @3	50
" Ex mess. ½ bs		—@12	00
Sm'k Herr'g, bx		50 @	55
NAILS.			
Assorted size, lb		4¾ @	7
OILS.			
Pacific Glne Co. Neat F't No. 1		— @1	00
Pure		1 25 @	—
Castor Oil, No. 1		— @1	75
do do No. 2		— @1	60
Cocoannt		45 @	50
Olive Plagniol		.5 00 @	—
do Possel		4 75 @	—
Palm		9 @	—
do Bagicalupi		— @	—
Linssed, raw		— @1	02
do boiled		— @1	07
China nut in cs		— —@	82½
do bulk		70 @	72
Sperm, crude		— @1	40
do bleachsd		— @2	20
Coast Whales		35 @	40
Polar, refined		50 @	55
Sperm		1 40 @1	50
Lard		95 @1	05
Coal, refined Pet		37½@	40
Olsophine		— @	34
Dsvoe'e Bril't		27 @	29
Long Island		— @	34
Enrska		37½@	40
Dsvoe's Pstro'm		26 @	29
Barrel kerosens		— @	26
Olive		4 00 @9	50
Downsr Keross's		— @	42½
Gas Light Oil		— @	34
PAINTS.			
Atlan. W. Lead		7½@	12½
Whiting		— @	2
Putty		4½@	5
Chalk		— @	2½
Paris White		2¾@	—
Ochre		— @	3½
Venetian Red		3½@	5
Red Lead		7 @	11
Litharge		10 @	11
Eng. Vermillion		1 00@1	25
RICE.			
China No. 1, ₱ lb		6½@	6¾
do 2, do		5½@	5¾
Japan		5½@	6
Slam Cleaned		7 @	—
Patna		— @	6¾
Hawaiian		7 @	7¾
Carolina		10 @	10½
SALT.			
Cal. Bay, per ton		10 00@14	00
do Oommon		5 00@ 7	00
Carmen Island		.11 00@13	00
Liverpool fine		.23 00@25	00
do coarse		15 00@20	00
SOAP.			
Castile ₱ lb		10 @	11
Local brands		5 @	8
SPICES.			
Allspice, per lb		15 @	16
Cloves		55 @	60
Cassia		22½@	25
Citron		— @	30
Nutmeg		— @1	07½
Whols Pepper		17½@	18
Pimento		— @	15½
Gr'nd Allsp'prdz		— @1	00
do Cassia do		— @1	50
do Clovee do		— @1	50
do Mnetard do		— @1	25
do Ginger do		— @1	00
do Pepper do		— @1	00
do Mace do		— @1	60
SUGAR, ETC.			
Cal. Cube per lb		10½@	—
Partz' Pro. Cube bbl or 100 lb bxs		— @	11
do in 50 lb bxs		— @	11½
do in 25 lb bxs		— @	11½
Circle A crnshed		— @	10½
Powdered		— @	10¾
Granulated		— @	10
Dry granulated		10 @	10½
Hawaiian		8 @	9
California Beet		— @	10¼
Golden O		— @	9½
do Rey'g grade		— @	6½
Cal. Syrup in bla		— @	27½
do in ½ bls		— @	30
do in kegs		— @	32
Hawaiian Molasses		20 @	25
TEA.			
Oolong, Canton, lb		19 @	25
do Amoy		28 @	50
do Formosa		40 @	80
Imperial, Canton		25 @	40
do Pingeuey		45 @	80
do Moynne		60 @1	00
Gunpo'der, Cant		30 @1	42½
do Pingsnsy		50 @	90
do Moynne		65 @1	25
Y'ng Hy., Canton		28 @	40
do Pingsuey		40 @	70
do Moyune		65 @	85
Japan, ½ chests, bulk		30 @	75
Japan, lacquersd bxs, 4½ and 5 lbs		45 @	67
Japan do, 3 ₱ bxs		45 @	90
do pl'n bx, 4½ ₱ lb		35 @	65
do ½ & 1 ₱ paper		30 @	55
TOBACCO—Jobbing.			
Bright Navys		50 @	60
Dark do		43 @	55
Dwarf Twist		57 @	62½
12 inch do		57 @	62½
Light Prssssd		65 @	75
Hard do		60 @	70
Conn. Wrap'r		40 @	50
Penn. Wrapper		20 @	30
Ohio do		7 @	15
Virgi'a Smok'g		60 @	95
Fins ot chs'g, gr		.8 50 @9	25
Fine cut chewing, buc'te, ₱ lb		.75 @	90
Banner fine cnt		— @9	00
Enrska Oala		.8 75 @9	00
TURPENTINE.			
Eastern		70 @	75

LEATHER.

WEDNESDAY M., July 8, 1874.

Leather is only moderately active. Sales are mainly in small jobbing lots, as stock is required. California brands are slow of sale. There is still some inquiry for medium weight Jodots.

City Tanned Leather, ₱ lb	25@29
Santa Cruz Leather, ₱ lb	25@29
Country Leather, ₱ lb	24@28
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 13 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornelian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Beaumerville 15 Kil	60 00@ — —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 35
California Kip, ₱ doz	40 00@ 60 00
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Backs, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@ 5 25
Good French Calf Boot Legs, ₱ pair	4 00@ 4 75
French Calf Boot Logs, ₱ pair	4 00@ — —
Harness Leather, ₱ lb	30@ 37½
Fair Bridle Leatber, ₱ doz	48 00@ 72 00
Skirting Leather, ₱ lb	34@ 37½
Welt Lsather, ₱ doz	30 00@ 50 00
Buff Leatber, ₱ foot	18@ 21
Wax Side Leather, ₱ foot	17@ 19
Eastern Wax Leather	—@—

LUMBER.

WEDNESDAY M., Jnl; 8, 187

The Lumber market is unchanged. Trade is active.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref, M	18 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

PUGET SOUND PINE —Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal foot	1
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾

REDWOOD—Retail.

Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	27 50
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

METALS.

WEDNESDAY M., July 8, 1874.

Quicksilver is still firm at $1.35 ₱ lb. There is nothing new to report of Iron and Steel.

American Pig Iron, ₱ ton	— —	@ 40	00
Scotch Pig Iron, ₱ ton	— —	@ 40	00
Whits Pig, ₱ ton	— —	@ 50	00
Refined Bar, bad assortment, ₱ lb	— —	@—	3½
Refined Bar, good assortment, ₱ lb	— —	@—	4
Boiler, No. 1 to 4	— —	@—	5½
Plats, No. 5 to 9	— —	@—	5½
Sheet, No. 10 to 13	— —	@—	5½
Sheet, No. 14 to 20	— —	@—	5½
Sheet, No. 24 to 27	— 08	@—	09
Horse Shoes, per keg	7 50	@ 8	00
Nail Rod	— 9½	@—	—
Norway Iron	— 8	@—	—
Rolled Iron	— 6	@—	—
Othsr Irons for Blackemiths, Miners, etc.	— —	@—	4½
COPPER.—			
Braziers'	— 31	@—	32
Copper Tin'd	— 45	@—	—
O. Niel'e Pat	— 50	@—	—
Sheathing, ₱ lb	— —	@—	24
Sheathing, Yellow	— —	@—	25
Shsathing, Old Yellow	— —	@—	12½
Composition Nails	— 24	@—	—
Composition Bolts	— 24	@—	—
TIN PLATES.—			
Platee, Charcoal, IX ₱ hox	—	@ 16	00
Plates, IC Charcoal	14 00	@ 14	50
Roofing Plates	12 50	@ 15	00
Banca Tin, Slabs, ₱ lb	— 33	@—	37
SEEL.—English Cast, ₱ lb	— 20	@—	25
Anderson & Woode' American Cast	— 10	@—	17
Drill	— 18	@—	22
Flat Bar	— 18	@—	22
Plough Points	— 16	@—	17
ZINC	— —	@—	11
Zinc, Sheet	— —	@—	11½
NAILS—Assorted sizes	— 5¾	@—	8
LEAD.—			
Pig, ₱ lb	— 5¾	@—	6
Bar	— 6½	@—	7
Sheet	— —	@—	9
Pipe	— —	@—	8½
QUICKSILVER, per lb	— —	@ 1	35

RETAIL GROCERIES, ETC.

WEDNESDAY M., July 8, 1874.

There have been no changes to note in our list of Groceries.

Butter, Cal. ch'ice	30 @	32½	
do common	22 @	25	
Cheese, Cal., lb	15 @	19	
Lard, Cal., lb	12½@	15	
Flour, sx. fam, bl	5 75 @6	00	
Corn Meal, lb	2½@	3½	
Sugar, wh. crsb'd	— @	10	
do lt. brown, lb	7 @	9	
Coffee, Sbarboro's			
family gr'nd, lb	— @	35	
Coffee, green, lb	24 @	32½	
Tea, fine blk, 50, 65, 75	@1	00	
Tea, finst Jap, 55, 75, 90	@1	00	
Candles, Admant'e	17 @	25	
Soap, Cal., lb	— @	10	
Oan'd Oysters, dz	2 00 @2	50	
Syrup, S F. Gol'n	35 @	40	
Dried Apples	8 @	10	
Dr'd Ger. Prunes	16 @	17	
Dr'd Figs, Cal	9 @	10	
Dr'd Peaches	10 @	12	
Oils. Kerosene	30 @	35	
Winee. Old Port	3 50 @5	00	
do Fr. Claret	1 00 @1	25	
do Cal., dz. bot	3 00 @4	50	
Whisky, O.B, gal	3 50 @5	00	
Fr. Brandy	4 00 @10	00	
Rice, lb	10 @	12½	
Yeast Powders, dz	1 50@2	00	

† Per lb ‡ Per dnzen. ¶ Per gallon

S. F. RETAIL MARKET RATES.

WEDNESDAY M., July 8, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

Poultry and Eggs are unchanged. Game is confined to Hares, Rab

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m



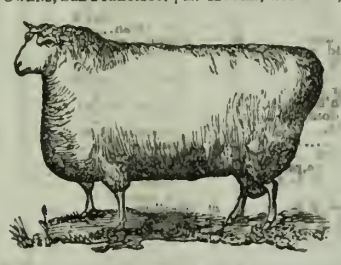
A. G. STONESIFER,

BREEDER OF

Pure Blooded French Merino Sheep,

Has for sale a choice lot of Rams and Ewes, on the Orlstimba Ranch, six miles west of Hill's Ferry, Stanislaus County, Cal. 22v7-3m

B. W. Owens, San Francisco. | E. Moore, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

N. GILMORE,

Importer and Breeder of

Angora or Cashmere GOATS

—OF—

PURE BLOOD

—AND—

ALL GRADES.

For sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address

N. GILMORE,
El Dorado, El Dorado county,
11v6-eow California.

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

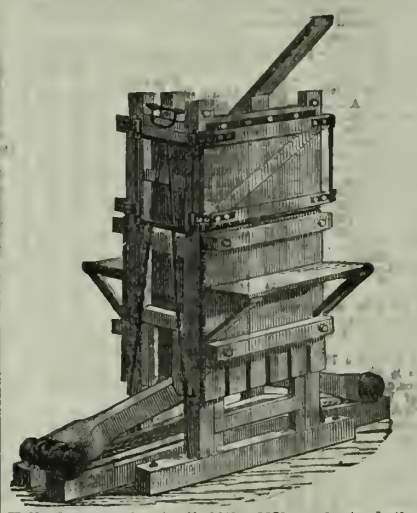
A. MAILLIARD,
17v7-3m San Rafael, Marin Co., Cal.

1873. THE IMPROVED EAGLE HAY PRESS. 1873.

THE KIMBALL MANUFACTURING COMPANY,

OWNERS OF THE PATENT AND SOLE MANUFACTURERS ON THE PACIFIC COAST,

COR. FOURTH AND BRYANT STS., - - - SAN FRANCISCO, CAL.



Several years were devoted by the patentee to the perfection of this powerful press.

His unprecedented sale at the East induced the Kimball Manufacturing Company to introduce them in California and the Pacific States.

During the past season a number of important improvements have been made, in order to gain all the power desired in condensing the weight and size of the bales. The wood and iron of the frame have been increased and strengthened, and it is now the most perfect and powerful press in use.

It Possesses Other Advantages:

Being cheap, simple to manage, with no intricate machinery to get out of gear, thus losing time waiting for a new piece.

All who have used these presses pronounce them superior to anything used heretofore.

The power applied by means of two levers increases in ratio to the resistance; and as the levers approach a perpendicular position, the power can be scarcely estimated.

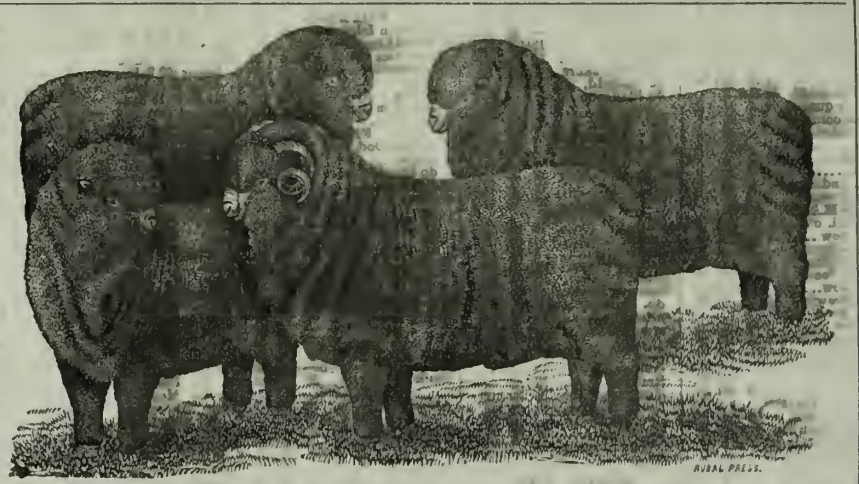
Three men, with one horse, can bale from ten to fifteen tons per day; each bale weighing from 300 to 350 lbs., using less rope than any other press.

When a bale is pressed and fastened, the follower runs down of its own weight and the bales can be taken out on either side.

On account of its great power, it is well adapted to pressing hides, rags, cotton or moss.

The particular attention of wool growers is called to our improved Wool Press, constructed on the same principle, which was tested at the State Agricultural Hall, Sacramento, April 18th, 1871, and stood the test of a bale of wool weighing 550 pounds. Reference, Major Robert Beck.

These presses are manufactured in San Francisco by the Kimball Car and Carriage Manufacturing Co., who have a stock constantly on hand. Prices $250.00 for Hay Presses; $350.00 for Wool Presses. Weight of Hay Press, 2,500 lbs.; Wool Press, 3,500 lbs. Can be shipped in pieces or set up. 13v7-2am-3m



L. U. SHIPPEE, Importer and Breeder of Thoroughbred Spanish Merino Sheep and Short-Horned Durham Stock, Stockton, Cal.

I wish to call your attention to my flock of Spanish Merino Sheep, both Ewes and Bucks, imported during the last two years, and selected from the best flocks in Vermont. Unequaled on the Pacific Coast for quality and size, many of them having taken first premiums both in Vermont and California. Should you or any of your friends require sheep of this quality, you will do well to call and examine this flock before purchasing elsewhere, as I intend to sell them at greatly reduced prices from what they have formerly been sold.

My Flock Consists of 1,500 Sheep, 1,200 Imported and 300 of my own Breeding.

P. S.—This flock is not only the finest but the largest flock of Imported Spanish Merino Sheep on the Pacific Coast. They have been selected from the flocks of the best breeders in Vermont, such as Rockwell, Sanford, Rich, Hammond, Saxton, Dean, Ellsworth, Remley, Stickney, and others who are acknowledged to be among the best breeders of Spanish Merinos in America. 24v7-eow-4m



The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept upon the MERINO RANCH



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. City Office—315 California Street, San Francisco.

SEVERANCE & PEET,
10v7-eow Importers and Breeders of Spanish Merino Sheep.

Kentucky Sales of Short-Horn Cattle for 1874.

	No. Head.
Hughes & Richardson, Lexington, July 22	50
Wm. Warfield & Co., Lexington, July 28	140
B. F. & A. Vanmeter, Winchester, July 24	80
J. V. Grigsby, Winchester, July 25	50
I. O. Robinson & Co., Winchester, July 27	40
Warnock & Megibben, Cynthiana, July 28	80
F. J. Barbee, Paris, July 29	60
C. M. Clay Jr., Paris, July 30	90
J. Scott & Co., Paris, July 31	70
J. Sudduth, Newtown, Aug. 1	40

The above sales comprise all of the most popular families of Short-Horn Cattle in America, and many imported animals.

Apply to the above addresses for their Catalogues. m30-6w

U. S.
LIVE STOCK EXCHANGE,
COR. FIFTH & BRYANT STS.

Cattle, Sheep, Milch Cows, Hogs and Horses sold on commission or bought on farm for cash.

Our accommodations for Live Stock are the most convenient, complete and extensive in the city or State. Thoroughbred Durham Cows wanted. Address,

DAWSON & BANCROFT, 449 5th St., S. F.
Special rates to members of the Grange. m9

JERSEY CATTLE.

A few head of very choice Jersey Cows—Heifers and and Bull Calves—for sale. Apply to
15v7-3m R. G. SNEATH, Menlo Park.

Short-Horned Cattle & Berkshire Pigs.

FOR SALE

A few fine young Bulls, one and two years old, got by Grand Turk, of Oak Home. Number of Bull in herd-book, 8,258. Also, pure Berkshire Pigs, Work Horses and Mules, to be sold on reasonable terms.

WILLIAM L. OVERHISER,
Oak Home Ranch, Waterloo Road, three miles from Stockton. 3v7-3m

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.
Works, King street, bet. Second and Third. fe15-eow



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

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Agricultural Articles.

FOR THE HARVEST OF 1874.



☞ Hoadley Engines, Russell End-Sbake Threshers, Pitts' Powers, Treadwell's Single-Gear Headers, Whitewater Wagons, etc., etc. Send for our Illustrated Price List, to Treadwell & Co., San Francisco.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
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CELEBRATED MITCHELL WAGON



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WATERHOUSE & LESTER,

IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware.

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

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Woolsey's Patent Wheels,

The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has the metallic-shouldered band; and it can be repaired as easily as the common wood wheel.

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17, 19 and 21 Sevenih street, - - SACRAMENTO.
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BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

C. OREGO. S. C. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;
And other first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
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H. C. SHAW,

STOCKTON, CAL.

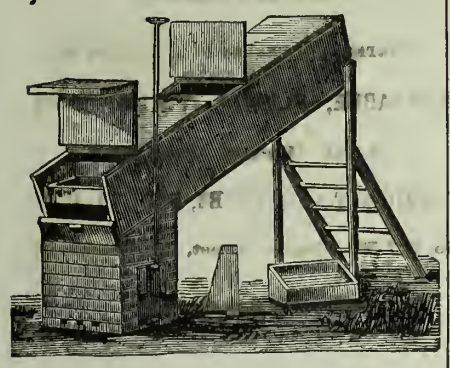
Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
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Ryder's American Fruit Drier.



This DRIER is a perfect success in the East, and will be on this Coast when its merits are known. Its cheapness brings it within the means of every Fruit Grower. The uniformity and perfection of its work challenge comparison. The principle claimed for this Drier (and violated in all other Driers in use), is, that no moisture shall come in contact with the fruit after the cut surfaces are once sealed by the heat, to open the cells and allow the aroma and fine qualities of the fruit to escape, which makes it undeniably the most perfect, as it is the most simple mechanical method for cureing Fruits, Vegetables, Meats and Grains ever invented. This Drier can make Raisins and the most beautiful crystalized fruit confection, equal to any imported. Can any other Drier do this? The fruit cured on this Drier last season, in this State, took the premium at the State Fair. Our Factory Drier will cure 60 bushels of peaches in a day. Send for Circulars. Farm, County and State Rights, and Driers with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

THE CELEBRATED

DUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

J. M. KEELER & CO.,
Commission and Forwarding Merchants.

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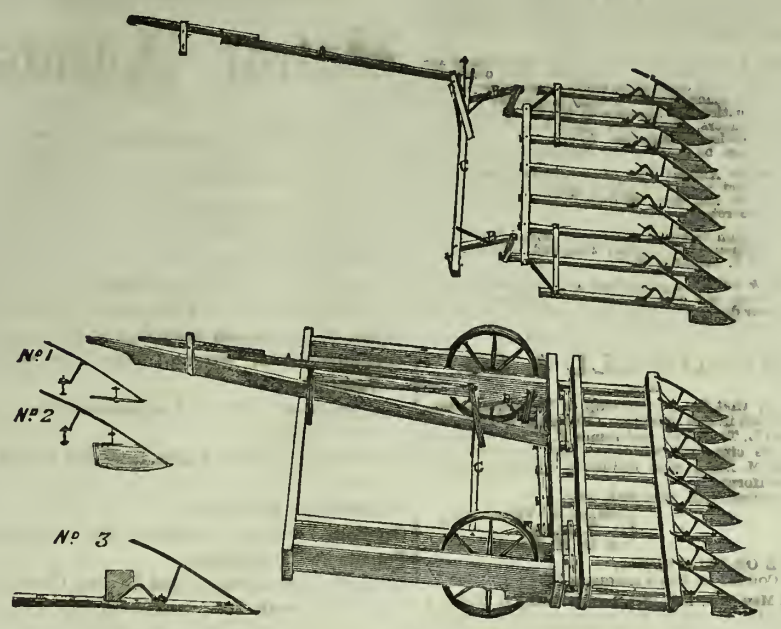
Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.

W. M. JACKSON'S PATENT GRAIN LIFTER.



This is the only Lifter that has enabled the Header to cut all kinds of lodged grain. It has been in use several years and gives entire satisfaction, not only in cutting lodged grain, but in saving crinkled or straw fallen grain. The Lifter can be had by addressing W. M. JACKSON, Woodland. The price will be SIXTY DOLLARS for ten-feet headers; SEVENTY DOLLARS for twelve-feet headers. I will sell them to dealers when ordered the same as heretofore; also to the Grange Agent as a dealer.

W. M. JACKSON,
25v7-4t Woodland, Cal.

THE CELEBRATED NEW DRAW-FEED

WHEELER & WILSON

SEWING MACHINES

Are without exception the most desirable for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in public favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.
E. W. HARRAL, Agent,
20v7-4m-15p 427 Montgomery street, S. F.

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TAKE NOTICE.

WE ARE SELLING

FRENCH CHINA, GLASSWARE,

PLATED WARE, ETC.,

CHEAPER THAN ANY OTHER HOUSE

ON THE PACIFIC COAST.

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Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

Address, W. H. & G. B. PEPPER,
21v6-1y Petaluma, Sonoma Co., Cal.

WHALE OIL SOAP,

—FOR—

Destruction of Bugs on Plants, Etc.

PHŒNIX OIL WORKS.

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IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

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STOVES and RANGES,

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THE HENRY CLAY,

THE EMPIRE CITY,

THE ALVARADO.

THE MONITOR, wrought iron body, cast iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

MILK PAILS, PANS, CHEESE HOOPS, ETC.

BABBIT METAL.

Wire for Fencing and Baling.

ALSO, METALS, HOUSE FURNISHING HARDWARE, JAPANNED GOODS, ETC., ETC.
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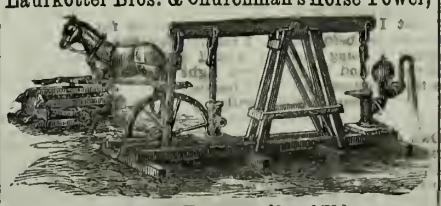
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

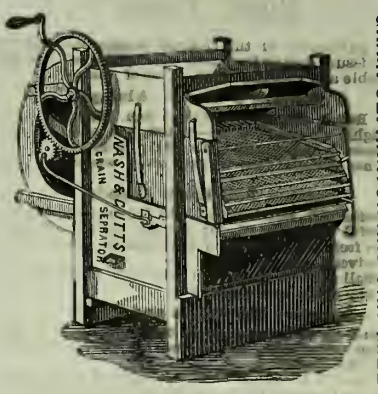
Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour. WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
v7-2m-3m Cor. J and 10th Sts., Sacramento.

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT GRAIN SEPARATOR AND FAN MILL.



THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars address

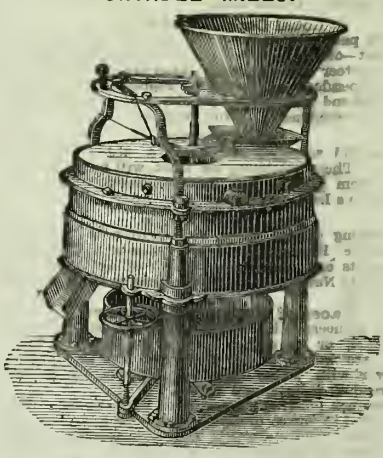
NASH, MILLER & CO.,
No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

J. WAGNER,

MANUFACTURER OF

FRENCH BURR MILL STONES AND PORTABLE MILLS.



General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. 13v7-3m-2am

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CARBOLIC SOAP

FOR

SHEEP WASH!



COMPOSITION—OLEIC ACID, NICOTINE, SULPHUR, CARBOLIC ACID & ALKALI.

It destroys and removes Scab, Ticks, Fleas, Mange, Scratches, Insects on Plants and Trees, Foot-Rot, etc., etc. Being strongly impregnated with CARBOLIC ACID, it is one of the best disinfectants known. Its healing, cleansing and disinfecting qualities are unsurpassed.

The STANDARD SOAP COMPANY also manufactures Laundry Soap, Family Soap, Hard Soap, Soft Soap, Marine Soap, Kane's Condensed Soap, Washing Powder, Washing Fluid, Liquid Laundry Bluing, Harness Soap, Thomas' Cool Water Bleaching Soap, Thomas' Patent Glycerine Soap, Mottled and White Castile Soap, Silicated Saponia, Bay Rum, Florida Water, Hair Oils, Extracts, Perfumes, Colognes, Cosmetics, etc., etc.

204, 206 and 208 Sacramento Street,
16v7-3m SAN FRANCISCO, CAL.

CO-OPERATIVE MARBLE WORKS.

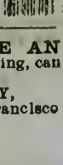
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Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

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21v2-1y



FARMERS WANTING TO HIRE AN

Engine and Engineer for the season, for threshing, can hear of one by calling at, or addressing,

J. W. RILEY,
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Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The RURAL PRESS—established Jan. 1870, has been thoroughly a farmer's paper—" first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfluities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast, that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with this interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the RURAL has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than has been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the RURAL PRESS.

The S. F. Market Reports

Will receive greater attention in the department of DOMESTIC PRODUCE than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the PACIFIC RURAL PRESS. We commence the new year with a regular circulation of

Over 5,000 Copies,

A far greater issue than that of any weekly on this Coast, independent of a daily publication. If our friends will continue to "help us help ourselves," we hope to reach a circulation of 8,000 this year, and do a correspondingly greater service of good. While we have the greatest advantages and can make by far the best weekly for

Agriculturists on This Side of the Continent.

We cannot expect one-half so large a circulation as journals in older and more populous districts. Consequently readers cannot rightly expect such a paper here at Eastern rates.

No Premiums But a Good Paper

Do we offer. A flashy chromo (or cheap map), with an ill suited paper, will hardly satisfy the farmers of this Coast, whose time is too precious for trifling. To many of you the benefit of a reliable and valuable paper should reach a hundred fold its cost, while to all a poor journal would be dear at any price.

Sample Copies Furnished Free

On receipt of stamp for postage.

Agents are Wanted

Who will do more or less active canvassing. To such we will furnish free samples and pay liberally for their services.

Terms of Subscription:

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To Granges and Farmers' Clubs, furnishing club lists, $3 per annum.

DEWEY & CO., Publishers,
Office, No. 224 Sansome street, San Francisco.

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th. R. S. Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhibition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers, Mechanics' Institute, No. 27 Post street, San Francisco, California. In order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Williston, Secretary; J. B. Frisbie, Treasurer.

TREADWELL & CO.

We certify that the partnership of Treadwell & Co., doing business in San Francisco, California, is composed of Leonard L. Treadwell and James F. Place, who both reside in the city and county of San Francisco, and William O. M. Berry, who resides in Oakland, Almeda county, California.

San Francisco, Cal., May 26th, 1874.

LEONARD L. TREADWELL,
JAS. F. PLACE,
WM. O. M. BERRY.

STATE OF CALIFORNIA, }
CITY AND COUNTY OF SAN FRANCISCO. }

On this May 27th, 1874, before me Henry C. Blake, a Notary Public, in and for said city and county, personally appeared Leonard L. Treadwell, James F. Place and William O. M. Berry, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

HENRY C. BLAKE, *Notary Public.*

Filed May 1st, 1874.
WM. HARNEY, County Clerk,
jy4-4w By S. C. ELLIS, Deputy.

DURHAM STOCK AS BUTTER MAKERS.

The following letter is published at the instance of Peter Wall, Esq.

GREEN VALLEY RANCH, Marin Co., May 8th, 1874.

MR. J. B. REDMOND—*Dear Sir:* We have just churned the cream obtained in seven days from our three-year-old heifer which we bought of you, and the result is fourteen and a half pounds (14½ pounds).

Thinking that you might be interested in the matter I thought best to drop you a line. If any person thinks that your Durham stock does not milk well I would like to have them swallow this statement.

Last year after bringing her from your place (and of course as a two-year-old), and after four months from calving, she made, on dry feed in August, in one week, nine and a half pounds. Respectfully yours,

25v7-4t O. ALLEN & SON.

Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

L. P. MCCARTY—General Agent.
A. C. KNOX, City Soliciting and Collecting Agent.
W. H. RATTENBERRY—California.
CHAS. W. OTIS—Solano County.
C. M. DALY—Colusa County.
CHAS. T. BELL—Alameda, Santa Clara and Santa Cruz Counties.
J. D. CAREY—Sonoma County.
J. W. ANDERSON—Orange and Santa Ana, in Los Angeles County, Cal.
HOON ALSTON—San Luis Obispo, San Bernardino and SanDiego Counties.

THE END-SHAKE THRESHER.—The following letter is from Wm. P. Harkey, Esq., Sheriff of Sutter county, referring to the value of the Lanfenberg End-Shake Shoe for threshing machines:

YUBA CITY, CAL., March 25, 1874.

MESSRS. TREADWELL & CO., San Francisco.—*Gentlemen:* In regard to the Lanfenberg End-Shake Shoe, which I bought of you last season, I will say I have given it a thorough trial, and if I could not get another I would not take One Thousand Dollars for it. I used it throughout the season on a Russell Separator, which I had run previously with a side-shake, and it saved me a great deal of trouble and much loss. It saves all the grain. I consider it the best and most valuable improvement on the threshing machine yet brought out. It is absolutely indispensable to the economical working of a good thresher. WM. P. HARKEY.

13v7-3m

A COMPLIMENT.

PLAINSBURG, MERCED CO., CAL., June 22, 1874.

DEWEY & CO.—*Gentlemen:* I herewith tender my grateful acknowledgements for the energy, promptness and efficiency which you have displayed in procuring my patent.

Although you were entire strangers to me when I first communicated with you, I soon felt satisfied you were gentlemen of integrity, and shall always be happy to represent you as such. Very truly yours,

H. W. RUCKER, M. D.

OAMPO, SAN DIEGO CO., CAL., July 3d, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* To-day I received the patent and other papers of my animal trap, that you so successfully worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long. I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into your hands.

I remain yours truly, A. M. GASS.

ONE of our most valued exchanges is the PACIFIC RURAL PRESS, published by Dewey & Co., San Francisco, California. Every number contains a vast amount of general news from the far west, besides much valuable information in the way of Grange news.—*The Farmer's Friend, Mechanicsburg, Pa.*

PLAINFIELD, July 4th, 1874.

MESSRS. DEWEY & CO.—*Dear Sirs:* I acknowledge receipt of yours of 2d inst., inclosing my Letters Patent. I thank you for the interest you have taken in obtaining the same. Yours truly, M. W. COON.

DR. E. J. FRASER, Homœpathic Physician and Surgeon, has removed his office and residence from 102 Stockton street to No 305 Kearny street, northwest corner of Bush. 6v7-3m

DEWEY & CO.,

American and Foreign

Patent Agents.

No. 338 Montgomery St.

SAN FRANCISCO.

Patents Obtained Promptly.
Caveats Filed Expeditiously.
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Patents Secured in Foreign Lands.
Assignments Made and Recorded in Legal Form.
Copies of Patents and Assignments Procured.
Examinations of Patents made here and at Washington.
Examinations made of Assignments Recorded in Washington.
Examinations Ordered and Reported by TELEGRAPH.
Interferences Prosecuted.
Opinions Rendered regarding the Validity of Patents and Assignments.
Rejected Cases taken up and Patents Obtained.
Every Legitimate Branch of Patent Agency Business promptly and thoroughly conducted.
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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, JULY 18, 1874. [Number 3.

H. B. Jolley.

We present to the readers of the PRESS to-day, a portrait of another prominent member of the Order of Patrons of Husbandry—Bro. H. B. Jolley, Master of Merced Grange, the first organized in Merced county. The friends of Mr. Jolley pronounce the accompanying portrait an admirable likeness, and we freely confess that we feel a degree of pride in the portraits that we have given of our friends, for we are a little sensitive in regard to the looks of our paper as well as to the matter contained therein, and we are proud in knowing that the personages whom the PRESS has introduced to its readers, present an appearance on paper equal to that of their record in the world outside.

The subject of our present sketch was born in Madison county, Indiana, on the 30th of November, 1824. His grandfather, W. H. Jolley, was a captain in Morgan's riflemen in the revolution of '76, and for many years afterwards judge of a court in Southern Ohio. His father, who was a Universalist minister, died when this son was in his fourteenth year, leaving his widow in charge of seven children and with limited means. The oldest son was an invalid, consequently the support of the family depended on the exertions of the mother and the subject of our sketch. Through the exertions of his mother and by working on a farm in summer, and attending school in fall and winter, he secured quite a liberal education. He also attended several select schools, and for some years followed teaching as a calling.

In 1845 he was united in marriage with Miss Louisa W. Beemer. In 1848 he removed to Illinois, and in 1850 had his mother and younger brothers brought to his home, and settled them on his farm. During the succeeding year, he was elected County Surveyor, which office he held for two terms, when he was elected Clerk of the County Court.

When Kansas and Nevada were opened by government for settlement, he removed to Kansas, and was appointed Marshal of the 13th district, and a judge of the first election held in Kansas.

His family being dissatisfied with the condition of things in Kansas, they left that State, and in 1861 crossed the plains and came to California; since which time he has been engaged in farming in the San Joaquin valley, the last three years very extensively. In 1872 he farmed 3,500 acres of land, of which only 1,500 were harvested. In 1873 he sowed 3,500 acres, of which only 300 were harvested.

As was stated above, Mr. Jolley organized the Merced Grange, in the summer of 1872, and is now Master of the same. At the organization of the State Grange at Napa in July, 1872, he was elected a member of the Executive Committee, in which he has continued to render valuable services ever since. He was also soon after appointed by the Master of the State Grange as Deputy for Merced county, for one year, and continues to hold that position. As Deputy he has organized several Granges in Merced county, and also two Granges in Tulare county. He has always displayed most commendable zeal for the good of the Order, and has well exemplified the qualities of a good Patron. He is now farming near Merced City. He has acted a very prominent and useful part in the Farmers' Canal Company, of Merced county.

THE "Resources of California," by Hittell, sixth edition, re-written, has just been published by A. Roman & Co. The volume is an interesting one, not only to Californians, but to people in the Eastern States and abroad, who wish reliable information of the State. The book treats of the topography of the State, society, climate, scenery, commerce, manufactures, agriculture, mining, geology, botany, zoology, law, topographical names, etc. The chapter on the last-mentioned subject might be read with benefit by some of our Eastern readers, who get the familiar names of the country so badly mixed. Considerable space is allotted to both agriculture and mining, and the subject matter concerning them is well written up. As a whole, the work is well worthy of perusal, containing not only much that is interesting, but considerable valuable information as well.

Wheat, Fruit, Potato-bugs, etc., at the East.

In Pennsylvania, New York and some other Eastern States, wheat growing is evidently being resuscitated, and the general report from this crop is at present exceedingly favorable. Fruit is also looking well; but the potato-bug is looking decidedly bad. In some portions of Pennsylvania this destructive and odious pest is greatly annoying the farmers. It is asserted that they travel by rail—not on the rail fence, as old-fashioned bugs have been in the habit of doing, but by the railroads of the country. The theory is quite plausible, for it is well known that the potato-bug, as a flying machine, is a failure; and no visible means of transit has yet been made known by which he reaches his destination. He has been caught "stealing a ride" on the axles and other parts of railroad cars, and though even a larger proportion of his, than of the human race, is crushed and dumped into eternity by the improved facilities for transportation, there will enough be left for purposes of propagation.

Among other current agricultural intelligence received from the East, Mr. J. B. Jones, of Rochester, N. Y., writes us as follows, under date of July 6th:

"After a long, cold spring, we are having a fine growing summer. Wheat, that looked so brown and lifeless in April, has thickened up, and is fully an average in all the Eastern States. Corn looks well and all other spring crops. Grass is heavy. The fruit crop, which with us is an important one, promises well. Strawberries have been fine and cheap (10c.) Raspberries and cherries are now ripe, and are a fine crop, bringing good prices, or from 10c. to 15c. per qt. Grapes, apples, pears and peaches have all set well—peas, perhaps, the least; while peaches have not been for a long time as promising. The potato-bug has at last reached us, and, although as yet only a part of our fields have been attacked, the damage is quite serious, and another year we shall have a *full* crop of bugs. Well, we must fight them."

FAIR OF THE NEW JERSEY STATE AGRICULTURAL SOCIETY.—The Secretary of the New Jersey State Agricultural Society sends us the programme and premium list of the sixteenth annual fair of this society, which is to be held at Waverly station, near Newark, commencing on Monday, September 14th, to continue throughout the week. The premiums are liberal in amount and are judiciously apportioned.



H. B. JOLLEY, MASTER OF MERCED GRANGE.

A Short Cut to Peach Culture.

It is to cut off any old branch of a peach tree, stick it into the ground—it may be used for a bean-pole while sticking there—and it will take root, bear splendid peaches—scorning the assistance of irrigation—performing all the functions of an old-style peach tree, and requiring none of the cares and labors which have hitherto been bestowed upon that class of trees. This, it seems, is the way they manage these things about Stockton. The occupation of the nurserymen in the vicinity of that celebrated city is evidently going, going, and will soon be gone. The grand patriarch of this new order of fruit trees, which now stands on the ranch of Mr. Learned, near that place, was originally a common garden stake. It is now pointed out to the effeminate, youthful occupants of our gardens and nurseries as an example of what a tree can do that is forced to rely on its own resources; a noble self-made peach tree. If surveyors could be induced to make their stakes of the wood of the peach tree and use them in their exploring expeditions, what a start it would give to the horticultural advantages of the country! and if the early settlers would use this wood for their fence posts, how tourists and excursive journalists would praise the country! For if this system was practised, the passing tourists and "our reporters" would only have to climb to the top of a four-board fence and fill those dear little hats, then eat, drink and be merry. It is true that in doing this they might incur the risk of pressing out some of the studied dents and kinks that all editorial and touristical hats are expected to possess, and thereby render their wearers liable to be mistaken for ordinary mortals; but after all, what is fame!

JOHN MITCHELL, the famous exile, is about to return to Ireland to become a candidate for the British Parliament. Nearly $2,000 has been collected in this country and in Ireland to defray Mitchell's expenses.

AN immense fruit crop is expected in Tuolumne county. In many places the farmers have to shake off the fruit to prevent their trees from breaking down.

THE Santa Clara College has received some coffee seeds, which they intend to plant as an experiment.

FIGS are now ripe in San Diego, and sell for twenty-five cents per dozen.

How About Silk Culture?

All human enterprises have apparently as many stages of existence, and play about as many parts as man himself. The self-accusing spirit of the American people prompts them to confess a superlative degree of guilt in some rather ordinary crimes. They acknowledge themselves to be particularly addicted to "running things into the ground;" to making costly idols one day and tearing them to pieces the next; taking up some new enterprise in a hasty manner, concentrating their hopes and energies upon them, and leaving them "in disgust" just at the time when they ought to have stuck to them. Our foreign neighbors and adopted citizens are ever ready to yield an unqualified assent to all these self-accusations of ours; and somehow manage to thus escape similar charges, which might be as justly laid at their doors. Of those sins, or rather weaknesses, which we acknowledge as national characteristics, but are really mere failings, possessed by the whole human family, the disposition to be still beginning and never ending is conspicuous. And among the things which we have rushed into wildly, and hacked out of hurriedly, silk culture stands forth as a recent and conspicuous example.

The extravagant hopes founded on the prospective silk business, and the injudicious management of its incipient stages, are too fresh in the memories of our readers to render a recital of them necessary; but we have faith that this, with other incipient enterprises of this country, will yet rise from their graves, and that the day of resurrection for the silk business, especially, is not far off. The expected profits of the enterprise were possibly overestimated, and impatience undoubtedly misled reason in looking after immediate results; but the abandonment of the undertaking was brought about by more realistic causes. The misdirected State patronage which induced the planting of myriads of a worthless class of mulberry trees, submitting the matter to the control of a corrupt ring, created a deep-seated disgust in the public mind which is really unjust, and is detrimental to the public interests. It is now asserted that certain foreign elements, operating in our midst, were actively and efficiently employed in blighting our silk interests to save those of their own countries.

But the errors and follies alluded to above will admit of speedy correction upon a revival of the active interest in the matter; and it only needs a conviction of the inimical influences having been exerted against them, to arouse and unite the energies of our people. The natural advantages which some portions of California, especially that in the vicinity of San Francisco, possess for silk culture were probably never overrated. They remain the same and can hide their time; and even another failure on our part would not preclude the next generation from placing this among the important industries of the country.

Close students and patient experimenters in this interesting art are now, and have continued from the first, evolving new theories, and reducing old ones to practice; and when they predict, as they do, that within ten years every family in and about San Francisco, who are disposed so to do, can make two or three hundred dollars per annum by feeding silk worms, we are hardly disposed to treat their theory as visionary. While the hasty popular verdict announces that silk culture in this country is "played out," new varieties of silk worms are being introduced here, and new methods of treatment are being practiced.

We would not designedly do anything that would have a tendency to revive the former excitement on this subject; but we fear that in our haste to dispose of business enterprises, and even still loftier undertakings, which are declared to have "had their day," there have been some cases of "buried alive;" and we do not desire to see human efforts, any more than the human body, put under ground before life is extinct.

SUB-TICKET OFFICES.—Officers of the prominent railways in session in New York recently, agreed to abolish all sub-ticket offices maintained at unnecessary expense and risk.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on snbjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

A Letter to J. M. Kerlinger.

SIR :—Having heen a resident of the State of California more than twenty-four years, of which time eight yesrs have been pssed in the Sierras, I reply to your letter of July 6th, giving you the result of my observation and experience, hoping thst you snd other immigrants may find desirable homesteads in the foot-hills, where the resources of the soil snd genislity of the climate offer unwonted and tempting inducements for permsnent settlement. I think that I am quite thoronghly conversant with the topography and climste of the central portion of the Stste, from the coast to the mountsins, and especially of the foot-hills, between the North Fork of the Feather river and the South Fork of the Americsn.

As the land along the Pacific Coast, and in the great interior valleys of the Sacramento and Ssn Josquin rivers, is mostly covered with Mexican grants, or owned and possessed hy capitalists and speculators, you will find it to be quite difficult to lay a soldier's homestead, excepting in the foot-hills of the Sierras. Here you msy make a permanent home, through the beneficence of the government, leaving the balance of the State to the possession to those persons to whom it has been granted, and who hold it at high figures for the purposes of speculation and profit. Perhaps equalization of taxes may yet convince some ot them that they own too much for the public good and the prosperity of the commonwealth. Here in the foot-hills you may locate a quarter-section of land, (160 acres), which has good soil, pnre water, and au abnndance of wood consisting of white, black, burr and live oak, and pine, for the fire-place; and, for fencing, there is chaparral. The soil will generate every kind of vegetable, plant, grain or tree, which can be cultivated in a temperate or semi-tropical country or climate. Here is now raised the hest fruit on the Pacific slope, for rich flavor and juicy quality. I make no exception or qualification to this proposition.

Do you admire fine-fleshed and mealy potatoes? They are produced everywhere at an altitude of from one to three thousand feet above tide-water. Do you love peaches? They are cultivated in the vicinity of Auburn, so racy and rare that they will melt in yonr mouth before they reach your palate. Do you want apples? George W. Applegate, of Clipper Gap, Placer connty, has nesrly a hundred acres of the finest and best fruit that can be named. Will you have pears? Dr. J. R. Crandall, of Auburn, raises the most excellent in the State. Will yon eat strawberries? The editors of the RURAL PRESS commend those cultivated by Felix Gillet, of Nevada city. Do you fancy oranges? The editors of the Sacramento *Union* say that they have received some from Bidwell's bar, Butte couuty, which are superior in qnality to the oranges of Los Angeles county. Do yon drink wine "for the stomach's sske," or do you love the grape as a fruit? James R. Nickeson, of Lincoln, Placer county, and Robert Chalmers, of Coloma, El Dorado county, have each of them over one hundred acres of foot-hill land in vineyard; and their fruit and wine command premiums and diplomas whenever they choose to put them on exhibition. Fruit of all kinds is the great specialty of the foot-hills.

The farmers of Placer connty have poultry, hogs, ducks, geese, turkeys, goats, cattle, mules and horses. Very few of them have sheep. Nearly every family has a flock of goats. Infants are reared on goat's milk in preference to cow's milk. Indeed, goat's milk in coffee is a luxury. The mohair of the Angora goat is becoming a valushle article of commerce in this county. Shirland & Thomas have large flocks of this hreed of goats. The goat feeds on the wild grass and shrubs of the hills. The flesh of the kid is considered hy many to he superior to mutton. Everything that is raised on the farm, in the garden, in the orchard, or in the vineyard, meets with a ready sale. When the local market hecomes overstocked, the Central Pacific railroad carries the surplus stock, of whatever kind, over the monntains to Nevada, Utah, Idaho and Montana.

In regard to the climate of the foot-hills, it is entirely different from that of the coast counties, and also that of the Sacramento and San Joaquin valleys. There are no cold and chilling ocean winds, like those which prevail at San Francisco, and which lay the fonndation for so many pulmonary complaints. There are no destructive northers, which sometimes sweep down throngh the length and breadth of the great interior valleys. There are no tornadoes or hurricanes; there are no earthquakes; there are no sand storms or water-spouts, which are very common in the southern connties of this State, and which are often exceedingly destructive to property and life itself. The rain-fall is from twenty to sixty inches annually, ranging according to the altitude above tide-water. Hence, there can be no drouth in the mountains. The springs and rivulets are perenuial. During the winter, the prevailing winds are either from the northwest or sontheast; the former heing cold and usnally closing np with some frosty nights; while the latter are warm snd hring rsiu in copious measure. During the summer, the wind blows regulsrly from the coast over the interior vslleys throughout the dsy, and is often hot and scorching; while throughout the night, it comes down from the higher monntains, rendering the temperature peculiarly charming and delightful. Hence, sleep is always sweet, sonnd and refreshing.

There are dairy ranches in the mountains; that is, there are cows which are kept for butter and cheese. During the winter the cows are pastnred in the valleys of the lowest foot-hills; but during the summer the ssme stock is pastured in the high mountsin valleys, far above the helt of the osk, and even the tall pine. There are none to rent, but there are butter snd cheese to sell. Qualified school-teachers can get a salary at from $50 to $100 per month; hut San Francisco is the place where school-ma'ams do mostly cougregate. In the mountain towns, generslly, carpenters cau obtain good wages. But I candidly think that even "energetic, intelligent people" cannot do much on a place in the mountains, or anywhere else in California, without some money for a stsrter. Such people mnst have money "for a living, until they resily get a start," if they would make farming pay in the foot-hills. However, I know two fsmilies in this neighborhood, who did not hsve $50 after they purchased their land, and in two years they hsve become comfortable, and in a messure independent. But the men, and the women as well, worked harder and more persistently thsn the most of people would do under similsr circumstances. Their plsces are now worth $2,000 or $2,500 each. As Arthur once ssid: "Where there is a will, there is a way." There is no doubt thst people of moderate mesns can do more and get along better in the foot-hills than in the San Josquin valley, where sometimes the gronnd becomes as dry and parched as the Colorado desert. It requires capital to ditch, dyke and irrigate the wide and extended alkali plains of that great valley; thns preparing and fitting it to he one of the great wheat sonrces of the world. A man of moderate means may make a comfortable home in the foot-hills. T. S. MYRICK.

Auburn, July 9th, 1874.

From Dry Creek.

EDITORS PRESS:—Feeling assnred of your willingness to publish auythiug that would he of interest or advantage to the public, especially those seeking homes in the State; and never having seen anything in print respecting this locality, I thought best to let the readers of the PRESS know something of a beantifnl tract of conntry lying on either side of what is known as Dry creek, sitnated in the southern part of Plscer county, and within 14 miles of Sacramento city. I consider it worthy of as much notice as many other places of which we read so much. We can hoast of as healthy a climate as any other part of the State. The soil is varied, heing composed of clsy, sand and decomposed granite. It will prodnce as good wheat, barley and oats as any other part of the country. Potatoes and other vegetables do well if properly cultivated, though we do not boast of as many bushels to the acre as some other localities; hut we have the satisfaction of reaping when we sow, having never known a total failure on tbis creek. There were a nnmber of pieces sown with alfalfa last winter, the most of which look well and will no donbt be a success. The orchards and vineyards give promise of a large crop, and the hay crop was good, having been cut and large quantities of it already marketed. We are now bnsy threshing wheat and barley, which will be an average crop, althongh the north winds fonr weeks ago injnred them somewhat.

Our nearest market is Roseville, a pleasantly situated little town at the junction of the C.P. Cal. and Oregon R.R. It is a good market for hay and barley, which is shipped in large quantities to the monntains for feeding stock in the lumber regions. What we want, in order to make this one of the most thritty towns in the State, is a few enterprising men with capital to erect a mill and factories and such other improvements as are needed to make a live place. We have the wheat and wool, and need the mills to fit them for nse. Judging from the acreage now in summer fallow, there will he donhle the area sown next fall that has ever been before. Another important item is the large quantities of white oak timber, which, converted into stove-wood, commands a good price.

I would say to those seeking homes in the country, give us a call before buying (not that I have lands for sale, as I have none; but because they are yet cheap, compared to many other places; possessiug no more advantages than are to be found here.) Improved farms can he bought for $20 per acre. There sre large tracts of land, from two to five miles of Roseville, that I am told can be bought cheap, and on reasonahle terms. They are now used for sheep ranches. We have a Grange in Roseville in perfect working order, which numbers something over 70 members, and still they come. V.W.S.

Dry Creek, Placer Co. July 6th, 1874.

About Hydraulic Rams.

EDITORS PRESS:—In the RURAL of Dec. 6th, 1873, I saw an article and an illustrstion of a hydraulic ram. I wish to know if they sre suitsble for irrigation, whst price for one of such sort, also the price per foot of the receiving and conducting pipe, and the elevation they will bring the water to? I want to irrigate a piece of vslley land which has a small rivulet running through it. The flood of last winter wsshed ont the channel to a depth of eight feet. The picture in the RURAL is a good description. I will feel mnch ohliged if you will reply in the the RURAL as soon as convenient. I want to know the scale of prices both of the ram and of the hose or pipe, as I want a lsrge one, or one that will discharge as much water as wonld fill an ordinary stove pipe—if there are snch. It seems to me thst vendors of such articles wonld be wise in advertising them in the RURAL. If the water of a small stream can he raised so as to run over the sdjoining land hy such a plan it wonld he a great advantage over a wind-mill, as it would he constant. SUBSCRIBER.

[We have never secn hydraulic rams used for irrigating, hnt from our acqusintance with them as used for other agricultural purposes, we can conceive of no reason why they shonld not he available in this. To answer properly all the enquiries of our correspondent would take more space than the present crowded condition of our columns wonld permit. If "Suhsciber" will fnrnish us with his address we will send him such informstion as he evidently needs. We would, however, take this occasion to put in a good word for the hydranlic ram; endorsing its claims as a relisble and enduring worker in many important positions; having known one instance where one of them had worked constantly for a term of 17 years, requiring in all this time only two or three replacements of worn ont parts, and was still running when last hesrd from. They are coming into extensive use among the dairymen of the East, who nse them for bringing water to their stable-yards and milk-houses. We have never known of one being "thrown aside."—EDITORS PRESS.]

The Army Worm.

EDITORS PRESS:—I notice several articles in your paper from C. W. Otis, describing a worm which is destroying the vineyards in his section. A worm which I take to be the army worm has made its appesrance here, destroying almost every variety of vegetation that is tender enongh to feed npon, in its march; several corn crops, vegetables of all kinds, grape vines, and even alfalfa have heen attacked hy them in this neighborhood. They only disturb corn when very young. For several days the irrigating ditches here have been literally covered with them, and having kept a strong cnrrent of water flowing through them has been, I think, a great protection, as quantities have been washed away from the cultivated portions of the ranch. In the South, where the cotton crop is frequently destroyed by the army worm, they usually appear in increased numbers within three weeks after their disappearance, which is the time, I believe, necessary for the moth to deposit and hatch the eggs. Should we have a second visitation from these worms I have great apprehensions for any snd all crops in their line of march. J. DIXON.

Buena Vista Rancho, Jnly 6th, 1874.

HORTICULTURE.

DO BEES EAT GRAPES?—As I have cnltivated bees in a part of Frsnce where grapes are the main crop, nesr the hills of Burgundy, celebrated for the wine produced by the cnlture of the sngared pineau, a grape richer in sngar than all the American kinds, I think I can bring some light on the discnssion existing hetween Professor Riley and my friend Kruschke. There has been considerable discussion hetween the wine-growers and the bee-keepers in the ahove named district, and it is very well estahlished that hees are unable to cut the skin of grapes. In order to ascertain the fact, the most jnicy and sngared grapes, pears, sweet cherries, plnms, apricots, etc., were put inside the hives; never have the bees attacked them, if they were not previously scratched. The experiment was repestedly made; it was discovered also that the first cutting was made by a kind of wasp, or by birds, or cansed hy the rain falling when the fruit was ripe. In Italy the same experiments have led to the same results. It is therefore unjnst to accnse the bees of the mischief. It is to be regretted to see such distinguished men as Professor Riley bring forward the accusation, and some bee-writers snstain it, who, with a more carefnl observation, would have arrived at an altogether different conclusion.—*Live Stock Journal.*

DESTROYING WORMS IN POTS.—The worms in the pots may be destroyed by stopping up the holes in the pots with corks, and watering with lime water until it stands on the snrface. The lime water may remain for an hour; then, on removing the cork, it will pass off. The lime water may he made by pouring 30 gallons of water over 10 ponnds of fresh lime. Stir well up, and allow the whole to stand two or three days; theu employ the clear liquor.

How to Grow the Oleander.

The olesnder is a very ornamentsl plant when properly grown, bnt we seldom see fine specimens. There is scsrcely one of my readers who has not seen dozens of tall, straggly plants. I propose to give a few directions by which fine plsnts may be grown.

Take a healthy cntting, place it in a hottle of water, and let it remsin there till roots spear; then pot it, shifting it into larger sized pots as its roots require more room. Do not try to have it hrsnch until it blooms. It will then have a long, straight stalk—a good fonndation for the plant you desire. After hlooming, three shoots will start; allow these to grow, as these are the flower shoots, bnt after these have bloomed, cut back all the shoots to within four or five inches of the former brsnching place. Do this each time the plant blooms.

Two years ago we had a plant given us which was four years old and several feet high. In the antumn my husbsnd remorselessly cut it down to within five inches of the first hranching, but after starting the following spring it grew rapidly. The oleander hss many good qualities. It will hloom well for its owner all summer, snd then, after cutting down in the fall, may be put in a dry cellsr for the winter, doing better dnring the following snmmer for its long rest. While growing it reqnires an sbundance of water. It would be a good plan to allow it to stand in pans constantly full of water till after blooming, when water shonld be grsdually witheld till cut in, and then it should he pnt in the cellar and no more water given it till the following spring. It is well to re-pot the plsnts every three years (just before starting them in the spring). If you do not wish them in larger pots, pare the ball of roots with a sharp knife on the sides and bottom, re-pot in strong, rich loam, and set in a shaded place, and in a few weeks the root will form anew.—*Kitty Clover in Floral Cabinet.*

Uses of the Cherry Tree.

At the Michigan Pomological meeting, Mr. H. S. Chubb paid a tribute to the cherry tree, which, in every position, contribntes in some way to the comfort and service of man. "Even the gum which exudes from its wonnds is precious for medicinal nurposes and makes an excellent mncilage;" its fruit is handsome; is nndoubtedly the best thst is canned or preserved; for drying, it has "no equal in the whole realm of commerce," its curative properties are universally conceded, and its rich color is the acknowledged standard of beanty on the lips of the most charming of women. Nor is this all. Its timber ranks high; "the honsehold furnitnre next best to black walnnt and mahogany is made of Michigan cherry, and thence transported to all parts of the world; the best printer's furniture is manufactnred from Michigan cherry, and distrihuted from thence wherever civilization has carried the printing press. Cherry, grown wild in the woods of Michigan, is songht for by the manufacturers of school furnitnre, as the best wood they can find for their purpose. It is easily worked; receives a good polish; has a delightful lively color, and, in contrast with maple and walnnt, gives a pleasing variety to decorative cahinet and carpentry work, which of late years have introdnced a new charm to dwelling, office, store, railroad car, steamhoat, and private carriage. The wood is hard without being cosrse or knotty, and its grain, though not prominent, is fine and beautiful." Thankful ought we to be, and prond, that we live in a land and enjoy a climate where this fruit and timher can be grown.

OWING to some mysterions change of climate, Scotland is becoming, year by year, less productive in the matter of frnit. At a late meeting of the Botanical Society, Mr. McNab read a paper on "Fnrther Evidences of Climatic Changes in Scotland," and mentioned that several old Scotch gardeners, as well as amateur cnltivators, concnrred with his opinion that several varieties of fruit now cultivated in that country were by no mesns eqnal to wh at they were from thirty to fifty years ago.

A LADY correspondent of *Moore's Rural New Yorker* says: I take good, thick paper, cut three-cornered, and double it in the shape of a funnel, fill with dirt, and planting a seed in each one, bnry it in a hox filled with earth. The seeds will soon germinate. When the plants are ready to remove to the flower-bed, lift the paper ont and plant it like roots. The paper will soon rot and the plants will never wilt. I transplanted nastnrtinms in this way with perfect success.

CHRYSANTHEMUM will remain in hloom a great while longer if taken np and put in boxes just as the buds are opening than if left in the ground, no matter how favorahle the weather may be ont of doors. Moving does not injnre them in the lesst if the work is done well; but the transplanting tends to retard the development of the hnds, and keeps them in a partially dormant condition, but not enongh so to prevent them from coming to perfection.—*Ohio Farmer.*

A RAPID GROWING TREE.—At the Knap Hill nursery, Surrey, England, is a specimen tree of the *Popolus Canadensis, nova*, a variety of the cottonwood, which in three years has made the extraordinary growth of twenty feet, forming well made trees. It is esteemed by Messrs. Waterer as a hetter grower than any other poplar, and its habits free and healthy.

The Horse.

Principal Points to be Regarded in the Judgment of Horses.

It is well-known that men of large experience in the judgment and selection of horses are the first to discern faults of conformation and unsoundness, whether the infirmity is in an incipient state or more fully developed. One glance at the legs or feet is generally sufficient to detect malformation or infirmity, and any serious deficiency in this part determines the usefnlness, and consequently the value, of the animal submitted for the examination of a competent judge. A good body will wear out two sets of poor limbs; and this point should always be kept in view in the selection of horses for any purpose whatever. A good head is a very material feature in all sorts of horses used for hunting, hack, or harness work. Coarse or heavy heads are seldom seen on really good horses; but big, lean and well-shaped heads are not objectionable, if they are not out of proportion to the strength of the neck and the size of the horse. Short, sharp and lively-looking ears; clear, but not very prominent eyes, with plenty of width between them across the forehead, are points of excellence. A small muzzle and good open nostrils, with plenty of width between the jaws, are elements of beauty always appreciated. A clean gnllet—without a fleshy appearance or flabby-looking skin at the juncture of the head to the neck—must always be looked for when perfection of form is wished. An arched neck is not at all desirable, and a straight "cow" neck should be regarded as an objectionable feature. From the "poll" of the head to the withers there should be a slight incline, and the length of the neck should be determined at first sight as neither too long nor too short. It should, however, be clean and muscular, without lumber or heaviness on the crest, and the wind-pipe should be clearly defined from its junctnre with the throat to the crest. Lengthy and obliquely-placed shoulders are essential in the formation of all horses used under saddle, or the rider will not be carried with safety or pleasure. With such shoulders as these, allied to long and muscular forearms, large, well-shaped knees, short and strong cannon bones, with the back sinews clearly defined; clean, well-formed fetlocks, and pasterns neither short, stilty, nor too slack, on sound, well-formed feet, a horse can hardly fail to ride pleasantly and firmly in his fine hand. A wide chest is objectionable, for the reason that it causes a rolling gait, and a narrow one will place the fore legs so nearly together that he is always in danger of "speeding out;" that is, striking the inside of one leg with the foot of the other. When standing in front of a horse, a good judge will take particular notice of the manner in which his feet are placed on the ground. If his toes are turned inward, he is termed "pigeon-toed," and is more objectionable than if he turned them out. Yet, in the search for that rarity—a perfect horse—both these faults will result in his rejection. A short back is always stronger than a long one, though not quite so easy to the rider. Nicely-arched and muscular loins, wide hips, and well-rounded quarters, with strong and muscular thighs, are also most desirable points. The hind legs should not be straightly formed, and the hock—being one of the most important joints in the frame of a horse—should be especially well formed, and free from every sign of bone or blood, spavin, curb, thoroughpin, or coarseness of any description. The hind legs should be placed far enough apart to prevent the interference of the hocks or fetlocks with each other, otherwise there will be that unsightly appearance known as "cut hams;" but they should not be so wide asunder as to induce uneven or imperfectly-balanced action. —*London Farmer.*

Let the Horse Roll.—Horses that are kept in the stable during summer, should be given daily the luxury of a roll on the earth. Rolling is the means given by nature for the animal to rid itself of vermin and skin diseases, and it tends to make the animal healthy. Some owners object to allowing a horse to roll on the bare earth, because it gets dirt into the hair and makes extra work to keep the auimal clean, but the extra work pays, if rightly understood. We allow our horse to roll in the dirt when he is not moist with perspiration, and then stand an hour or two with his coat full of dust before being cleaned up.—*Ohio Farmer.*

Sweeny Remedy.—A correspondent of the Cincinnati *Gazette* says: Take equal parts of sweet oil, turpentine and hartshorn; put in a vial and shake well; then add chloroform, and shake it up well before using. Put it on three mornings in succession, freely; then hold a blanket on it for 10 minutes. It is a sure cure. It also cured rheumatism for me, in my arm, from which I had been a sufferer for 20 years.

[We have cured sweeny by applying to the part affected a woolen cloth, saturated with turpentine, then holding a heated flat-iron as close to it as the animal will allow. But few applications will be needed.—Eds. Press.]

Cure for Brittle Feet.—Wash the horse's feet clean when dry, apply with a brnsh, to the hoof only, a coating of this mixtnre: Fish oil, one part; vegetable tar, one part; oil of tar, one-eighth part.

Poultry Yard.

Boiled Corn for Poultry.

In the breeding of poultry as in all other pursuits, a little care and forethought invariably return an apparently disproportionate result. In the rearing of poultry, where the expenditure on each fowl is small and the material provided comparatively inexpensive, we are apt to overlook the small wastes which occur in the transformation of the different grains into poultry, but which aggregate quite a respectable sum.

The opinion that corn is very nonrishiug food for fowls is so universal, that no further thought is given the matter. If any one should suggest that corn would be easier of digestion if soaked or boiled, he would very likely receive the answer that corn was nothing hard to digest for birds, which swallow stones and other hard substances without detriment. A moment's thought, however, will convince that the millstones and the grist are very different things, and feeding hard grain, although not exactly like feeding the millstones with pebbles, bears a certain likeness to it. The trouble attendant on the preparation of food, if it is to be cooked, may indeed seem very disproportionate to the advantage to be derived from such treatment, but, in reality, little time need be spent, as before going the rounds of the nests a little hot water may be poured over the grain, a tight cover put on the kettle, and the whole placed over the stove, where, by the time your rounds are completed, the corn will have become steamed and mellow, and have lost none of its good qualities. Remember each hen has a certain amount of animal force to be expended every day in some direction, and the less she has to give to digesting her food, the more she will have to be expended in egg-producing. The advantages of the warm food in winter, when much food goes toward prodncing animal heat to withstand the cold, are two-fold from the direct action of the warmth and the slower action of the food itself, to say nothing of the fact that the content produced by uourishing food will result in more eggs, for a hen thoroughly at home will lay many more eggs than a discontented one. We have performed the experiment ourselves and know that feeding boiled corn does pay, and it is as a result of experience that we offer this plan to our friends. —*Live Stock Journal.*

Why High Priced Eggs do not Hatch.

High priced eggs do not always hatch, for we have tried them and know. We set two dozen under orthodox hens of amiable disposition, that knew how to stick to the nest, and did it for twenty-three consecutive days. It wasn't the fault of the expressman, for they did not come by express. They were not old. We knew the yard wnere they were laid, and they were fresh eggs. There was a twelve pound rooster, with the hens that laid them. And the result of the hatching was one thoroughbred Buff Cochin chick. Now, there are 20 reasons why they did not hatch—beginniug with this, that the hens were kept confined in two small yards. We do not know what physiological laws are violated that hens kept in close confinement do not breed well. Perhaps it is because they are fowls of the air, and need a good deal of that article and plenty of mother earth to make them thrifty. The fact is pretty well established in the experience of poultrymen. There is no trouble of this kind with hens running at large. They steal their nests in hay mows, under the barn, under the shed, in the woods, in out-of-the-way places with no protection at all, and nearly every egg hatches until frost comes. But with the fancy breeds, as they are called, come small yards, that several varieties may be kept upon the same place, and here trouble begins. All sorts of causes are alleged for the failure of the eggs to hatch. The expressman is roundly abused. The breeder is dishonest. He may be only ignorant, and over-anxious to sell eggs at six dollars a dozen. If small yards are not a good reason for infertile eggs, we will hring forward the other nineteen. The moral is: It is safer to buy high priced eggs after seeing the fowls. —*Ex.*

Salt in Poultry Diet.—Salt is necessary for human diet, and is found in small quantities in the hones of all animals. To pigeons, a species somewhat allied to hens, it is very beneficial. It is almost certain death to fowls if thrown out in large quantities, as when meat or fish barrels are emptied in their way. Salt fish or salt beef has been known to cause their death. But a little salt mixed with the chicken dough is beneficial; rather less should be given than persons generally use in their own food.

A young lady in Concord, Mass., says there is profit in the poultry business. She commenced with about 60 fowls in the spring. From these she raised 450 chickens. During the season she sold eggs to the amount of $90, and from September 20th to January 27th, she got ready for market 150 pair of chickens, which she sold for $260, making in all $350.

Profits from Fowls.—A farmer in Chester county, Pennsylvania, sold from 30 hens in 1873, eggs and chickens amounting to $430.78. The cost of feed and commissions for selling amounted to $161.84, leaving a net profit of $268.94.—*Ohio Farmer.*

Sheep and Wool.

Rules For Shearing.

We have beon asked for directions as to how to shear sheep. However at home we may feel in the sheep barn, or on the shearing floor, we confess to being somewhat at sea when trying to impart information at so long range. Shearing a sheep is one of the things that need to be seen to be appreciated. There is no mystery about it; hut it is, nevertheless, a trade that has to be learned by practice. The novice that has determined to become a good sheep shearer, should provide himself with, 1. A good pair of shears (avoiding cheap ones). 2. A splendid stock of patience. 3. A pair of overalls. 4. A smooth cutting whetstone. If we were required to add to the above, we would say, a little more patience; for it is the nervousness and impatienoe of the workman that, in nine cases out of ten, leads to the cramping and crowding of sheep, which begin struggling for relief, thus adding to the confusion and tediousness of the operation of shearing.

Even among accomplished workmen, there are different practices in the operation of shearing. Some commence work on the brisket, others on the neck, some at the top of the head, and still others lay bare the belly first—laying the sheep down on the left side, keeping its head down by drawing its right foot across the neck, and holding it with the left hand. Some shearers use a bench or table, fourteen or eighteen inches high, upon which the sheep is placed, though a majority prefer to keep the animals on the floor during the operation. We recommend the latter, as it is equally as easily learned, is no more tiresome, and the table or bench is not always so easily improvised. The man who learns without it is always ready for work; the one who learns to use it is often at a disadvantage.—*Ex.*

Sheep-raising in Ventura.—Sheep-raising is at present one of the most important interests of Ventura county, and it will doubtless remain as such until the development of the country closes out the various ranges, which will probably be many years yet. For several seasons past the business has been steadily increasing, proving lucrative to those engaged in it, and hringing large sums of money into this section. The present numher of common sheep in the county is about 125,000, and we learn from Mr. Kennedy, one of the most extensive sheep-raisers of the county, that the average yield of wool for the season, including the fall clip, will be about three and a half pounds per head. Ordinarily this would not be regarded as a very heavy yield, but the wool this season is of a superior quality, and heing very fine and clean, weighs less than the clip of last year. Of this spring's clip there have been shipped from this port up to date, 1,472 hales, averaging ahout 300 pounds, and about half that amount from Hueneme, which includes nearly the entire clip. The amount shipped from this port, we are told, is almost equal to the entire shipments of wool from here last year. There are a number of excellent sheep-ranges in the county, but the Simi and Las Posas are the most extensive and important. —*Cor. San Jose Mercury.*

Sheep Disease in New Mexico.—A correspondent in Santa Fe county, New Mexico, sends the Agricultural Department the following: I would like to call the attention of the department to a disease among lambs, reported to me by Mr. E. W. Eaton, one of my assistant correspondents. Mr. Eaton says: I would like to call your attention to a disease that destroyed about six hundred of my lambs, and in the same proportion, say two-thirds of all the lambs dropped in several other cases, and, if possible, get some information from the department of its cause and cure. It is in the mouth and on the lips, having the appearance of syphilitic warts in the mouth, and growing to entirely cover the teeth. So far, I could see it did not affect the tongue, the lips growing to three or four times their natural size. I used spirits of turpentine; this seemed to partially check the disease for a time, but did not entirely cure.

The wool clip of Colorado and New Mexico, for the year, is estimated by the Pueblo *Chieftain* at 5,000,000. The computation was made some time ago, however, before the fall prospects could he well indicated.

A correspondent of the *American Farmer* proposes that Southern farmers devote a few acres to ruta bagas, for sheep food, arguing that, in order to raise early lambs, the ewes must have succulent food to produce milk. While his neighbors wore losing lambs one winter through feeding dry corn and hay, he avoided this by giviug plenty of cabbages, which he happened to have on hand.

Cure for Sheep-Killing Dogs.—The *Rural Sun* recommends suspending the dog from the top of a pen, so that his fore-feet will be about four inches from the floor, and then letting the oldest buck in the flock exercise his butting propensities on him. It is said to be an effectual cure.

Stretches in Sheep.—John R. Chapman, Madison county, N. Y., says the hest remedy he knows is a pint of warm lard. Stretohes, he says, are produced from eating old, dry hay, or a want of drinking water or both combined.

The Apiary.

Good Honey Localities.

Individual instances are not rare, of good yields of honey in almost every Southern State, but they are neither as numerons nor constant as in higher latitudes. We believe two principal causes can be assigned for this: The backward state of bee culture, and greater extremes of climate. Bees will not do well in too wet seasons, nor the opposite, and it is well known that the Southern States are much more liable to these extremes than the Northern States. Some of the extreme Western States are worse, perhaps, than the Southeru in this respect, and there bees will not do well. The South has been lauded, frequently, as "the home of the honey hee," but we think the advantages of pasture are with some northern localities. Only in one thing does the South have the advantage, and that is in mild winters. The shortness of the winters may not be any particular advantage, as the prolonged season of work, very early and very late, does not afford very much substantial aid—the stocks consuming more than they gather. Quiet in winter quarters, as all bee-keepers know, is better than activity when it is useless.

The South abounds in flowers, hut many of them do not yield honey. There is no nectar in the thousand and one swamp flowers of the Sonth. Still, aside from these there are natural sources sufficient to make most of the Southern States good honey districts, if they are not subject to drouth. These dry spells usually occur in the latter part of the summer and in the early fall, during which time no honey is gathered, and accumulated stores are eaten up. In such localities, if alsike is cultivated very extensively, and has the advantage of irrigation, which is easily secured in most localities, all the trouble is avoided, and the climate is one of the most desirable.

Another drawback to Southern bee-culture, and a serious one in my opinion, is the moth. Many will say "pshaw!" but that won't alter my opinion. The climate and long warm season of the South is favorable to the development of these pests to the highest degree. They breed in vast numbers and grow with astonishing rapidity, and destroy with unrelenting persistency. Of course, this can all be overcome, but hee-culture in the South is not far enough along yet to do this.

The greatest drawback to bee-culture in the South, however, is the want of enterprise, and the lack of interest in the subject. On this part of the subject we shall not enlarge at the present, leaving that for a future article. We close with the assertion that almost any locality in the United States can be made good for bees by the cultivation of those useful grasses and grains that produce honey largely.—*Bee-keepers' Magazine.*

Remedies for Bee Stings.—Among the various cures recommended for bee stings, and to be applied to the part, are liquor potassæ, olive oil, vitriol, laudanum, vinegar, honey, salaratus and water, salt and water, soft soap and salt, raw onion, tobacco juice, a paste of clay or flour, the expressed juice of any green leaf, or of the ripe berries of the coral honeysuckle. As animal poisons deoxydize the blood, their antidotes will he anything that contain much oxygen. The poison of a hee being acid, an alkali must he employed to neutralize it. If, therefore, we were selecting for trial any of the above so-called remedies, we would choose either soft soap or ammonia. But if the individual stung is not very nervous, cold water applied to the wound will be quite sufficient, and it should not be rubbed. One great essential is, if heated, to get cooled just as soou as possible, and to avoid becoming heated again for at least two days. Nothing is so apt to make the poison active as heat, and nothing favors its activity loss than cold. Let the body be kept cool and at rest, and the activity of the poison will be reduced to a minimum. Any active exertion, whereby the circulation is quickened, will increase both pain aud swelling. —*Ex.*

Introducing Queens.—Upon releasing a Milan queen to the bees, I was anxious to be sure that she be well received, so I removed a comb from the hive and let the queen go out on it among the bees, and was at once satisfied all was right. I introduced a second Milan queen in the same way, and others since. Being at a neighbor's apiary, when he was about releasing a queen, I suggested the same way, with like results. If one has a valuahle queen I recommend this way of releasing, as should the bees pack on her they can he scraped off in a basin of water, when the workers will scatter and the queen be recaged. This plan of scraping a wad of bees into water was suggested to me by my neighbor. I think it first-rate, as there is great danger of losing the queen by trying to pull off the bees.—*Ex.*

The most oomplete check upon robbing hees is to placo a bunch of grass or wet hay over the entrance to the hive. The bees will find their way to the entrance to their own hive, the robbers will be caught by the sentinels in passing through the grass, and soon oease their pilfering.

Young bees come to maturity from two to four days sooner in California than in Pennsylvania.—*Harbison.*

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

Visalia Grange, Kern County.

Editors Press:—Since December I have read your paper regularly, and have derived not a little pleasure from your frequent accounts of the Harvest Feasts and other good times enjoyed by the different Granges in the State. But the better part of that matter is, Mr. Editor, that in the mean time we have been having Harvest Feasts and other good times occasionally in the Visalia Grange, although no one has ever said anything to you about them, so far as I know.

On Saturday last we graduated a class of ten, and had an unusually pleasant time. The ladies of Tulare county certainly know how to prepare a feast and enjoy a festivity. The great pity is that so many farmers' wives and daughters have so few of them to enjoy. But as the Grange offers such excellent facilities for social intercourse, we hope that all that class for which it was designed, and who so greatly need its opportunities, will not be slow to avail themselves of its advantages; and if the Grange shall accomplish no greater or better work than occasionally to call away from their endless rounds of ceaseless care some of the already overworked mothers and daughters, and give to them thoughts on subjects and enterprises abreast of the times, who will dare to call the organization a failure? Who will not rather pronounce it a blessing, both to the present and the future?

Our Grange now numbers 82 members, and is in good working order. There is a class of 19 prepared for the degrees, to be conferred during the month. The celebration here on the 4th was a decided success. The oration by Mr. Daggett was an especially praiseworthy and successful effort. In careful preparation, in just and appropriate utterances, in clear and forcible expression, I have seldom known it excelled on similar occasions.

James O. Blakely, Sec'y.

Potter Valley Grange "Swarmed."

Potter Valley Grange, No. 115, numbering—by secretary's book—161 members, has swarmed. In other words, our hired hall being uncomfortably crowded and unsafe, and the members of the extreme ends of the valley hopelessly divided on the question of location of a Granger's hall, a division, taking with it regalia and funds in the treasury, *pro rata*, has been effected, and a second Grange, with 30 charter members, organized July 4th, brother Merry officiating.

The new Grange takes the name of Pomo Grange, Pomo, Mendocino Co., being the post office address of its officers and members generally.

With those who join by card and those who have signified their intention to apply for membership, the new Grange will very nearly equal the mother Grange in numbers, and we may reasonably hope that, working in harmony for the interests of the Order, the two will accomplish more than one could have done under the circumstances.

Potter Valley Grange will never cease to be gratefully remembered by its members in the new Grange—late settlers especially—for the social re-unions which made friends of strangers and cultivated the fraternal relations that in all localities consecrate a home. [The names of the officers of Pomo Grange are in another column—Eds. Press.]

Several officers of the Pomo Grange having held the same official positions in Potter Valley Grange, prior to the division, it may save confusion in correspondence to mention, that L. A. Preston was elected Master, and Mrs. A. H. Slingerland, Secretary of Potter Valley Grange, in place of John Mewhinney and Geo. B. Nichols, resigned.

C. I. H. Nichols.

Death of L. K. Woods.—The steamer from Humboldt brings to us the sad news of the death of Bro. L. K. Woods, Master of Kiwellattah Grange, who died suddenly on July 12th. Brother Wood was active and devoted as a Patron; as a man, honorable, and esteemed by all who knew him. He was a pioneer in Humboldt county, being one of its earliest settlers. In his death society has lost an honored member, and our Order mourns the loss of one of its brightest ornaments, and a faithful laborer in our cause. He was a member of the State Grange, where he endeared himself to all. He leaves an interesting family—wife and six children—to whom is extended the heartfelt sympathy of our Order. T. H. M.

Shipping the Grain.

A Defense of the Grangers and their Agents.

The following article has been prepared by Bro. J. W. A. Wright, Lecturer of the State Grange, and its careful perusal is commended to Patrons throughout the State, as a full vindication of the course and policy of the house of Morgan's Sons, the Grange shipping agents of this State:

The California harvest of 1874 and the handling of our abundant wheat crop have at last fairly begun.

We have reached a time to which many, especially farmers in the protection of their interests, have looked forward with great anxiety. Both parties concerned naturally have been and are planning to gain certain points, the grain-buyers to secure as much grain as possible at a low figure, the farmers to realize for their wheat as high a price as the Liverpool market and ocean freight will justify.

Now, what is being done, pro and con, and what is clearly the line of duty for us farmers to pursue in this emergency?

First for the grain-buyers: Fortunately, most of the city and interior papers of our State express themselves favorably to this important and permanent movement of our Granges to free producers generally from the evils of low profits or no profits, and from their consequent dependency. The farmers appreciate their generous support and are grateful for it. Unfortunately, the *Evening Post* and one other city paper are an exception to this general rule, as is proved by several recent articles. The latter are so lengthy that we cannot quote them entire. We shall repeat only a few important points, for the sake of answering them, though each article is bristling with other objectionable features that we should like to ventilate.

Monopoly of Grain Ships.

The *Post* of June 22d says: "Nothing worse for our farmers could possibly happen than that there should be anything like a monopoly of wheat-carrying ships. It has been currently reported on 'Change that the new house of Morgan's Sons have chartered some 70 vessels, of a carrying capacity of about 100,000 tons, at freights varying from £4 to £4 10s. As it has also been generally circulated that these parties are to be the agents for the sale of wheat belonging to the farmers, it seems inconsistent that they, as the agents of the producers, should monopolize the bulk of the ships coming to this port, thus establishing a high freight market to the detriment of the farming interests."

Then follows a sentence or two containing such expressions as "The schemes of Morgan's Sons to monopolize the freight market to the injury of our producers," and "The extravagant figures given by Morgan's Sons," etc.

Some Things which Farmers Remember.

Fellow farmers, what a "mare's nest" they have found! How they hold up their hands in holy horror for fear some monopoly may injure their dear producers.

Have the *Post*, its writers and readers forgotten that in September and October, 1872, when our amount of surplus wheat was by no means so great as it is likely to be this year by their own showing—have they forgotten, I say, that ships had to be chartered at from £5 to £5 13s per ton to take our grain to Liverpool? If *they* have forgotten it the farmers have not, and we have reasons never to forget that glaring injustice. Perhaps the farmers of this State know as soon and as surely as any men in it when our crops are likely to yield a large surplus, and when we shall need a large number of ships, as well as sacks, to move our grain.

Formerly we used but little of that foresight which we possess in common with other men to anticipate these wants and to guard against impositions from unscrupulous speculators on our necessities. These matters we had generously and confidingly left to others, who, we wished to believe, were friendly to our interests. But in 1872 such rates as $25 and $28 per ton for ships, 18 and 21 cents a piece for two-bushel grain sacks, $2 50 a ton per season for storage, 18 to 24 per cent. per annum for borrowed money, and similar exactions in reference to all farm produce, convinced us to a man that, to save ourselves from ruin and to secure justice in handling our products and supplies, we must ourselves, by combined action, look into such matters as shipping, sacks, storage, interest, sales and trade, and try to avoid in future such losses as we had all experienced from previous exactions.

Hope in the Grange Movement.

In the spring of 1873 the ground-swell of the Grange movement reached our shore, and furnished us a means of redress, such as the farmers of America never before possessed. It found us in the proper frame of mind to embrace it heartily. Hence the California State Grange, and under its guidance now more than 220 subordinate Granges; hence our maturely considered and carefully established agencies and business plans. If our producers combine to prevent such abuses as those above quoted, what just man will blame them?

For some reason, how different was the range of everything required by grain raisers last year from the rates of 1872. Ocean freights from $15 to $21, sacks 15 cents, storage from $1 to $1.50 per ton, interest 12 and 15 per cent. per annum, besides a lively interest in handling all our products, and supplying all our wants *reasonably, satisfactorily*.

The producers of this State—and they are no small nor mean class of citizens—rejoiced and felt easier. Why?

Because they had tangible proof, not that any absurd "agricultural millennium" was at hand, but that indeed there was promise of a "better time coming," when more equity, fairness and a juster division of profits and less oppression from monopolies can be attained.

But every farmer in this State knows the many good results flowing from the unity and earnestness of our producers in this one organization. Let us never forget them, and let them ever be preserved and advanced.

The Shipping Agents of the Grangers.

Now, the *Post* seems to be very much and very unnecessarily exercised because it suddenly becomes known on 'Change that "the *new* house of Morgan's Sons has chartered some 70 ships" at £4 to £4 10s. It had heard the rumor that this firm are our Grange agents for handling wheat, and all at once it dreads a hurtful monopoly of shipping.

It may as well be fully understood by everybody that the firm of E. E. Morgan's Sons *are* the accredited grain agents of the California Grangers, and have been ever since August last, and will continue to be for an indefinite period. The whole history of the connection of this firm with our carefully made business arrangements is a subject of pride and congratulation with every Grange member who is at all familiar with the facts of the case.

Nor is it, correctly speaking, a *new* house, as one or two of the city papers delight to call our agents, slightingly. It is true that they did not establish their branch house in California till last year; but the firm of E. E. Morgan's Sons is one of long and respectable standing in New York city, and there is no shipping firm in America more favorably known throughout Europe.

They have ever shown themselves to be fair dealers, and opposed to uniting with any combinations forming oppressive monopolies. They have constantly pursued an independent course in San Francisco, and have never joined in any way with our oppressors.

What Morgan's Sons Did for the Grangers Last Year.

These facts placed in their hands last year the grain interests of the Granges of California, and most nobly has the firm fulfilled its trust. Indeed, no such triumphant success has attended any Grange business elsewhere in the United States, as followed the efforts of Morgan's Sons in our behalf last year. The writer is a Grange member, has been identified with the work of our Order in California from its incipiency, and knows whereof he speaks. The firm on this coast has at its head a most thorough and widely-known business man, who for more than a year has managed to "hold his own" against the combined genius of the grain speculators of San Francisco, in spite of their well-known efforts to crush his firm. Every Grange in this State owes a debt of gratitude to the firm and the man which they can never repay. "For what?" does any reader ask? Why, for the liberality, the zeal, the fidelity, the success with which they have managed the business intrusted to them; for the sacrifices they have actually made, the abuse and misrepresentation they have borne, the constant devotion they have shown to crown the self-protecting pains of our farmers with success. Every Grange member can receive proofs of these facts in details which we are not at liberty to make public, and we should never forget them.

From these facts what may the *Post* and every one else infer? Why, that whatever the firm of Morgan's Sons does, in the way of chartering ships, or importing sacks, or direct shipment of our grain to Europe, for which we are preparing, is done with the full knowledge and approval of the State Grange of California, through their Executive Committee, after due deliberation upon all the facts in the case, and with no object in view but the good of our Order throughout the State.

Extremes to be Avoided.

In ocean freights we have two extremes to avoid. We must not place them so low as to drive the much-needed shipping from our coast, nor so high as to rob the producer of his hard earnings. It has never been the wish of the farmers of California to place any freights so low that they will not make a fair profit for shippers, and for all others who furnish transportation. In view of the vast crop of wheat to be moved, and the natural inclination of ship-owners to charge high freights for an abundant crop, we, as farmers, are well pleased to have so much shipping secured at $20 and $21 per ton, instead of the $25 to $28 paid by us in 1872. It allows ship-owners a fair price, of which they cannot complain, and is a saving over the *old* style of $5 to $7 a ton to begin with.

True, the *Post* closes the article in question by the assertion that a ship has been chartered "outside of the monopoly"—(isn't it amusing—"outside of the monopoly")—at £3 17s 6d to Liverpool, that is, for 50 cents less per ton than the £4 we have agreed to pay.

Now, my brother farmers, this statement is of exactly the same nature as one which followed the announcement that the Grange agent had imported for this crop 2,000,000 sacks at a certain price. Don't be deceived. Do you not remember the assertion made then and since that sacks could be bought at something less than the Grange agency offered them for?

Devices of the Grangers' Opponents.

Did you ever hear of an opposition steamer being placed on the waters of California against a monopolizing line of steamers which charged unreasonable rates? What followed? Why, the monopoly placed its rates as low as possible to try and run the opposition boat out of the trade. Have they generally succeeded? They have; and we, the producers, have continued to be overriden by monopolies. Believe me, this dodge on ocean freights and sacks is exactly of the same character. Our opponents wish to drive us from the trade and to destroy our confidence in the leaders we have selected, and in our agencies. Do not be deceived by them.

We are perfectly willing for any firm in this State to furnish ships or sacks at a less rate than we have been able to establish, or to pay a higher price for grain than we have been able to secure by direct shipments. Why? Because the legitimate profits remaining in the pockets of our farmers will be increased by all such means, and this is just what we are laboring for. We should like to inquire, just for curiosity, what will people who are now talking down freights agree to furnish us ocean freights for in September and October next?

The *Post* of July 1st says, besides many other things in keeping with its preceding article: "We question the policy of farmers turning speculators in tonnage." The truth is, our farmers in their Grange movements are not speculators in tonnage nor speculators in grain, nor speculators in any other way. They are merely "taking time by the forelock," and adopting sound business plans under the guidance of well tried and well trained business men of their own choosing, in order to protect themselves from impositions, which they know they have suffered in the past at the hands of speculators of all kinds. Let us call things by their right names.

A surprising editorial also occurs in the *Post* of July 8th, rather urging farmers to hold on to their grain with the hope of reducing ocean freights. This is surprising, because it differs so materially from the well known sentiments in former years of those who control the *Post*.

A Curious "Commercial" Document.

But we will turn for the present from newspaper statements to consider some extraordinary assertions found in the annual grain report of this coast, which goes to the marts of Europe and America as the law concerning the grain market of California—at least, it has always been so considered heretofore.

Besides considerable acrimony, this report contains several inaccuracies, such, for instance, as the statement that the farmers' "new advisers" led them to expect $3 for their wheat, when $2.50 was the highest anticipated; and who doubts wheat would have reached that, but for the financial panic in October? Now for the only statement of this report which we care especially to notice at present.

It says: "Already a band of charlatans, who, unfortunately, appear to have obtained control of the press, are ventilating new dogmas of trade, urging farmers to leave their legitimate calling to become merchants; prophesying that by leaving the old channels an agricultural millennium will dawn on this State. The farmers, themselves, eager for high prices, are only too easily deluded by this kind of claptrap, and, unless wiser counsels prevail, we may expect a recurrence of many of the blunders of last year."

What this "Charlatanism" consists of.

Ha! Somebody must be hurt. We should like to see repeated a few such "blunders" as kept in our pockets a part of our hard-earned money, which would otherwise have gone under our old advisers into the coffers of our wealthy grain speculators, would we not? And you, brother farmers, and those you have placed in front to labor for the good of our common and noble cause, are called "a band of charlatans," and are scandalously misrepresented in public as well as in private. And this just because last year you managed by your combination to retain for the benefit of your creditors and your families a few hundred thousand dollars which would otherwise have gone into the hands of speculators already grown rich at your expense.

Does this not of itself sufficiently show the animus of the opposition you have to meet in struggling to secure your just rights? Does not this unwarranted attack bear on its face sufficient proof to justify all your efforts for self-protection? Though it is our purpose to continue our policy of regard for the feelings of all concerned, would not this harsh language almost justify a departure from that well-known courtesy we have shown toward everyone who, by nature or choice, may be opposed to us? Allow us to say, however, that said grain report no longer has nor deserves to have the weight which it once had. Its bias and drift are now thoroughly understood. These statements are of a piece with the reports now rife in city and country, that the Grangers are quarreling among themselves; that they can not agree, just as it was predicted about them. They are of a piece with the absurd and malicious rumor, that our agents, Morgan's Sons, who have been, and are so true to us, have formed an alliance with our opponents. Nothing is further from the truth than such statements, brother farmers. In all of them "the wish is father to the thought." Nothing would so please, and so play into the hands of our opponents, as to make us quarrel and lose confidence among ourselves. Oh! how they chuckle even over the hope of such a result. Let us renew our vows to disappoint them.

Let us continue to work harmoniously for the success of all onr plans, in spite of all difficnlties. Harmony and thorough concert of action are at all times vital to our success.

"United, we Stand—Divided, we Fall!"

Brother farmers, never let them divide us. Even though we desire the privilege of quarreling a little among ourselves, let us be a unit toward all who place themselves in opposition to us.

In conclnsion, reviewing all the circumstances of the case, what is it best for us to do this season to secnre the highest market value for our wheat? Evidently, we should ship direct to Europe by the means already provided. We can sell as soon as loaded, at the highest rates the English market will justify, paying commission to but one agent instead of four, and thus carry out the Grange principle of as direct a trade as possible between producer and consumer; or, if present prices are still nnsatisfactory, we have the privilege of carrying our grain and selling at any time during the passage, or on its arrival, when the results of the English and continental harvests become known, and prices are more definitely fixed, thus saving storage, snndry commissions and high rates of interest on money advanced. Any Grange members can ship in lots of one hundred tons or less. However, Granges are already fully informed of the details of onr plans. But here we will be met by the statement, that Grange members who shipped directly last year lost by the operation.

Grange Shipments Last Year.

This is entirely a mistake. No Grange member lost by direct shipments last year. Some farmers are said to have lost in this way, but not one of them was a Grange member, nor did they ship through the Grange agency, and indeed they shipped through parties naturally adverse to the success of direct shipments by farmers, and before our Grange agency was established. Of conrse, our grain-buyers will do everything in their power to make direct shipments nnpopnlar with farmers. But very few Grange members shipped directly last year. Complete preparations were made early in August to ship directly on a large scale, but our grain-buyers continued to pay such handsome prices for wheat that our agents advised farmers to sell rather than ship, and farmers generally were satisfied to do so. The only instance where Grange members shipped directly was as follows: On the ship "North American," which sailed early in December last, five Grange members, whose names can be given if necessary, shipped one hundred tons each. They realized on this wheat from $2.35 to $2.40, according to quality, while wheat sold at the same time in San Francisco at only $2.25. These facts can all be vouched for, if desired.

Stand Fast in the Ranks.

Consider well the words here offered. They have been carefully weighed before being presented for your consideration. Above all things, remember what is necessary for our success this year and in future. Preserve unity in our Order and its plans, at all hazards; have no quarreling among ourselves about side issues and non essentials; labor for the good of our Order everywhere; rally in a solid phalanx around your leaders and agents; let no schemes of our opponents take away your confidence and estrange you from them; do these things, and our vital interests will be saved. Do not become demoralized by the tricks of our foes, but ever be on the alert to detect them. Remember, this is a critical time in our history. Let each endeavor to do his part well, and let this fresh abuse and injustice knit us the more firmly together. How rich the assertion, that we innocent farmers "appear to have obtained control of the press." Well, our papers do generally seem to side with us, but it is only from their true sense of justice. We regret that the *Post* is so blind to equity and its own interests as to side with monopolies rather than with our farmers. Let our press and people prefer to cast their lot with the so-called "band of charlatans," otherwise known as Grangers, who now have a strength of between one and two million members throughout the Union, and somo 15,000 or 20,000 in our own State, rather than side with the riug of grain speculators, knowing both parties as well as we do. Evidently, the spirit which made it necessary for our "band" to organize is not dead, nor is it even true that it sleepeth.—*S. F. Chronicle.*

Temescal Grange Harvest Feast—Temescal Grange, of Oakland, held its harvest feast on Saturday last, and, as usual on such occasions, quite a number of the uninitiated were invited to participate. Professor Carr, of the State University, Master of the Grange, delivered an address upon the aims and purposes of the Order, whioh was well received by all present. The address will be found published in full in another colnmn. After the Professor had concinded there were impromptu speeches by several of the invited guests, all of which were well received, and abounded in good wishes for the success and prosperity of the Order. One of the best of these addresses was given by Rev. A. F. White, of Oakland. He was followed by Mr. Henry, President of the Oakland Savings Union; Mr. Harwood, of the Oakland *News*; Mr. Barter, of the *Semi-Tropical Press*; Mr. Shinn, Master of the Centervllle Grange; Bro. Merry of Healdsburg, and several others. The table was covered with the choicest viands, to which ample justice was done by all who sat down to them.

There are about two hundred Grangers in Inyo county.

Address by Prof. Carr.

The following address was pronounced at the harvest feast of Temescal Grange, Oakland, on the ocoasion of the anniversary of the organization of that Grange, Satnrday, July 11th, by Dr. E. S. Carr, Prof. of Agricultural Chemistry at the State University, and Worthy Master of Temescal Grange. It has been furnished for publication by especial request:

Patrons and Friends:—It is only six years last April since the first missionary of our Order set out on his journey to the great valley of the Mississippi, "The granary of the world," as it had come to be called before California disputed the title—where, in spite of enterprise, industry and great natural advantages, combinations of the non-producing classes had made it almost impossible for the farmer to live by his pursuit. The agricultural classes had almost to a man become aware of their helplessness in the hands of a power, created by the people in their eagerness for easy access to the world's markets, without safeguards and mostly without stipulations for its exercise. An internal commerce, worth $450,000,000 annually—the direct earnings of the people of the United States—was practically beyond their control; and while every other industry was being fairly remunerated, the agricultnral was steadily going behind, until in these great wheat-producing States it was on the verge of bankruptcy. While every man who handled the farmer's products was getting rich, the farmer himself was becoming poor through the exactions of transportation, and the exorbitant prices he was paying for nearly every article he used. It seemed absurd for a class of men to complain year after year of grievances which they had power to remedy.

For one-half the voting population of the United States are engaged either in agricultnral pursuits, or others directly depending upon them, and if these 4,000,000 farmers and their friends wanted a change of masters, or to become their own masters, they had only to combine as a unit in favor of the requisite measures, and the men to execute them. Scattered all over the country in sparse settlements, on large plantations, in suburban districts, there had never been any organization of their interests or power until December, 1866, when O. H. Kelley, of the Agricnltural Bureau of Washington, who had made a tour of inspection of the agricultural resources of the Southern States under President Johnson's orders, laid before a few friends, assembled in his own house, his scheme for the Order of Patrons of Husbandry.

This little cloud, no bigger than a man's hand, now overshadows more than a million hard fisted, sworn defenders of the right to live by the soil; this little spark, which a breath might have extinguished, is glowing as a beacon light to oppressed millions beyond the sea.

So small a thing as an organization of the agricultural class for self-protection and self-improvement was not calculated to alarm those clear heads, those powerful organizing brains which had consolidated power into all the combinations and rings, growing rich on the farmer's toil; not until an unexpected development of brain power within the Order, was there any attention paid to its rapid numerical growth, the most wonderful in the history of any organization. You all know how the Patrons multiplied in the States of the interior, in Iowa, which has 4,000 members in its State Grange, in Minnesota and in Missouri. To plant a Grange was to create a magnetic pole, and every member became a magnet in turn, as we have seen in Michigan, whose first Grange of 150 members, opened in Nov. 1872, multiplied 150 times in a single year. There are now 430 active Granges, and enough organizing and to be organized before the second anniversary to bring the number up to 600 in the Wolverine State. The little State of Vermont, one of the last to organize, has 120 Granges, and 10,000 members. In our common country we cannot travel far without finding a hospitable gate opening into the symbolic farm; for there are 41 State Granges, 17,000 Subordinate Granges, with a membership of 1,032,840, one-fifth the entire agricultural population, and from one-third to one-half of all eligible to membership. Should the present rate of increase continue, by the end of another year the number will be doubled. Even here, where the farming interest is so new, and so scattered, 200 Granges with 15,000 members are enrolled.

A tree which is going to bear very choice fruit must be cut back if it is making wood at the expense of fruit buds. We mnst keep to our legend, "We seek the greatest good to the greatest number," and ever remember the motto adopted by the National Grange, "In essentials, unity; in non-essentials, liberty; in all things, charity." We must remember that it is quality more than quantity which is to determine the value of our Order in elevating the masses of laborers to all the dignity of citizenship.

We hear already of a division and defection in onr ranks. Within the last month a Grange in the State of Illinois has seceded, given up its charter and disbanded. This is the most serious drawback expericnced by us—the loss of one seventeen-thousandth of our body; but tho alleged reasons, as well as the chargos made by outside parties, that the National Grange is wielding unconstitutional powers, and sucking the treasures of the subordinate Granges dry, deserve a moment's consideration. Let us see how much the National Grange can get from the subordinate Granges. A new, male member of a subordinate Grange, who has taken four degrees, has paid five dollars besides his regular monthly dues. Of this sum, the Treasurer of the subordinate Grange pays to the Secretary of the State Grange twenty-five cents for each degree taken, or one dollar for the four degrees, with twenty-five cents annual dues from each member, making $1 25 in all.

Now, out of this dollar and a-quarter, the State Grange pays over to the National ten cents for each degree, and ten cents annnal dues, or fifty cents for the first year, and ten cents annually thereafter. That is the amount of our tax for all the information, secret or otherwise, furnished by competent agents *elected for a moderate term of office*, about every immediate, vital topic of agricnltural interest in the United States. It shows how much importance is attached to the growth of our Order, that the sums remaining in the National Grange treasury, when its reasonable expenses are paid, can be supposed to enrich any one. It is not the money power in the National, *but the money power in the subordinate Granges*, holding as they do the best securities in the world, which the enemies of the farmers fear. We can carry on *within ourselves* all the banking, warehousing and mercantile operations *necessary to our existence*, with persistent adherence to the principles of our Order.

We have stated as explictly as language can do it, that we are not enemies of railroads—that we are not enemies of capital—that we do not intend to abolish middlemen, but only to dispense with whatever service of these classes *which we can do without*. We are pledged to cheap transportation, to industrial improvement and to indnstrial co-operation; first with each other, and then on the most equitable principles with other classes of laborers. We are pledged against high salaries, exorbitant profits and rates of interest; against litigation when it can be avoided. We are pledged to enlarge the abilities and usefulness of woman, and to a better, more practical and more thorough system of education.

We are expecting powerful and well organized opposition to the further extension of our Order. We know exactly where to look for it.

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Political power does not belong to us by virtue of our membership here, but of our citizenship. A good Patron can no more be a bad citizen than he can be a shiftless farmer. A sense of personal responsibility as citizens will necessarily increase as the weight of intelligent manhood and womanhood increases among us. We have hardly begun to realize the social and educational benefits embraced in our orgauization, we have been so busy in getting organized. We are like a family moving into a new house, and are hardly settled enough to know how we like it. But it is much to know that it is founded on the rock—that it is large enough for any increase of the family—that there are food and shelter and raiment for all who enter it, if they will consent to dwell together as brethren, and work for the common good.

As a concluding sentiment, Dr. Carr offered the "Hymn of Labor," which our English brethren are singing amid all the privation and distress which attends their struggle towards emancipation. He thought it a good doxology for Grangers to sing to the tune of "Old Hundred."

We thank Thee, for the men who lead,
Who fight our cause with tongue and pen,
Whose love to Thee, best shown in deed,
Breaks forth in ardent love to men.

We thank Thee, that from south to north,
From east to west the flame has spread,
And that the breathing from Thy mouth
Has kindled unto life the dead.

Lord, make us patient, as Thou art,
Yet constant to Thy great design,
From thoughts of vengeance keep each heart;
Justice and love are both divine.

More men, more manhood now accord,
Make us more worthy to be free,
Where dwells the Spirit of the Lord,
There is the home of liberty.

Change of Officers.—The Master and Secretary of Potter Valley Grange have been changed, and are now as follows: L. A. Preston, M.; Mrs. A. H. Slingerland, Sec'y. The Post-office address has also been changed to Potter Valley, Mendocino county.

The Master and Secretary of Rhonerville Grange, Humboldt county, are now as follows: H. S. Case, Master; Samuel Strong, Sec'y.

Kiwellattah Grange, Humboldt county, has also changed its Master and Secretary, as follows: H. W. Arbogast, M.; Cyrus Daniels, Sec'y. Present Post-office address, Arcata, Humboldt county.

Healdsburg Grange has also changed its Secretary, H. W. Gladden now occupying that positon.

Wiley Watson has resigned his position as Master of Visalia Grange, Kern county, and Thomas Fowler has been elected to fill tho vacancy. H. C. Higby has also resigned as Secretary, and James O. Blakeley elected to fill his place.

Tehaichapa Grange Officers.—The names of the officers of this newly organized Kern county Grange are as follows: John Norboe, M.; E. McVicar, O.; W. B. Brink, L.; W. S. Eastwood, C.; H. F. Wiggins, S.; T. H. Godwin, A. S.; James Prewett, Sec'y; W. C. Wiggins, T.; Robert Taylor, G. K.; Lucy Wiggins, Ceres; Julia Taylor, Pomona; Lizzie Butts, Flora; Mrs. McVicar, L. A. S.

New Granges.

Editors Press:—It gives me pleasure to report that I have just returned home safe, from an arduous trip to Round valley, Mendocino county, 115 miles from here, having been called there to organize a Grange. July 4th, I was at Pomo, Mendocino connty. The Grangers of the valley turned ont in full force, and had a splendid dinner to which all did ample justice.

Pomo Grange, Pomo, Mendocino County.—On the afternoon of July 4th I organized Pomo Grange with 30 charter members, and the following officers were duly elected and installed: John Mewhinney, M.; B. Pemberton, O.; T. W. Dashiells, L.; G. W. Pickle, S.; Isaac Grover, A. S.; W. B. Jones, Chap.; Life Farmer, T.; Geo. B. Nichols, Sec'y.; B. B. Brown, G.K.; Mrs. Dannah Mewhinney, C.; Mrs. Lavinia Grover, Pomona; Miss Martha Hughes, Flora; Miss Jennie Deselms, L.A.S. P.O. address of Master and Sec'y, Pomo, Mendocino Co.

Round Valley Grange, Covelo, Mendocino Co.—On July 7th, I organized Round Valley Grange, with 30 charter members and the following officers: Philo Handy, M.; C. H. Eberle, O.; William Pullen, L.; Nelson Brush, S.; P. K. Faulds, A.S.; Joel Eveland, C.; C.H. Bourne, T.; J. A. Crawford, Sec'y.; J. A. Foster, G.K.; Mrs. Mary M. Melendy, C.; Mrs. Esther O'Farrell, P.; Mrs. Mary A. Hornbrook, Flora; Miss C. L. Long, L.A.S. P.O. address of Master and Sec'y, Covelo, Mendocino Co. Two more Granges are soon to be organized in Mendocino county.

The Fourth at Petaluma.—We have received from Bro. J. W. A. Wright a full report of the Patrons' celebration of the Fourth at Petaluma, the publication of which we are compelled to defer until next week. We have also received from the same source "Notes on Inyo and Kern counties," taken during Bro. Wright's late visit to that section, as Organizing Deputy for the Order, which will appear next week.

Cummings Valley Grange, Kern Co.—The officers of this newly organized Grange are as follows: G. W. Thompson, M.; J. M. Brite, O.; P. P. Martin, L.; M. S. Freeman, C.; T. M. Yates, Sec'y; Jesse Davenport, T.; O. B. Wilson, S.; J. D. Chappell, A. S.; H. L. Todd, G. K.; Mrs. J. E. Martin, Ceres; Mrs. S. Cummings, Pomona; Mrs. S. Chappell, Flora; Mrs. M. J. Freeman, L. A. S.

Home Again.—Bro. Baxter, Secretary of the State Grange, returned from his trip to the East, on Thursday, and is once more at his post, at the Grange Agency, corner of California and Sansome streets.

A Handsome Compliment.—J. Walter Ward, retiring Secretary of Napa Grange, and now the assistant Secretary of the State Grange, was lately the recipient of a purse containing $100.

Planting Trees.—The Grangers of Powder river valley, Oregon, are endeavoring to induce all members to plant trees on their premises—a most worthy purpose.

New Deputy.—Bro. T. J. Farbee, of Bishop's creek, Inyo connty, has been appointed organizing deputy for the counties of Mono and Inyo.

Postal Changes Ordered for the Pacific Coast.—The following postal changes have been ordered on the Pacific Coast: Offices established: At Montserrat, San Diego county, Cal.; Simeon Goldbaum, Postmaster. At Freeport, Cowlitz county, W. T.; V. N. Vallace, Postmaster. At New Locoma, Pierce county, W. T.; W. H. Fife, Postmaster. Postmasters appointed: Mrs. Eliza Perry, at Big Trees, Calaveras county, Cal.; Charles E. Thomas, at Alcatraces, San Francisco county, Cal.; William Estwart, at Morro, San Luis Obispo county, Cal., G. H. Tebbetts, at Santa Barbara, Santa Barbara county, Cal.; John C. Worth, at Peoria, Linn county, Or.; Z. Beard, at Tangent, Linn county, Or.; Charles A. Montgomery, at Fort Colville, Stevens county, W. T.; John H. Hill, at Whittman, Walla Walla county, W. T.; Jacob Ralph, at Beale Spring, Mohave county, Ar. Offices discontinued: Deep Creek, Tooele county, Utah; St. John, Tooele county, Utah.

The Best Seed for Lawns.—Since the publication in the Press of last week of the brief article concerning the lawns of San Francisco we have received inqnires as to the best seed for lawns in this locality. In answer to suoh, we would state that Kentucky Blue Grass and White Dutch Clover, combined, are the seeding most nsed by our landscape-gardeners. About three-fourths of the grass to one-fourth of clover is the proportion most in use, though some prefer a larger percentage of olover. All, however, agree that the two combined produce a neat surface and strong sod.

Fruits now on the Stands.—Some additions have been mado within the past week to the varieties of fruits in our market. Peaches that are peaches—almost—are now on hand; some of the better kinds of plums are showing their blooming oheeks in pnblic places; blackberries are improving in sizo and flavor; the apple market, and the apple itself, are "softening" a little, and a few sonrish grapes, even, are here to be moralized on by the San Francisco foxes. Let them come; we are resigned.



The Use of Flowers.

God might have made the earth bring forth
Enough for great and small,
The oak tree and the cedar tree,
Without a flower at all.

Of all we might have had enough
For every want of ours:
For luxury, medicine and toil,
And yet have had no flowers.

The ore within the mountain mine
Requireth none to grow;
Nor doth it need the lotus flower
To make the river flow.

The clouds might give abundant rain,
The nightly dews might fall,
And the herb that keepeth life in man
Might yet have drunk them all.

Then wherefore, wherefore were they made
All dyed in rainbow light,
All fashioned with supremest grace,
Up-springing day and night?

Our outward life requires them not,
Oh, why then had they birth?
To minister delight to man,
To beautify the earth.

To comfort man, to whisper hope,
Whene'er his faith is dim;
That He who careth for the flowers
Will much more care for him.

—*Mary Howitt.*

The Time to be Pleasant.

"Mother's cross!" ssid Maggie, coming into the kitchen with a pout on her lips. Her aunt was busy ironing; but she looked up and answered Maggie.

"Then it is the very time for you to be pleasant and helpful. Mother was awake a good deal in the night with the poor baby."

Maggie made no reply. She put on her hat and walked off into the garden. But a new idea went with her: "The very time to be helpful and pleasant ia when other people are croas."

Sure enough, thought she. "That would be the time when it would do the most good. I remember when I was sick last year, I was so nervoua that if anybody apoke to me, I could hardly help being crosa; and mother never got angry or out of patience, but was just aa gentle with me. I ought to pay her back now; and I will."

And she aprang up from the grass where ahe had thrown herself, and turned a face full of cheerful resolution toward the room where her mother sat soothing and tending a fretful, teething baby. Maggie brought out the pretty ivory balls, and began to jingle them for the little one. He stopped fretting, and a smile dimpled the corner of his lips.

"Couldn't I take him out in hia carriage?" she asked.

"I should be glad if yon would," said her mother.

"I'll keep him as long as he ia good," said Maggie; "and you must lie on the sofa and get a nap while I am gone. You are looking dreadfully tired."

The kind words and kiss that accompanied them were almost too much for her mother. The tears rose to her eyes, and her voice trembled as she answered, "Thank you, dearie, it will do me a world of good if you can keep him out an hour; and the air will do him good, too. My head ached badly this morning."

What a happy heart beats in Maggie's bosom as she turned the little carriage np and down on the walk. She had done real good. She had given back a little of the help and forbearance that had so often been bestowed npon her. She had made her mother happier, and had given her time to rest. She resolved always to act upon her aunt's advice: "The very time to be pleasant and helpful ia when everybody is tired and cross."

How to Manage a Husband.—A lady read the following paragraph in a paper: "A young wife once cured her husband of a disposition to absent himself from home at night by providing a good dinner, and saying to him afterward, 'George, if you find a sweeter spot than our home describe it to me, and I will rival it if I die in the attempt." A kiss and a few tears completed the victory." This lady tried the game on her husband. He wasn't melted a bit; he merely said, "When you can get the boys to come here and amoke cigars and talk politica, and yon set up a keg of lager, you can count me in. I like the company of the boys; I do." Our lady saw that sentiment had no effect on him. So she didn't throw herself on his neck and hug and wet hia paper collar with tears; bnt she took a saucer and fired it at his head, and followed it up with a cup, and ended by slinging a dish of strawberriea on his shirt bosom. Since that iime he haa been an examplary husband. Yet he does seem very anxious for her to visit her dear mother as often as four or five times a week.

There is one town in Connecticut that is not afraid of the measles. It's Haddam.

The Harvest, Local Option, etc., in Potter Valley.

[Written for the Press by Mrs. C. I. H. Nichols.]

Far as the eye can see, the fields, only a few days ago a waving expanse of green, are broken np, here and there, iuto cosy neighborhoods, the hay-cocks sitting in social groups like friendly gossips at a country tea-party, or chasséeing in the hedge like dancers at a harvest-feast. But here come the hay-makers and their carts, and now the fun takes on a business air. Breeze and hay-forks dispute the possession of the merry waltzers.

Our long and late continued winter rains, developing more cheat than wheat in the early sown grain on low grounds, have caused our farmers to cut for hay whole fields and portions of fields, seeded for grain. The yield is very generally heavy and the cash value of the hay will probably equal that of grain, had the season favored its production.

Late sown grain is very good, and corn—of which more than usual has been planted—is doing finely. On the eveniug of the 5th, a drizzling rain set in and continued at intervals through the 6th and 7th, scarcely starting a rill or wetting the ground to any considerable depth, but treating it to a wet blanket that benefited late crops very perceptibly and gave garden vegetables a fresh start.

Many acres that would have been sown to small grain had the winter offered the usual opportunity for plowing, were planted to corn. The soil was uo sooner dry enough to plow, than the corn planting demanded all the forces our farmers could muster and left no margin for summer-fallowing.

In January the early sown crops, volunteer and on fallow and corn grounds, promised splendidly. At the present date the hopes of our farmers are vested in the late sown grain, and with their large hay crop and a good corn season, they have abundant reasou for content. Our season is at least two weeks later than usual for fruit—of which there is great abundance—ss well as other crops.

I was very much interested in Mr. Crane's report of his army worm experiences, aud as I have no fancy for lodging and boarding the ugly things, though as curious as Mr. C. to kuow what "they are aiming at," I shall look carefully for his fiual report of that imprisoned 100. The worm which he describes visited this valley some years ago, I am told, and without injury to the cropa, and disappeared suddenly. It has been prospecting among us, in considerable force, for scme three weeks, and at the present writing is rapidly disappearing, no one can tell whither. It has considerately passed by the growing crops and "gardeu sass" and grape vinea, so far as I have heard, and fed on the weeds bordering roads, fences and ditches. It betraya an eager appetite for aour dock and if only it would act on Mrs. Carr's suggestion to the touriata to Yoaemite, and cram ita herbarium with "the beantiful white blossoms" and "fern-like leaves" of the Tarweed, which abounds here in all its varieties, in pasture and native grass lands, this "large army worm," as our neighbors in the Sacramento valley call it, would be a public benefactor, even if it did, like the demented Solona of this beautiful State, tax the "growing crops," (cropa in expectancy!). Ah, how I admired these aame blossoms till I made acquaintance with the villainoua odor and gummy adhesiveness of their foliage, gluing skirta, hose and even the pedestrian's boots with a dirty, greenish mixture almost impervious to soap aud water, and at certain seasons of the year communicating a nauseous flavor to milk and butter; the cream when strongly impregnated foaming and utterly refusing to "come."

Ou the 10th inst. "Local Option" re-asserted the popular will of Potter valley, which had neither a saloon nor a drunkard, and tucked Calpella (the other voting precinct of the township) under the thrifty wing of temperance.

Our Potter valley election differed in two respects from every Local Option election of which I have seen returns—not a vote was cast for license, and not a woman was on the ground to pray, or coax or cheer the voters. Eighty votea were cast in the precinct. Fully one-third of the eleo'ors, busy with their haymaking and aure of a no-license victory, did not go to the polls; while the women of the valley, aerenely confident of the issne, staid at home, patched the trowsers, darned the hose, sewed on buttons, cared for the children and chickens and prepared appetizing suppers. Alaa! what did become of the chickens, moulting hens, and babies, in towns whoae women aasembled at the ballot boxes, boqueting button-holes, dispensing refreshments and appealing to a liquor and gold smothered humanity.

As I have read published accounts of the praying and electioneering labors of the women of our country in behalf of temperance, I have felt both jubilant and regretful; sometimes, I confess, thoroughly indignant at the comments of friends—unwilling frienda of the programme. Jubilant, that woman, as the reserve corps of God and good men in the grapple with giant wrong, holds firmly and modestly the advance post assigned her. Regretful, that the mass of men and their leaders have proved recreant gnardiana of the public weal and let loose an enemy which she must attack with prayera and teara and sacrifice. Aud indignant, that man who preteutiously bar her from contact with "the muddy pool of politics" and drunken voters at the ballot box, aa an elector, should send her to kneel in the gutters of that muddy pool and to brave the votariea of intemperance in the reeking kennels of their craft! "Consistency, thou art a jewel!"

Surely the labors of these women, tolerated by many, who regard them outside woman'a sphere, as a forlorn hope, are a reproach to the legislation which has made such vicarious offerings of womanly devotion necessary. The political morality, which, under the plea of regulating, justifies the licensing of a demoralizing trsffic or pursuit or "social evil," emanated from the bottomless pit. And the politicsl economy which enters a plea of benefits from such regulation, or license fees, is an unmitigated cheat and swindle.

Here in my quiet retreat, deeply sympathizing in a struggle to which I have given some of the best and happiest years of my life, I have interviewed the present, questioned the future and drawn upon the experience of the past for au answer to—"How will it end and when?"

And how will it end? Faith, sustained by testimony of the past and present, answers: "Not in immediate success; never in ultimate defeat." It is God's cause, and in the running fight permanent successes overlay transient defeats. Defeat is the discipline of success. But many a drawn battle must precede final triumph. The inadequately sustained forces of temperance, ss in the conflicts of the past, will again and again "change their base," or rest on their arms to renew their strength and recruit their numbers.

But what is to be the influence of the work on the workers themselves? is a questiou anxiously asked in regard to these praying, electioneering bands of women. In the light of the past, I answer, unused faculties and slumbering energies will be developed, repressed sympathies will be set free, and new lessons, upsetting old time ideas and prejudices concerning woman's duty, capability and rights, as a free-will worker under God, will be taken to heart, by both men and women, to bear fruit more abnndantly in all future conflicts between right and wrong. The spirit of the conflict, dictating the manner, deeply concerns the worker and insures success or defeat in proportion as it appeals to or outrages the better iustincts of humanity.

Shall we work, and for what and how? are questions that every soul, that would grow to the stature and normal proportions of manhood or womanhood, should intelligently answer. Shall we work? Yes, surely, for God iu giving us the abilit, haa indicated both our dnty and our right to work.

For what shall we work? For every good cause which challenges in us an nnused or half used faculty for the work.

How shall we work? Work in harness or out, as we can best bring our energies to bear upon desired results, or as opportunity offers.

And what will be the reault of the efforta put forth, on the personality, mental, social and physical, of the workers? I answer—a harmoniously developed manhood to men, womanhood to women; in proud contrast with the Caspar Hausers of society, who have been restrained from the legitimate use of this and that faculty aud atimulated in the use of others, till mentally, morally and physically they are more or less cripples and dyspeptics, to whom rational, useful, humanely rounded livea are impossible, and wholesome, soul-strengthening aliment indigestible.

Then let na work ont onr aalvation from sin-licensing laws and prejudices and win the clear head and strong heart, that can comprehend and execute the higher law of universal love aud justice.

A Revolutionary Relic.

Mr. J. A. Anderson, of El Monte, sends to the Press the following literary curiosity, with the accompanying explanatory note:

[In a number of the *Historical Magazine* may be found the following ingenious piece of poetry, which one of its correspondents vouchea to have been circnlated in Philadelphia during the occnpation of the city by the British, in the war of the Revolution. Its author is unknown. Its peculiarity consists in the manner in which it may be read, viz: in three different ways: 1. Let the whole be read in the order in which it is written; 2. Then the lines downwards on the *left* of each comma in every line; and (3) in the same manner on the *right* of each comma. By the first reading, it will be observed that the revolntionary cause is deprecated, and lauded by the others:]

Hark! hark! the trumpet sounds, the din of war's alarms
O'er seas and solid grounds, doth call us all to arms;
Who for King George doth stand, their honors soon will shine;
Their ruin is at hand, who with the Congress join.
The acts of Parliament, in them I much delight;
I hate their cursed intent, who for the Congress fight.
The Tories of the day, they are my daily toast;
They soon will sneak away, who independence boast,
Who non-resistance hold, they have my hand and heart;
May they for slaves be sold, who act a Whiggish part.
On Mansfield, North and Bute, may daily blessings pour.
Confusion and dispute, on Congress evermore;
To North that British lord, may honor still be done,
I wish a block or cord, to General Washington.

"Are you going to make a flower bed here, Jndkins?" asked a yonng lady of the gardener. "Yes, miss; them's the ordera," answered the gardener. "Why it'll quite spoil onr croquet ground." "Can't help it, miss; them'a your pa's orders. He says he'll have it laid out for horticulture, not for husbandry."

A placard in a Brooklyn barber'a shop window announcea, 'Boota blacked inside." But must not that be very bad for the atockings?

The Story of a Little Bird.

There was an old couple who earned a poor living working hard all day in the fields.

"See how hard we work all day," said the wife, "and it all comes of the foolish curiosity of Adam and Eve. If it had not been for that, we should have been living now in a beantiful garden, with nothing to do all day long."

"Yea," said the the husband; "If you and I had been there, instead of Adam and Eve, all the human family had been in paradise still."

The Count, their master, overheard them talking in this way, aud he came to them, and ssid:

"How wonld you like it if I took you into my palazzo there, to live, and gave you servanta to wait on you, and plenty to eat and drink?"

"Oh, that would be delightful indeed! That wonld be as good as parsdise itself!" answered husband and wife together.

"Well, you may come up there, if you think so. Only remember, in paradise there was one tree that was not to be touched, so at my table there will be one dish not to be touched. You mustn't mind that," said the Count.

"Oh, of course not," replied the old peasant; "that's just what I say when Eve hsd all the fruits in the garden, what did she want with just that one that was forbidden? And if we, who are used to the scantiest victuals, are supplied with enough to live well, what does or matter to ns whether there is an extra dish it not on the table?"

"Very well reasoned," said the Count. "We quite understand each other, then?"

"Perfectly," replied both husband and wife.

"Yon come to live at my palace, and have everything you can want there, so long as you don't open one dish, which there will be in the center of the table. If you open that, you will go back to your way of life."

"We quite understand," answered the peasants.

The Count went in and called his servant, and told him to give the peasants an apartment to themselves, with everything they could want, and a sumptuous dinner; in the middle of the table was to be an earthen dish into which he was to put a little bird alive, so that if one lifted the cover, the bird would fly out. He waa to stay in the room and wait on them, and report to him what happened.

The old people sat down to dinner, and praised everything they saw, so delightful it all seemed.

"Look! that's the dish we're not to touch," said the wife.

"No; better *not* look at it," said the husband.

"Pshaw! There's no danger of wanting to open it when we have such a lot of dishes to eat our fill out of," returned the wife.

So they set to and made such a repast as they had never dreamed of before. By degrees, however, as the novelty of the thing wore off, they grew more and more desirous for something newer and newer still. Though when they at first sat down it seemed that two dishes would be ample to satisfy them, they had now seven or eight, and they were wishing there might be others coming. There ia an end to all things human, and no other came. There only remained the earthen dish in the middle of the table.

"We will just lift the lid np a little wee bit," said the wife.

"No; don't talk about it," said the husband.

The wife sat still for five minutes, and then she said:

"If one just lifted up one corner of the lid, it would scarcely be called opening it, you know."

"Better leave it alone, altogether, and not think about it at all."

The wife sat still another five minutes, and then she said: "If one peeped in just the least in the world, it would not be any harm, surely, and I *should* so like to know what *can* the Count have put in that dish?"

"I'm snre I can't guess in the least," said the husband, "and I must say I can't see what it can signify to him if we did look at it."

"No; that's what I think, and besides, how wonld he know if we peeped? It would not hnrt him," said the wife.

"No, as you say, one could just take a look," said the husband.

The wife did not want more encouragement than that. Bnt when she lifted one side of the lid the least mite, she could aee nothing. She opened it the least mite more, and the bird flew out. The servant ran and told his master, and the Count came down and drove them ont, bidding them never complain of Adam and Eve any more.—*Roman Folk Lore.*

Purity of Character.—Over the beanty of the plum and the apricot there growa a bloom and beauty more exqnisite than the fruit itself—a soft, delicate flush apreads one its flushing cheek. Now, if you brush your hand over this it is gone. The flower that hangs in the morning impearled with dew, arrayed with jewels—once shake it so that the beads roll off and you may sprinkle water over it as you please, yet it can never be again what it waa when the dew fell silently on it from heaven. On a frosty morning you may see panes of glass covered with landscapes, mountains, lakes and trees, blending in a beautiful picture. Now, lay your hand upon the glass, and by the scratch of your finger, or by the warmth of your palm, that delicate tracery will be obliterated. So, there is in youth a beauty and purity of character, which, when once touched and defiled, can never be restored.

The Deacon's Hat.

A rather ridicnlons scene occurred in Norwalk, Ohio, recently. The hero is a prominent and much respected deacon. The other Sunday he started for church with an old hat on his head. It was an easy hat, and the old gentleman enjoyed it. It appears there are pegs to hang hats on in the churches there. He thus disposed of his head-gear on reaching the church, and took his seat with the congregation.

When the services were over he lingered as is customary and proper for deacons to do. He finally reached the porch, and stopped for his hat, and any respectable citizen can imagine the horror he experienced on beholding but one hat left, and that a most dilapidated and scandalons looking article. He could feel his blood boil within him as he looked at it and thonght of the mntton-head who owned it, and had walked off with his glossy beaver instead. He said out loud that the owner of that hat was a mutton-head, and gronnd his deaconish hoel into the floor, and felt much relieved by so doing. Then he tied a handkerchief about his head because the old hat was mnch too large for him, and he could not wear it even if flesh and spirit had not revolted against the spectacle. He told the sexton that the hat must have been built in a dry dock, and the only thing that troubled him in the matter was how a man with a head that size got into the church anyway. Then he stalked majestically homeward, with the red handkerchief wound about his head, and the detestable hat held at arms' length of him, and altogether forming a spectacle that fastened the astonished attention of every beholder.

Arriving home, he extended the obnoxious article towards his wife, and waiting an instant for her to take in the awful enormity of the offense, he explosively shouted: "Look at that villainous rag!" The lady looked at it and was astonished. "I don't wonder you are sick," he howled, morosely; "it makes me sick to think of the bull-head who owns such a smoke-stack palming it off on me, and taking my new beaver for himself in *mistake*. (He ground this out in a withering sarcasm.) "A pretty mistake, I must say, when this rag is big enough to cover a cart, and filthy enough to make a crow sick."

"But that's your every day hat," asserted his wife, in still greater astonishment.

"My hat!" gasped the amazed deacon, staring at her with eyes half-way out of their sockets, and then laughing hysterically and shivering from head to foot.

"Certainly, it is," persisted his wife, "and here is your best hat," taking that article from its accustomed place and holding it out to him. Without a word the miserable man sank into a chair, and after staring blankly at his wife for a moment, slowly said: "The ways of Providence are past finding out. Rub my head, Matildy!"

Civility.—A courteous man often succeeds in life, and that even when persons of ability fail. The experience of every man furnishes frequent instances where conciliatory manners have made the fortunes of physicians, lawyers, divines, politicians, merchants and, indeed, individuals of all pursuits. In being introduced to a stranger, his affability or the reverse creates instantaneously a prepossession in his favor, or awakens unconsciously a prejudice against him. To men civility is, in fact, what a pleasing appearance is to woman; it is a general passport to favor—a letter of recommendation written in a language that every person understands. The best of men have often injured themselves by irritability and consequent rudeness; whereas men of inferior ability have frequently succeeded by their agreeable and pleasing manners. Of two men, equal in all other respects, the courteous one has twice the advantages, and by far the better chance of making his way it the world.

The Invisible Children.—It is not when your children are with you; it is not when you see and hear them, that they are most to you; it is when the sad assemblage is gone; it is when the daisies have resumed their growing again in the place where the little forms were laid; it is when yon have carried your children ont, and said farewell, and come home again, and day and night are full of sweet memories; it is when summer and winter are full of touches and suggestions of them, when you cannot look up to God without thinking of them, nor look down toward yourself and not think of them; it is when they have gone out of your arms, and are living to you only by the power of imagination, that they are the most to yon. The invisible children are the real children, the sweetest children, the truest children, the children that touch our hearts as no hands of flesh ever conld tonch them.—*Journal of Education.*

"What do they mean?" said Spicer's friend, pointing to the three gold balls in front of a shop the other day. "Indians," was the reply. "Indians!" said his friend. "Yes, Pawn-ees," retorted Spicer.—*Boston Bulletin.*

A book-binder had a book bronght to him to be rebound. After the job was finished he made the following entry in his day book: "To repairing the 'Way to Heaven,' twenty-five cents."

A little boy having broken his rocking-horse the day it was bought, his mother began to rebuke him. He silenced her by inquiring, "What is the good of a horse till it's broke?"

Young Folks' Column.

The Little Robin.

As I sat at my window this evening,
A robin came flying along;
Then he hopped and he twittered—then chirping
He sang me a beautiful song.
He sat on a rose-bnsh so slender,
As he poured forth his beautiful lay;
Then another he sang, and sat singing,
As if he intended to stay.

On a sudden, his bright eye discovered
A cord which the rose-bush confined.
"Oh, ho!" thought the robin, "what fortune!
How nicely my nest will be lined!
This cord is now just what I wanted,
To put in my dear little nest,
I will see if I cannot untie it,
Or break it—yes, that would be best."

And he fluttered, then worked away bravely;
But finding he did not succeed,
He sang a sweet song for a moment,
Then worked away bravely indeed,
He pulled again, never despairing,
Then rested once more from his work,
Then at it again he went strongly,
And broke it at last with a jerk.

Then off to the fir-tree so shady
My robin flew swiftly away,
And deposited safely his treasure
With some small bits of straw and of hay;
Then back again came the dear robin,
He quickly came flying along,
And again on the rose-bush sat lightly,
And sang me another sweet song.

Now think of this robin, dear children,
When something perplexes, I pray;
Stop and sing a sweet song for a moment,
And the trouble will vanish away.
Persevere in your least undertaking
As this dear little robin to-night;
Be patient, be cheerful, dear children,
And your duties will seem very light.

—*Children's Hour.*

Value of the Morning Hours.

Tom Jones was a little fellow, and not so quick to learn as some boys; but no one in the class could beat him in his lessons. He rarely missed in geography, never in spelling, and his arithmetic was always correctly done; as for his reading, no boy improved like him. The scholars were fairly angry sometimes, he outdid them so constantly,

"Why, Tom, where do you learn your lessons? You don't study in school like the other boys."

"I rise early in the morning," answered Tom.

Ah! that is it. "The morning hour has gold in its mouth."

There is a garden near ns, which is the prettiest and most fruitful spot in the neighborhood, The earliest radishes, peas, strawberries, potatoes, grow there. It supplies the family with vegetables, besides some for the market. If anybody wants flowers, that garden furnishes the sweetest roses, pinks, and "all sorts" without number. The soil, we used to think, was poor and rocky, besides being exposed to the north wind; and the owner is at his business all day, yet he never hires any one to dig or to weed for him.

"How do you make so much out of your little garden?" he was once asked.

"I give my *mornings* to it," he answered; "and I don't know which is the most benefited by my work, my garden or I."

Harry's Chickens.

Sammy Brent lived "way down south," and was just as full of mischief as a boy of thirteen could be. One evening he came home after a ramble through the woods and by the river, and asked his brother Harry, who was eight years yonnger than himself:

"Harry, wouldn't you like to have some funny chickens?"

"I'm just sure I would," answered Harry.

"Well, you take these three eggs and put them in a box of sand and set it in the sun, and after a while you'll have three of the funniest chickens you ever saw."

Harry followed his brother's directions, and morning, noon and night, he might be seen watching for his brood to poke their bills up out of the sand. At last, one hot day, just before noon, the sand began to move, and the queerest kind of a chicken came out. It had a long, flat body without feathers or wings, four feet, and a tail nearly as long as its body. As soon as Harry's excited eyes could see clearly he exclaimed:

"Oh! oh! it's a alligator! it's a alligator come out of an egg."

If Harry had been a little older he would have known that the alligators bury their eggs in the sand and wait for the sun to hatch them, and as soon as the young alligators appear, the mother condncts them to the water.

Sunshine.—Sunshine is beautiful and joy-inspiring always. All things animate and inanimate take on a new life in its presence, Not a flower but gratefully recognizes it, not a bird but carols the sweetest under its touch.

A little girl asked a minister, "Do you think my father will go to heaven.

"Why, yes my child. Why do you ask?"

"Well, because if he don't have his own way there, he wont stay long, I was thinking."

Andrew Jackson was accused of bad spelling, but John Randolph defended him by declaring that "a man must be a fool who couldn't spell words more ways than one."

Good Health.

The Human Frame.

No. 6—The Larnyx.

The larnyx is one of the most delicate and beautiful organs of the body. It is, in fact, an admirably constructed musical instrument so placed as to utilize the currents of air, passing in and out of the lungs, for the production of sound. It is a piano, flute and clarionet all in one; and all compressed within the space of a cubical inch. The lungs are the bellows which supply the air; the trachea is the tube which concentrates and conducts it to the music box, while the "vocal chords" supply the place of the numerous wires which cause the different tones to be produced in the piano. But, while there are dozens and dozens of these wires reqnired in the piano, this tiny, but unrivaled instrument has but two, and these, like the eyes and ears, are perfect duplicates. Yet, these two "chords" of yellow elastic tissue are capable of producing a far greater variety of sounds than the boasted Chickering with its seven or eight octaves. True, the human voice, except in rare cases, does not exceed two or two and a-half octaves, but the instrument of art only has a single half tone between each note, while the voice in this respect is almost unlimited—Jenny Lind, it is said, being capable of producing one hundred appreciable tones between any two major intervals in the scale. Besides this, when we consider the endless variety of expression the voice is capable of, compared with the puny "stops" of other instruments, it becomes useless to draw comparisons further.

But perhaps it may be desired to know something more of the mechanism by means of which these wonderful results are accomplished. Well, this box, placed just below the base of the tongue, and the forepart of which constitutes the well-known Adam's apple, is triangular in form, with the apex pointing outward, and is constructed out of nine "boards," or pieces of cartilage; these being bound together by eight muscles and about a dozen ligaments. Two of these cartilages have little horn-like terminations which project upwards into the cavity of this box, and at the ends of these are attached one extremity of each vocal chord, the other being attached on the opposite side. These cartilages are movable by means of muscles which cause them to partially rotate; thus putting the chords on the stretch or otherwise. These muscles are under the control of the will; and, just as the violin string gives a shriller sound when drawn tighter, so the owner has only to telegraph down, and these cartilages are "yanked" around in a twinkling, the vocal chords put upon extreme tension, and "Come out of that, John Henry!" is uttered with a shrillness that makes the little culprit fairly jump out of his boots.

These chords are, as we have said, composed of elastic, yellow fibrous tissne, and covered by an extremely delicate mucous membrane, the thickening of which, by colds or otherwise, causes that huskiness of voice so often observed.

Another curiosity connected with the voice, is a "sonnding box," hollowed out of the frontal bones, known as the "frontal sinus," and which communicates with the fossa of the nose by means of tiny apertures. These often become also closed through the thickening of the mucous membrane from colds, etc., and hence occasion that peculiar, flat tone of voice known as "talking through the nose." When the cold passes away the aqueducts are reopened, resonance restored, and the nasal tone ceases.

The "Open Treatment" of Wounds.—The principal maxims followed by Prof. Rose in the treatment of wounds are to secure absolute rest after arrest of bleeding, and to provide for perfect freedom of discharge and scrupulous cleanliness. Another principle is to interfere with the healing process of wounds only when special indications are afforded, aud to consider stitches and bandages of all kinds as interferences to be so avoided. The air to which the wounds are freely exposed in the open treatment must, of course, be pure, aud the system accordingly includes the use of energetic ventilation. In the hospital, ventilation is obtained only by constant opening of the doors and windows, a proceeding which, it is true, renders the heating arrangements often insufficient in winter. The advantages claimed for this method are: There is no pressure or constriction by dressings. An irritation of the wounds by changing the position and external applications is avoided. There is no danger of infecting the wounds by impure articles. The danger of retention of matter is small. The state of the wounds may be controlled at any time by simply lifting the coverlets. As healing by the first intention is given up, as many ligatures may be applied as are desirable, and thus secondary hemorrhage may be better avoided. The air of the wards is not infected by emanations from the dressings, as in the case of other methods, except Lister's. There is less need for materials for dressings, therefore less expense.

An infussion of flaxseed, with licorice-root and lemon jnice added, is recommended as a common drink in catarrh.

Taking Cold.

The secret of avoiding the unpleasant consequences thought to spring wholly from the action of cold upon the body has very little dependence upon exposure, but a great deal upon an impure and weak condition of all the vital processes. In other words, with an average or superior constitution, and an intelligent observance of all the laws of health, men and women conld not take cold if they wanted to; they might be exposed to the action of cold to a degree equal to the beast of the field, and with like impunity. But in the case of persons with feeble constitutions, and who disregard knowingly or otherwise—and most frequently otherwise—the conditions of healthy existence, no degree of care will prevent the taking of cold, as it is termed. They may live in houses regulated with all the precision of a hot-house—they may cover themselves with the most highly protective clothing the market provides, and yet they will take cold. The consumptive person does not live, nor ever will live, even if kept in a temperature absolutely nniform, aud clothed in a wholly faultless manner, in whom the well known signs of one cold after another will not be apparent. But, on the other hand, there are those who, like the late Sir Henry Holland, of good constitutions and living in accordance with the laws of health, may travel as he did from the tropics to the arctics again and again, clad only in an ordinary dress coat, and yet scarcely know what it is to have a cold, or sickness of any kind. The truth is, that in order to avoid taking cold from ordinary, or even extraordinary exposure, the vital processes of the body must be made made strong enough to rise above the untoward influence of external conditions. If the body is not thus superior, if it is so weak that it can only act harmoniously under the most favorable conditions, a continued state of health is not among the possibilities. No more will a weak body maintain itself without harm amid great external disturbance thau will the weak machinery of a steam vessel maintain itself without injury amid a severe storm. The avoidance of elemental disturbances are not possible in the one case any more than in the other, yet it is precisely what persons by the ten thousand are to-day seeking to accomplish in the preservation of their health. The study is not how to make their blood purer, their bodies stronger, but how to dodge the ugly weather.

The conclusion from all this is, that neglecting the conditions upon which strength of constitution and purity of blood depend, and then striving to avoid in a sedulously carefnl manner the evil influences of colds upon the body, is like neglecting the substance for the shadow of health; or more properly, it is like one who starves his body, and then strives to keep quiet in order that his strength shall not be exhausted. Let food be taken, and the exhaustion from exercise will not eusue; let all the conditions of health be observed, and then the natural changes of the weather will fall harmlessly on the healthy functions of the body.—*Sanitarian.*

Transfusion of Blood.—In many cases, particularly those in which exhaustion had taken place from hemorrhage, transfusion has been attended with remarkable success. In cases where organic disease previously existed, failures have been frequent. Dr. Flint states that while normally a patient should have from fourteen to eighteen pounds of blood in the system to properly sustain the functions of the body, the injection of from four to seven ounces of blood into the circulation of a person apparently dying has been known to completely restore the patient to life. The introduction of portions of blood without the red blood-globules has been nnattended with good results. These blood-corpuscles are the oxygen carriers. It is Dr. Flint's opinion that this operation is perfectly practicable, and that it should not only be employed in those desperate cases where favorable results are scarcely expected, but should be resorted to before patients have fallen into such a desperate condition.

Legislation and Hygiene. — The various lessons given us by Nature as to the possibility of checking or preventing disease have culminated in the fact that the State uses its moral power and material resources toward preserving the health of its citizens. As to how far the State may thus exercise authority, there is a difference of opinion; but the neglect of a city government to provide proper sewerage and the conrse of a common drunkard, both tending to disturb the public peace and the comfort of individuals, are alike crimes and should be considered as such in law. The existence of vile deposits which overwhelm the inhabitants with a tainted atmosphere, or the spread of the habit which strikes at the root of the physical, moral and intellectual health of the people, are both producers of disease to the community, which should be as sedulonsly guarded against as the visitation of a fever to the individual, and the means used to defend the people from their ravages are striking examples of pure preventative medicine.—*Sc. Am.*

Prevention in Place of Cure.—President Barnard says that the advance of modern science is such that the physician will eventnally find his occupation gone. The people would, as they advance further in knowledge of natural laws, become more and more able to dispense with the doctor, and in brief would learn so to apply the "ounce of prevention" as to obviate the necessity of the "pound cure."

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SAN FRANCISCO:

Saturday, July 18, 1874.

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Removal.

July 13th, 1874, the business office of this Journal was removed just one block east of our former location, to No. 224 Sansome Street, southeast corner of California, over the Bank of British Columbia, where we have secured large and elegant quarters. This removal is made in consequence of the sale of the building which we formerly occupied, to parties who will proceed immediately to demolish the present structure and erect a new and magnificent block in its place.

PERSONAL.—It is with much regret that we announce the fact that Mr. W. Wadsworth, who for some three years past has been connected with the editorial department of the PACIFIC RURAL PRESS, has been compelled by serious indisposition to withdraw, permanently, from all editorial labor. Since March last our columns have largely missed his able and genial pen. Protracted visits to Santa Cruz, Los Angeles, and more latterly to Verdi, near the summit of the Sierras, have thus far failed to restore his declining health. His numerous friends, in all parts of the State, will share with us in regrets at his declining health, and join us in the hope that he will yet return once more to the active duties of life.

"THE HUMAN FRAME."—We give to-day another of the excellent series of articles on The Human Frame. They are prepared expressly for this paper by a gentlemen connected with it By thoroughly understanding the subject which he has taken in hand, and having formed a correct estimate of the tastes and needs of the general reader in these matters, he has been able to give a large amount of useful information in an attractive form.

EXAMINE YOUR HOUSE.—Since the church accident at Syracuse the people all over the country have been examining their meeting-houses, and about every other such building is reported by somebody as unsafe. The only astonishing thing is that half the inhabitants haven't been killed before now.

California Butter.

The complimentary notices which are received from the East, concerning the good keeping qualities of California butter, do not fully satisfy us. They imply that we have merely made a lucky hit in the mode which we have adopted for preparing our butter for market; and it seems to be expected that we should accept them as a liberal concession on the part of those who could not conscientiously admit the product itself, aside from its style of going to market, among the first-class dairy products of the land. We are not, however, disposed to complain of any slight, or even want of appreciation, on the part of our distant customers; for we are aware that it would be casting a worse slight upon them to suppose that they did not know that butter could not be kept good, that was not good when it was taken out of the churn.

It is not to complain of the want of our full complement of praise, but rather to inspire confidence on the part of the producers of California butter, that we have taken the subject in hand. This is one of the very few products in regard to which our people are willing to admit that other portions of the country possess superior advantages; but if they had conceded certain other claims to their Eastern neighbors, and withheld this, they would have arrived at a fairer and more judicious distribution of agricultural honors. They have evidently been led into this mistake by the pratings of Science. This lady has condescended to make frequent visits to the dairy, of late. Possibly these visits have been a little too frequent; for though some of her hints have been of practical benefit, many of her conclusions have been unsound, and have misled her too confiding votaries. It has been remarked that when a lady takes out her gold watch in a crowded street car to inform herself of the time of day, her fellow passengers are justified in the conclusion that she has not carried a watch a very long period of time; and by the same rule we may suppose that those who display among the masses an elaborately and highly burnished case of science, from which dangles a long chain of sounding epithets, have not long been in possession of the same.

Science has condescendingly called on her poor relation, Agriculture, and has seemed to take a particular fancy to the dairy department. She has furnished dairymen with an analysis of grasses and soils, and told them in what localities the component parts of butter are to be found in their greatest purity and abundance; and in this connection we have been assured that California is not among the few favored spots where first-class butter can be made.

We are willing to admit that we have not yet seen anything of the California make that is quite up to the once famous "Orange county butter," of New York, or that equals the now celebrated Philadelphia butter; and among the many dairying districts of the East there are probably other favored spots where, during a brief season of each year, a grade of butter may be made which we cannot equal. But we are not disposed to accept any classification which places California butter in the "ordinary," or even in the "good grades;" for we assert that, with the exception of the strictly "fancy" article, our butter is superior to that of Eastern manufacture.

From our observations of the effects of climate on milk, we cannot see how that of California can be otherwise than favorable to butter making. Where the condition of the atmosphere is such that the milk sours before the cream rises, and where the cream becomes tainted and moulds a few hours after skimming, we cannot expect as much butter from the same amount of milk, or as good an article as in situations which allow the cream ample time to rise, and do not render it liable to the slightest taint during the butter-making processes. It will, perhaps, be remembered by the readers of the PRESS that Harris Lewis, of Herkimer county, N. Y., recently gave, through the columns of our paper, his opinion of the probable effects of our remarkably pure atmosphere on cheese-making; stating that among other advantages which we might expect to derive from our climate in this product, cheese made and cured under such circumstances would possess long-keeping qualities. Mr. Lewis, in his letter to the PRESS, limited his observations to cheese-making; but we are confident that he and every other experienced dairyman will agree with us that these climatic advantages are equally available in butter-making.

The uniform temperature of the climate of California undoubtedly gives uniformity to California butter, and it is this quality, which is imparted to it even by the food of which the cow partakes, which gives it much of the remarkable keeping quality for which our system of packing is especially credited. "Fancy butter" is pleasant to read about, and it is really delicious eating; especially where the consumer brings to the feast a bit of his own fancy; but uniformity in butter is a quality far more desirable than fancy; especially where it is uniformly good, or even better than good, as is the standard butter of California. If people do not go into ecstasies over California butter, on the other hand their senses are never shocked by it as they are by a large portion—perhaps three-quarters—of that which is made in the East. It is interesting to observe the almost timid manner with which the retail purchaser of eastern butter makes his acquaintance with the article. His sense of smell has received so many gross affronts of this character that he does not bring it in close proximity to his nose, but "scents it from afar" at first. When the nose, as a partner in the purchase, assents to the bargain the taste is consulted; and after some deliberation, accompanied by an ominous scowl and a suspicious smacking of the lips, the purchase is perhaps completed. Similar scenes are enacted over the butter-plate at the table. It is scarcely considered a breach of hospitality or of table etiquette for the guest to lift the butter to his nose before spreading it on his bread. But we see little of this in California. As it is safe to eat a California apple in the dark, so can we spread, as well as eat, our bread in peace, with no noisome stench or flavor to molest or make us afraid.

What we have said in regard to the keeping qualities of California butter being more attributable to our climate than to our mode of packing, should not be considered as evidence of a want of faith on our part in this mode; for we think that our butter-makers achieved a fortunate hit when they adopted it. We want no butter-firkins in the State, though butter packed in them here would undoubtedly keep better than in those places where they are in general use; but our long, two-pound roll possesses many advantages. In convenience and neatness in marketing it cannot be surpassed; and a slice from one of them furnishes a becoming occupant for the butter plate. Enrolled in thin cloth, and pickled in large butter casks, it can be safely transported to any distance.

We hope that by improving our dairy stock, and by increased facilities for making and marketing butter, we shall be able to compete as successfully with Eastern dairymen in regard to prices, as we now do in the quality of the product; and that we shall soon export largely of this article. The exclusive exportation of grain fortunately suits the emergencies of a new country; but all farmers are aware that if continued it will exhaust the vitality of the soil, and they do not need the croakings of assayers to stimulate them to an endeavor to substitute something of a different character as soon as practicable. For this purpose nothing is so well adapted as dairying. It enriches instead of impoverishing the soil, and whatever enriches the soil, enriches the owner of the soil.

Hints on Hop Growing—No. 7.

Drying Hops.

Our apology for allowing the present number of this series of articles to follow so closely upon the heels of its predecessor, which appeared in last week's issue, is, that the two processes of which they treat are still more closely connected and are also close at hand.

A good dry-house is not an expensive structure, and when not used for drying hops is available for various other purposes. A building covering a space of 18x36 feet, and having 16 feet posts, will be sufficiently large for a hop yard of ten acres. The lower story, divided into two apartments of equal size, will form the store-room and the press-room, where the baled hops can be stored. The upper story, divided in the same way, will form the kiln—over the store-room—and the store-room for unpressed hops. Let the building be as tight as a good outside boarding and inside ceiling will make it; for air and light should be pretty effectually excluded. About two feet may be taken from the hight of the kiln and added to that of the stove-room. This will more effectually concentrate the heat in the kiln, and the floor being elevated above that of the store-room it will add to the convenience of shoving the dried hops from the former to the latter. In place of a floor between the stove and kiln-rooms, heavy wire cloth should be placed upon the joists; and over this bailing cloth should be spread to prevent the hops from sifting through. No glass windows should be placed in any of the rooms, with the exception of that in which the hops are pressed, as the hops should be kept from the light as much as possible. One window with shutters that fit closely and that can be readily managed is all that is needed for the other three rooms; though the stove-room should have ventilators near the floor, which may be opened or closed as more or less heat is required. There should be no entrance to the stove-room except through the press-room; and the window through which the hops, when brought from the yard, are emptied into the kiln, is all the communication needed between this room and the outside world. A platform under this receiving window will be needed in placing the sacks of newly picked hops from the wagon into the kiln.

The dried, unbaled hops being extremely bulky, it is desirable to have as much space as possible in which to store them, as haling can not be well attended to during the drying season. To gain space for this storage, a foot—or even more—may be taken from the room beneath the press-room by placing the dividing floor thus much lower. The press-room should be well lighted, as it is here that the sewing of the bales is done; and, when the drying season is past, this room furnishes a good shop for the farm. Near the center of the room a hole about two feet square should be left, under which the press is to be placed, and from which the hops are poured into the press through a cloth hopper. This can be done with a trap door, and opened as the press is to be filled.

One of the largest size box stoves will answer for hop-drying, through a regular hop stove is made for this purpose. Let the pipe run up to within about two feet of the floor above, then entering a "T," from each end of which a pipe runs around each side of the room entering the chimney on the side opposite that at which the stove is placed. An earthen floor for the stove-room is preferable.

In placing hops within the kiln for drying, be careful and not trample them. Have them lay up as loose as possible. Begin in the part of the room most distant from the receiving door, placing them about you, and crowding yourself out of the room, by the increasing surface of hops. Take a light rake, and make the surface smooth as you extend it. About sixteen inches is a good depth to spread the hops. When the supply is complete, close the receiving door or window, also that which leads into the stove-room, and the "hatch" is ready to have the heat applied.

The dryer must not expect to remain a longer time in the stove-room than is necessary in making the fires. He should, however, give this duty his close attention, as a uniform heat is desirable. An experienced dryer will be able to catch a few minutes' sleep occasionally, between the fire-makings; but as a general rule the dryer should not trust himself in this respect. The stove should be kept at such a heat as will show spots of red on its surface nearly all the time. Have a stock of unpulverized sulphur near at hand, and occasionally, about every two hours, place two or three ounces on the stove. This will preserve the bright green color of the hops.

Under ordinary circumstances, ten hours' time is sufficient for drying a batch of hops. The dryer, commencing his fires at six o'clock in the evening, will be able to retire at four in the morning, leaving everything tightly closed. About nine o'clock the kiln should be visited, when they will be found to be partially cooled. They should now be thoroughly stirred, by walking through them, scraping the feet along the floor, instead of stepping, thus plowing them up and bringing the bottom hops to the surface. They can again be closed tightly, and left until such time in the afternoon as you wish to prepare for another drying; then they should be shoved into the store-room. As we have before suggested, the hops should be kept from the air and sunlight as much as possible, from the time they are taken from the hop-picker's box to that of entering the press-hopper.

When hops are properly and thoroughly dried they should have a delicate green color, and be crisp and brittle, pulverizing readily by rubbing in the palm of the hand.

OUT OF MORMONDOM.—Mr. Fred. D. Perris, editor of the Utah *Mining Gazette*, called at the office of the RURAL PRESS on Tuesday of this week, in company with William H. Sherman, Esq., also a citizen of Salt Lake City. The principal object which these gentlemen have in view is to prospect, from a colonization point of view, the northern portion of California. Should the observations of this visiting party, and the inducements offered them, warrant a favorable report, it is believed that quite a numerous colony—not co-operative—will leave Utah during the present year and take up their abode in this State. The parties having this enterprise in hand are possessed of the means and experience needed in organizing and establishing a self-sustaining community. From conversation with Messrs. Perris and Sherman, we are inclined to believe that Mormonism will need slaying over again, not being as near its latter end as the Gentile world have fondly believed. What is really the most discouraging phase of the subject at present, is the fact that it is becoming partially modified, and displays evidences of adaptability to progression.

CHICAGO'S SECOND FIRE.—Chicago has been overtaken by another terrible conflagration; this time, however, mostly in a part of the city not covered by expensive improvements. Two or three fine streets, however, have suffered severely, and the post-office, one of the large hotels, a fine theater and church have been destroyed. Some sixty or more acres of ground were burned over, embracing from fifteen to twenty blocks, and the loss is estimated, from five to eight millions. Several hundred families, mostly poor and suffering before, have been turned out of house and home by this calamity, the full particulars of which have not yet reached us. The sympathy of the entire country and of the whole civilized world, indeed, is with Chicago in this her second great disaster.

MORE STATE FAIRS.—We have received a copy of the premium list of the Kansas City Industrial Exposition and Agricultural Fair, to open at Kansas City, Mo., September 14th, and continue six days. The premiums offered amount to $20,000. With the above came a copy of the list of premiums to be awarded at the approaching annual fair of the Oregon State Agricultural Society.

THE "Mitchell wagon," sold by Mills & Evans, at 508 Market street, is one of the most popular farm wagons now being sold on this coast. These gentlemen have adopted the novel advertising expedient known as "Commission Scrip."

THE prices paid for wool this year in Yreka ranged from 22½ to 26 cents, those who sold first getting the lowest rates.

More About Comets.

We gave a short chapter on comets last week, and so much interest appears to he taken in this class of heavenly bodies just at this time, that we have been persuaded to add another chapter to-day, which we premise by calling attention to the accompanying engraving, that presents a vivid illustration of the four chief characteristic appearances which heavenly bodies of this class present to the vision. Fig. 1 represents the comet of 1689, which presented a curvilinear-shaped tail like that which accompanied the famous comet of 1858. Fig. 2 represents the somewhat unnsual appearance of a double or many tails. Fig. 4 represents one, whose tail, either from its particular position with reference to the observer appears straight like a shadow, or which really is so. Fig. 3 represents the only instance we have had of a comet without any appearance of a caudal appendage, even at its nearest approach to the sun. Fig. 5 represents a portion of the ordinary orbit of a comet which it will he seen is extremely elliptical.

Notwithstanding all that has been written and said abont comets, we really know but very little about them; but nearly all people, scientific men especially, are very anxious to know more. Philosophers have talked wisely, but generally very vaguely about them, and have expressed opinions in some respects quite at variance. Sometimes we are told that they are composed of such flimsy stuff, that were one condensed into a solid body, it might he readily carried in an ordinary pocket—that they are simply visible nothings! Of course such talk is arrant nonsense; because the value or weight of the mass of many comets has been approximately calculated, which have been ascertained to be bodies of large gravitating power, and in some cases the nucleus is known to consist of a dense opaque mass.

The nucleus of the comet now in the heavens is evidently a comparatively solid mass. This is known by the intense brilliancy which it presents when examined through a telescope. We have repeatedly made such examination since its appearance, with a small, but very superior instrument, having a 3-inch object glass, and find that the brightness of the nuclens is rapidly increasing as the comet approaches the sun. At this time its brilliancy is far superior to any star, and can be compared to nothing but the sun itself. But whether viewed as ephemeral or substantial bodies, comets present a most interesting subject of study and speculation.

What We Know About Comets.

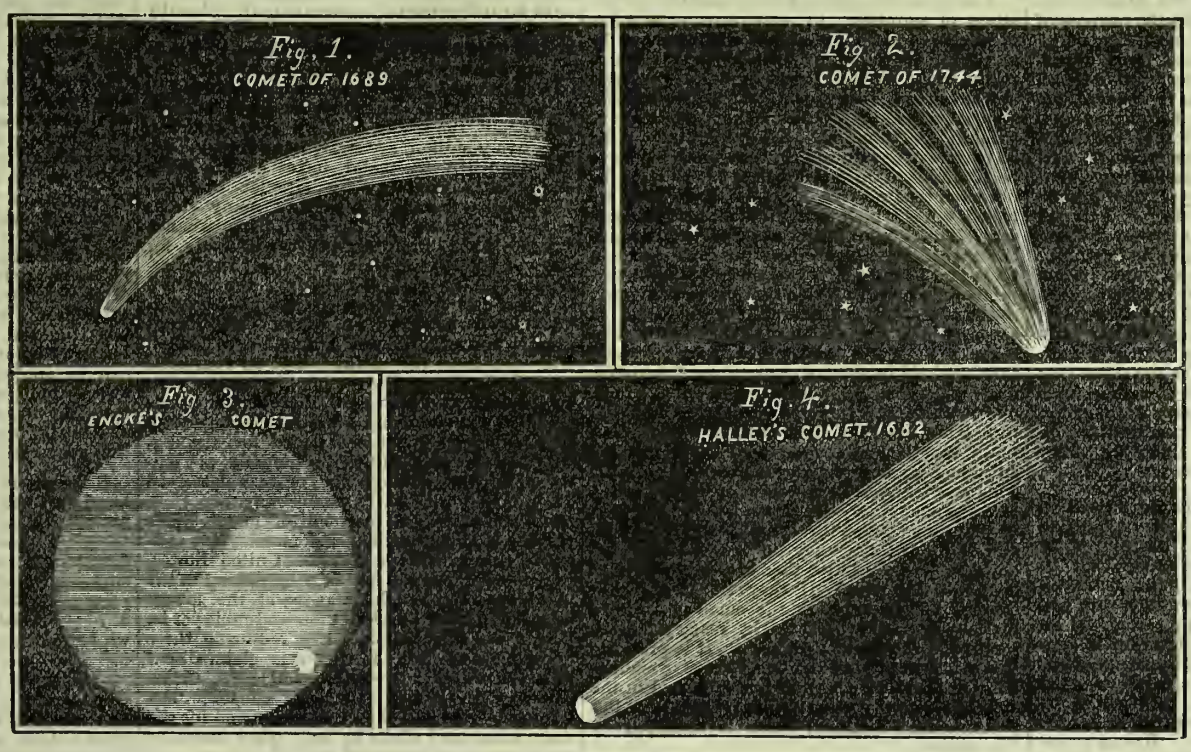
We know positively that they differ widely from planets in their lesser density and very eccentrio orbits. Planets all revolve around the sun in one direction, and in very nearly the same plane; while comets move in every possible direction and at every possible inclination from any given plane. The paths of comets are either an ellipse, a parabola, or a hyperbola; in the latter case they come into the solar system from one direction and go off in another, and in such tracks that it is impossible that they can ever come back to us when they havo once left. They are simply wanderers in space, withont any fixed track. Some comets have revolutions as short as three years; one, that of 1811, is estimated to have a revolution stretching through a period of not less than 3,000 years! Planets have a uniform speed, while the speed of comets varies according as they recede from or approach the sun. When near their aphelion or greatest distance from the sun their movement is exceedingly slow; when at their perihelion or nearest the sun they move with almost incredible velocity, even for heavenly bodies. It was calculated that the comet of 1843, when nearest the sun, moved at the velocity of 22,000 miles a minute, while the earth moves only about 1,100 miles a minute.

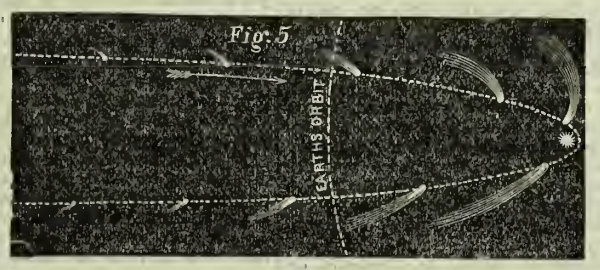
What We Don't Know about Them—Chances of Collision with the Earth.

It is estimated that there must be at least a million of comets, and probably several millions, which revisit our solar system; but of all this vast number not over 1,500 ever come within the earth's orbit, and of course the chances of collision are restricted to this small number only. And when we reflect that only 150 visit us in a century, and that they come in upon us from such an infinite diversity of directions, we must become aware that the chances of collision are so infinitely small that the mind can scarcely comprehend the fraction of danger. It is safe to say that the chances of any given individual being killed by lightning, even here in California, are as many hundreds of millions to one of the probability of danger of injury from any collision of the earth with a comet. Moreover, it is very definitely known that much of the largest portion of those which do reach the earth's orbit are of such extremely gaseous consistency, that even were they to come in contact with the earth they conld no more penetrate the atmosphere, so as to reach anything npon the earth's surface, than could a dry s ponge, if thrown upon the surface of the water, reach and crush a lobster or other slow orawling objeot which might at the moment be npon the earth at the hottom of that water.

Again, there is only one oomet known whose orbit crosses the earth's plane at any point in the earth's orbit; and the only chance of collision is that both should reach the same point at the same time. The chances of a collision even with *that* body are enormously large against such an occurrence. The chances of collision with any other known oomet are about as great as would be the chances of a street car on Montgomery street, in this city, colliding with another on Broadway, New York. The idea that comets are dangerous visitors to our system has its only support from superstition and nervousness, and not from reason or science.

The lack of danger from the approach of a comet near a planet was remarkably illustrated by the approach of Lexell's comet to the planet Jupiter in 1779. That comet evidently became entaugled with Jupiter's moons, or came so completely within the influence of the attraction of that planet, as to be entirely held from its conrse for several months, and yet not the slightest disturbance could be observed in the equanimity of even the smallest of those satellites.





Comets' Tails.

We endeavored last week to illustrate the philosophy of the tails or trains of comets, showing that they, in all probability, consisted simply of reflected light, nothing more. There are various and diverse phenomena accompanying these appendages, for which it is difficult to account upon this or any other theory. This is especially the case with regard to the comet of 1744, shown in our illustration with six different tails. Why they are thus divided np or spread out into such a fan-shape is a puzzle for scientists. We are told that our present visitor is giving symptoms of a development of two tails.

The gradual development and disappearance of the tail of a comet is shown in the illustration of the orbit of a comet, fig. 5. When first seen by a powerful telescope a oomet presents a round, nebulous mass like that shown in fig. 3. As they approach the sun the tail is gradually developed, as shown by the approaching comet, in fig. 5, and disappears in the same way as is seen by the same body on its retrocession, as indicated hy the arrow in same figure.

Another peculiarity is the remarkable deflection or curvature of the tail, which is often presented, and which deflection, when seen, is greater when the comet is near the sun. The tail when near the sun is sometimes seen much more deflected than herewith shown. Cases have occurred where the tail was almost at right angles with a lino passing from the center of the sun through the center of tho comet. This incline is greatest when the comet is approaching the sun, as shown in fig. 5, and is always toward that region of space from which the comet is moving. In some comets either this deflection does not exist, or the tail is so prosented to our vision that it is not perceptible. That such may be the case can he illustrated by holding up to the vision, some considerable distance from the eye, a curved stick. When held in the proper position the curve is distinctly seen; but when turned one-quarter round, the stick appears perfectly straight.

The tails of comets vary immensely in length—that of 1680 was not less than ninety-six millions of miles in length—a length representing the entire distance of the earth from the sun. The free movements of these immense streamers through space, and the fact that though many millions of miles in thickness, the faintest stars may be seen through them, afford abundant evidence that whatever may be their nature, they do not consist of matter of any kind. Hence, no sensible effect can be produced by their contact with the earth, or from the earth being actually immersed in them, unless it be an excess of light for the time. From the enormous expanse in space which they occupy or sweep through, it is by no means an improbability that these appendages may often come in contact with our orb. Indeed there are at least one or two instances in which there is but little doubt that the earth actually passed through a comet's tail, and without any perceptible effect whatever. Among the most singular phenomena connected with comets' tails is the remarkable trembling or pulsating motion often observable in them—something like the wave motions sometimes observed in the aurora. These pulsations seem to start from the nucleus, and run slowly along the whole length of the tail.

Distance of the Present Comet from the Sun and Earth.

According to the observations of Prof. Parkhurst, who is making the present comet a special study, that body reached its nearest point to the sun—its perihelion—on Wednesday of last week, and will make its nearest approach to the earth on Monday next, July 20th, when it will be 25,000,000 of miles distant. This distance is about 3,000,000 of miles less than that of Venus when that planet is at its nearest approach to us. Twenty-five millions of miles is quite a respectable distance, and little danger need be apprehended as our celestial visitor thus flits past us on flight to the regions of space beyond our solar system.

Timorous and superstitious people are an unhappy race of mortals under any circumstances, and the appearance of comets and all other unusual natural phenomena, are well calculated to sorely plague them; hut it is to be hoped that such important discoveries may be made during the continuance of the present comet within our vision, that the old superstitious notions which still linger in the minds of many, may be entirely done away with.

Reported Attempt at Compromise in Cuba. It is stated that two gentlemen from Venezuela arrived in New York, who have a commissiou from tho President *pro tem.* of Cuha, to treat with Captain-General Concha about a compromise between tho Cuhans and Spaniards. They have already had several interviews with Concha, and have seen Genoral Alent, of Cuba, in New York.

Wild Coffee.

We entreat our farmers in the foot-hills not to lose sight of the plant which is now called wild coffee. From information derived from intelligent persons familiar with coffee plantations, we uuderstand that it is a species of the coffee tree. In their wild state neither the tea plant nor the coffee make an acceptable beverage. It is by selection and cultivation that such plants, like our fruits, become adapted to our tastes.

Doubtless it will be found that there are many varieties, among which may be some of superior quality, which may furnish grafts for others that may be better for standards. We may find it hest to import cultivated stock and graft on our acclimated trees.

The buckeye which cumbers our wilderness is a species of horse chestnut, which it is equally unwise to overlook. Herr Schmitt, who made efforts to raise the tea plant on a large scale in El Dorado county, had also young chestnut trees from Japan. He engrafted several cuttings on buckeye trees with success. The grafts found a congenial home with the new foster mother. An unexpected calamity destroyed the tea plants, and the enterprising Prussian abandoned the place. Probably the engrafted chestnuts met the fate of all young shoots when exposed to roving cattle.

But if the fine chestnut of Japan gives such a record, we may hope that the coffee tree of Guatemala will do equally well when grafted on our wild mountain coffee.

Straw-Burning Engines.

Editors Press:—I notice an article in your valuable paper of the 10th instant, headed "Straw-burning Engines." I beg leave to annonnce through your columns that I hold letters patent on two straw burning devices. The patents I obtained through your agency, one being dated February 11th, 1873, and the other May 20th, 1873. These devices can not be excelled for simplicity and efficiency, when applied to the return fine boiler patented by H. W. Rice, of Haywood, Alameda county, which patent was also obtained through your agency. My straw-burner consists of a simple attachment to the aperture of the furnace door, to prevent the cold draft of air from passing into the furnace, as the straw fnel is introduced. This device requires no belt to run it, and no one to turn it by crank when the engine is not running, in order to get np steam. A twelve-year-old boy can fire with perfect ease any retnrn flue, steam threshing engine with dry straw, hay or weeds of any description, instead of using machinery to place this fuel in the furnace. I use an ordinary hay fork. One ton of straw will thresh one thousand sacks of grain. These devices can now be seen at work in the valleys of San Joaquin, Livermore, Alameda, Santa Clara, Santa Maria, and many other places. Messrs. Treadwell & Co., corner Market and Fremont streets, San Francisco, are the sole agents for the Pacific Coast.

D. Morey.

Watsonville, Cal., July 12th, 1874.

Plucky but Prudent.—A contributor to the *Weekly Sutter Banner* congratulates the citizens of Levee District No. 1, of Sutter county, on the suocess which has crowned their efforts to protect themselves from the melting of the vast accumulation of snow in the mountains. The residents of that locality realize that they have received substantial rewards for the labor and expense bestowed upon their levee; for they can at present show hundreds of thousands of acres of as fine wheat and barley as can anywhere be seen, while they have reason to believe that without the protection of their land the water would have swept away this with all the rest of their possessions. But the writer, who evidently represents the spirit of the neighborhood, is not disposed to settle down into supposed safety. After meting out the full complement of praise and congratulations to his fellow citizens, for the work performed and the rewards secured, he closes as follows: Now, we by our earthworks, have been able to keep the threatening waters at bay, but we must not remain idle in the future; because, while the enemy has been surging at our gates, it has been busy bringing down material from the mountains, and building counter-works on our front, from which, in the future, it can more successfully assail us; and, unless we are more vigilant, we may be yet overcome, and our fall will only be the more terrible the longer it shall be delayed.

A Venturesome Trip.—A Colorado man purposes to soon attempt the trip from Pueblo to New Orleans, down the Arkansas and Mississippi, in a light canoe.

Miscellaneous.

An Architectural Infliction.

A few yesrs ago the monetonous style of roof used in architecture was agreesbly varied by the introduction of whst is known as the Mansard roof, sometimes called the French attic. The splendid srchitectural piles in Paris received some of their best graces of expression from the handseme sky-lines the Mansard roof gave them, and almost every American traveling abroad wondered why so grsceful a roof could not be sdopted in our American cities, where the lsrge huildings usually terminated with an ahrupt, sharp, and unpicturesque sky-line. The Mansard roof after a time was introduced, and its peculiar beauty soon made it very populsr. But, like all fashions which hecome the rage, and which are adopted by people imitatively, without perception of the principle that governs them, the French attic has become with us an architectural infliction. The Mansard roof was designed for tall buildings. Its special purpose is to break the monotony of a massive pile, and to reduce in appearance its real hight. A structure that would seem awkwardly tall, with an unvaried succession of stories, hss not only, by means of the Mansard roof, a more graceful caption, but attains more agreeable proportions. The specific purpose of this roof being recognized, the absurdity of its use in small huildings becomes at once apparent. Our builders, however, seem to lsck all power of perception, and to hsve reduced the art of architecture to indiscriminate imitations. Everywhere now the Mansard roof confronts us. Every new cottage on the roadside, new cheap villas in those extemporized villages that line our metropolitan railways, new public buildings of every sort and degree, railroad station-houses all over the country—everything of the kind now, no matter if only a story high, must have its Mansard roof, with entire disregard of fitness or propriety. It is exasperating to see a good idea thus dragged into ahsurd and iguoble uses. As we at first hailed with pleasure the appearance of the Mansard roof, we shall now look with hope for the signs that will indicate the termination of its career. And yet whatever msy follow will have to undergo the same experience. It is our natural way to try and appropriate every big thing for every little purpose.—*American Builder.*

Protecting Varnish.—A simple invention for the preservation of cards, photographs, and, in fact, of anything likely to be injured by moisture or dirt, has just been announced. It cousists of a preparation of gutta-percha in solution. This liquid is thrown in a very fine spray over the article to he protected, by an atomizer. By this process a thin film is produced, and when the liquid part has evaporated, as is very speedily done, the object is coated with a translucent suhstance, impervious to water. Gutta-percha, in its pure state, is of a semi-transparent grayish color. But its transparency, as a covering for pictures, depends on the thinness of the film. The gum first needs to be purified, and then, if it has not been treated with alchohol, it is solnble in chloroform or ether. The process of dissolving it is in itself a purifying one. The ether, being highly volatile, very soon disappears when the spray is deposited on any object. A drawing or photograph thus protected can be washed, the gum not being permeable by water, and resisting any amount of hcat so long as it is wet. It hegins to soften, however, at a temperature of 150° Fahrenheit. But this is a temperature to which our climate naturally subjects nothing. This simple invention might come into very practical and general use; and if it did no more than to give additional security to the work of the camera, it would be a highly valuable invention.

Nitro-glycerine.—Nitro-glycerine is au explosive oil, in many respects analogous to gun-cotton. It is produced by the action of nitric acid, mixed with oil of vitriol, upon glycerine, the sweet substance obtained when oils and fat are steamed. It is one of the most treacherous explosive substances known to chemists, and frightful accidents hsve been cansed by incautiously using it in its crude state. In the course of many endeavors to counteract or reduce the sources of danger attending the use of nitro-glycerine, M. Nobel made the important observation that its explosive properties were not reduced; hut, on the contrary, somewhat favored, by mixing the liquid with solid substauces, in themselves thoroughly inert. This led to the production of dynamite, which constitutes one of the safest, most powerful, and most convenient explosive agents applicable to industrial purposes, although it is not, in our opiuion, equally applicable to military purposes. Dyuamite is made by mixing nitro-glycerine with a porous, infusorial earth, known in German as "Kiesselguhr." The earth absorbs the oil, and the result is a plastic, putty-like substance of a brick-dust color, containing about 75 per cent. of nitro-glycerine and 25 of absorbent earth.—*Jour. of Chemistry.*

Air.—In air containing not more than 0.0006 of its volume of carbonic acid, the odor from presence of orgauic matter is imperceptible. Pure air contains a proportion of ahout 0.0005 of carbouic acid.

Fruit contains germs of decay, which must first be destroyed, otherwise the formation of a vacuum about them will not suffice to preserve the fruit.

Aerolites.

In modern times it has been coujectured that aerolites csme from the sun, and slso from the moon. Many hsve supposed them to be of terrestrial origin, the msterial heing tsken up in the foim of dust by whirlwinds, and condensed into a solid by some unknown chemicsl or physicsl process. This view is disproved by all reliable investigatious which have ever beeu msde. About a hundred years ago, the eminent msthematicians of the time took up the suhject, and by a course of elaborate calculations proved, that meteoric stones could not come from the meon, as by careful measurements of their velocity they were found to move, when near the earth, at the rate of 114,000 feet, or about 21½ miles, per second; whereas, if they came from the moon, they wonld start with an initial velocity of 8,292 feet per second, and reach the earth with a velocity of only 35,000 feet per second. It was clear, therefore, that they came from a more distant region in space than that occupied by the moou. Biot, Laplace and Poisson, three of the most eminent mathematicians that have ever lived, engaged independently in these investigations, and after 12 years of labor reached results very nearly alike. These iuvestigations alone are quite sufficient to prove the celestial origin of meteoric stones.

The metal iron enters largely into the composition of aerolites. In some specimens it has been proved to be present to the extent of 92 per cent. Seven other metals—copper, chromium, nickel, cobalt, molybdenum, manganese and tin—have been fouud, and the earthy substances, augite and hornblende; also carbon, sulphur and alumina. Altogether, out of the 63 elements recognized by chemists, 20 have been found in meteoric masses. It is to be observed that no *new* elements have beeu detected, a fact which is significant and interesting. Regarding aerolites as of celestial origin, the only difference we have to note between them and terrestrial substances is iu the respective methods in which the component parts are admixed. The minerals are the same as those which are distributed throughout the rocks of this earth, but we have none in which they are held in similar proportions. Aerolites differ widely in chemical con titution, but in one characteristic there is remarkable uniformity. They are all of them covered with a black fused crust, or rind, which extends into the suhstance no more than a few tenths of an inch. This peculiar physical condition is due to the circumstauce that when they strike the oxygen of our atmosphere, in their descent, they instantly iguite, hut they do not remain long enough in contact with the air to become fused deep into the mass. If they traversed 300 or 500 miles of atmosphere, the small portions of the largest masses that might reach the earth would be but scoria or cinders. It is probable that millions of small stones, those weighing but a fractiou of an ounce, are burned in the atmosphere every year, and nothing but an impalpable dust remains, which is scattered by the winds.

It is certain that meteoric stones are not of terrestrial origin, and that they do not come from the sun, moon, or visible planets. Modern science has quite satisfactorily proved that these bodies are little planets, so to speak, traveling arouud the sun in orbits of greater or less eccentricity; and that our earth in plunging through space encounters them, and they become entangled in our atmosphere and are rapidly drawn to the esrth's surface. The larger masses, though probably very numerous, are yet relatively few in number, compared with the minute meteorites which flash out upon the darkness of night, as fire-balls or shooting-stars. If hut six or seven falling stars are seeu in an hour, it mnst be that the earth is pssing through clusters of meteors, containing more than one hundred thousand in a region of space equal to her own volume. It cannot be otherwise than that the interplauetary spaces are thronged with these fragments, and it is probahle that the stellar regions are likewise filled with them. They constitute the material of which worlds are made, and it is possible that the sun's heat is due to the incessant rain of these projectiles upon his incandescent mass.—*Boston Journal of Chemistry.*

An Oyster Patent.—One of the great troubles which oystermen have to contend with is the starfish. This rapacious enemy destroys thousands of bnshels of oysters every year, and no device has heretofore proved effective as a protection. But the ingenuity of a Connecticut Yankee has at last triumphed. Mr. Oliver Cook, of Darien, Conn., has lately obtained a patent on the suhject. His invention consists in spreading a net, under watcr, on the ground composing the oyster hed. Mr. Starfish puckers his fingers together, squeezes himself up through the meshes of the net, and then extends his digits again. Being uow upou the upper side of the net, he will he infallibly captured whenever the oysterman raises the net to the surface. This is to be frequently done until the cnemy is cleared from the coast, when the oysters at once begin to laugh and grow fat.—*Scientific American.*

Combined Sail and Drag for Boats.—This invention consists in a novel construction of drag or drag-sheet, which not only has an improved hold upon the water to keep the boat's or other vessel's head to the sea, or act as a floating anchor to a life raft, as the case may be, but which is readily convertible into a sail when its use as a drag is unnecessary, and may otherwise he used to advantage in saving life and property.

Making Match Sticks.

[Concluded.]

The quantity seems enormous, and almost staggerers helief, hut such is the velocity with which the machines sre driven, and the multiplication of the sticks so rapid, that there is no difficulty in producing the number stated. When the wheels are in motion, the sticks fall from the cutters in a regular shower, and are caught in a trough below, through which passes a helt or elevator, which carries them to a series of machines, called shakers, with small latticed bottoms, in which they are suhjected to a violent shsking as they pass through. This operation is for the purpose of removing all imperfect sticks and pieces of shavings. As they pass through, they are deposited in large cases ready to be carried to the drying rooms. These rooms are three in number, each fourteen by fourteen feet, the floors of which are covered with a series of steam-pipes. The boxes containing the sticks have latticed bottoms, and are placed upon these pipes in tiers, one above the other, four or five deep, when the hest is forced through the entire mass. Here they are allowed to remaiu for a dsy and a night, subjected to a temperature of 120 degrees, which effectually dries the wood, rendering it almost as light as a feather. As great care must be used to guard against fire in these rooms, perforated pipes, with an independent connection, are liberally provided, through which a sufficiency of steam can be forced in a moment to extinguish fire in case of combustion. After going through the drying process, the sticks are carried to another series of shakers. Here, by an ingenious arrangement, the sticks, as they are shaken np by a lively motion, are straightened, when they are deposited in metal boxes at the lower end of each machine, with circular bottoms. These boxes are made to hold as many sticks as can be grasped by the hand, from whence they are taken, and packed in cases ready for shipment to the finishers, who apply the compound to the tips. After tipping, the matches are placed in boxes for sale. The plaiu match-stick may be looked upon as an insignificant item at first sight, but a moment's reflection will couvince the reader that an enormous quantity is required to supply the daily consumption. The making of these match-sticks is a distinct manufactnre, the match-makers in large cities purchasing the sticks for tipping. The American Match-Stick Company, at Williamsport, Pa., employ the process described above, and when fairly under way, expect to make and ship a full carload of match-sticks per day to their various customers. It is estimated that in Europe and the United States, the amount of wood annually consumed in the manufacture of match-sticks is, at the lowest calculation, four hundred thousand cubic yards. One of De Bowens' machines, requiring three horse-power to drive it, will, it is claimed, cut in ten hours fifty-two millions of match-sticks. This machine is also claimed to consume less lumber by one half than that consumed for the same number of sticks by any other machine yet invented.—*Journal of Applied Science.*

Another Calculating Machine.—A useful contrivance is the "computing telegraph" introduced by J. E. Fuller, of Boston, who first produced it some 30 years ago, and who since that time has beeu continually improving it, so that at the present moment it is a most complete instrument. It consists of a square board made of old tarred rope, a material which is not giveu to expansion or warping; upou this is posted an engraved card, which has a graduated circle of the diameter of 8¼ in. Within this circle there is an inner circle, which revolves, and is graduated in the same manner as the outer circle. The divisions are from 0 to 10, completing the circle, and are the same for both; the divisions are similar to those of the ordinary slide rule, and decrease iu a perfectly regular logarithmic order. In fact, the instrument is a circular slide rule. It possesses a great advantage over the ordinary straight slide rule, in consequence of its length (the actual length of the rule being 26.7 in.); this advantage is further increased from the circular arrangement being endless, only one scale of 0 to 10 is required, whilst in the ordinary rule, one wants 0 to 10 and 10 to 100. The instrument forms a slide rule of a very perfect character, and enables one to work out the simplest and most complicated arithmetical questions. In calculatious where the same factor has to be used many times, the saving of time is enormous. For engineers of whatever kind, such a calculating machine must prove useful.

Ice Manufacture.—A Scotch inventor claims improvements in apparatus for the manufacture of ice. In these hollow partitions are made of cast iron; the passages are oblong in cross-section, and bars of wood are placed along their middles to reduce the actual passages for the freezing fluid to very narrow spaces along the sides. The hollow partitions which hold the brine are fixed with their hottom edges some distance above the bottom of the tank, and bars of wood are placed along the bottom edges to prevent the formation of ice round those edges. Steel, malleable iron, brass or zinc may be used instead of cast iron for forming the partitions. Brushes or flexible wipers are made to reciprocate over the surfaces of the ice whilst it is forming, to remove air bubbles.

Native Silver Amalgams.—Some researches, by M. Pisani, on the amalgams of silver occurring at Konigsberg, in Norway, show that two distinct amalgams are found.

A Natural Hygrometer.—An instrument for measnring the humidity of the atmosphere, and one which, combined with the thermometer and bsrometer, might be of great use to farmers, in prognostigating the weather, may he made, according to M. H. De La Blonchere, as follows: The grain of the common ost of sgriculture, and also of the wild oat, is surmounted by a bsrb, which is terminated by a right-sugled elbow. Let one of these grains at maturity be cut in half, and the upper half be attached by means of glue to the ceuter of a circle marked upon the plane surface on a piece of wood or metal. To the extremity of the harb may be attsched a fine piece of straw which will serve as a needle, and will amplify the indications. To graduate this simple little instrument, place it in very hot air, and mark 0 at the point indicated by the needle; then place it in an atmosphere saturated with humidity by means of wet cloths, and mark the point indicated by the needle 100, and divide the interval between 0 and 100 into one hundred equal parts. The straw needle may be made of considerable length, so as to give its indications clearly. Such a hygrometer costs but little, and is always comparable with itself.

Incombustible Wood.—Several attempts have been made at different times to render timber uninflammable. A new and apparently successful method has recently been tested, of which, perhsps, the most convincing of the first series of experiments was that in which a large heap of the prepared timber, about two feet high and seven or eight feet in circumference, placed on large iron sheets, was saturated with paraffin and set on fire. As soon as the paraffin was consumed the fire spontaneously went out. The timber was then examined, and found to be scarcely injured. The pieces of wood were of various sizes, the majority being abont eighteen inches long hy two and three inches square. Not only does the process render timber uninflammable, but it has the not less important property of making the softer kinds of timher (such as white and yellow pine) throughout, both in appearance and hardness, like teak or oak. What adds immensely to the value of the discovery is that the system can be applied hy a simple method to ships already built, so as to render those containing incipient dry-rot almost as good as new, and absolutely arresting any further damage from these destructive fungi.

Blisters in Veneering.—Cut out the blistered part with a very sharp, thin-edged cutting instrument, and glue it on again, after soaking the piece thoroughly in hot water, and then flattening it out between two flat hard-wood surfaces brought together firmly by heavy pressure. Before gluing, its under side should be again moistened with hot water, and, after wiping off the water which stands on the surface, the glue, which should he hot and not be too thick, shonld be applied; then replace the piece, and hold it down firmly to place in the usual way till it is dry. The spot where the piece is to be replaced ought also to be sponged with hot water hefore applying the patch. If this be done carefully, the defect will be remedied; and the joining will only be seen on the closest inspection.—*Artisan.*

Testing Belting Leather.—M. Eitner proposes the following simple method of determining the value of leather employed on belting. A cutting of the material about 0.03 of an inch in thickness is placed in strong vinegar. If the leather has heen thoroughly acted upon by the tanning, and is hence of good quality, it will remain, for months even, immersed without alteration, simply becoming a little darker in color. But, on the contrary, if not well impregnated by the tannin, the fibers will quickly swell, and, after a short period, become transformed into a gelatinous mass.

Cement for Glass and Porcelain.—Two parts of isinglass are soaked in water until well swollen; the water is then poured off, and isinglass is dissolved in alcohol hy the aid of heat. One part of mastic is then dissolved in three parts of alcohol and added to the above solution; then one part of gum ammouiacum. The solution is well shsken, and evaporated to the consistency of strong glue, when it solidifies on cooling. For use, the cement and the articles themselves must be wsrmed.

The *American Chemist* states that a waterproof paper, transpsrent and impervious to grease, is obtsined by soaking good paper in an aqueous solution of shellac and borax. It resembles parchment paper in some respects; if the aqueous solution is colored with aniline colors, very handsome paper, of use for artificial flowers, is prepared.

To Soften Skins.—Soak the skins in a mixture of two quarts bran and one gallon of water, for three days; take them out and rub them with a handful of salt (if they have hsir or wool on, add powdered alum with the salt) and hang up to dry. When done in this manner they becomes as soft as kid.—*Jour. of Chem.*

One-half to one per cent. of fusel oil may be detected in ordinary alcohol by introducing into it, in a long test tube, a few fragments of potassic iodide, agitating gently. If fusel oil is present, a light yellow coloratiou makes its appearauce in a few minutes. Heating develops this color more rapidly.

Gas from Clay.—Rev. Henry Moule, after a series of experiments extending over 20 years, has devised a process of manufacturiug an illuminatiug gas from clay found at Kimmeridge, England.

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26v7-3m JAMES VINSONHALLER.

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MISS. S. F. McDONALD, Principal,
Napa City, Cal.

REFERENCES.

Rev. R. Wylie, Napa; Hon. C. Hartson, Napa; R. T. Montgomery, Esq., Napa; G. E. Goodman, Esq., Napa; D. Moclure, Esq., Napa; Rev. Dr. Goodbridge, San Francisco; Rev. P. V. Veeder, Yokobama, Japan; Geo. K. Glynas, Esq., San Francisco; James A. Crow, Esq., Stockton; R. O. Baldwin, Esq., San Ramon; J. R. McDonald, Esq., Grayson; J. B. Crow, Esq., Hills Ferry; Rev. C. M. Blake, San Francisco; Meier Snyder, Sonoma; S. Alstrom, Esq., White Sulphur Springs; Geo. L. Kenny, Esq., San Francisco; Hon. R. C. Clark, Sacramento. 1v8-2m

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Write for Catalogue to ELWOOD COOPER.
22v6-1y President Board of Directors.

Agricultural Notes.

COLUSA.

Young Cotton.—Colusa *Sun*, July 11: We visited the field of Andrew Rutland lately, who put in fifty acres, but some of it was on alkali, or salt grass land, and is not doing well. About forty acres look fine, and it is from fifteen to twenty-four inches high. It is blowing ont very nicely. The color of all of it, even on the poorest land, is good; and he may get an average of half a bale--250 ponnds—to the aore, on the whole crop. The experiment looks at the present writing very mnch like a snccess. We hope he will make it profitable, as he is the pioneer cotton planter in this valley. Much will depend on his good management of this crop; for, if ho makes it profitable, we think there will be thousands of acres planted another year.

CONTRA COSTA.

Harvest Time.—Contra Costa *Gazette*, July 11: The farmers in the central sections of the county have now fairly engaged in their harvest work, though there are still many late sown pieces of wheat that are not yet ripe for the reaper. The yield of the section will average well to the acre sown, and the aggregate result will be equal to that of any previons season, though the area sown was not as large as last year.

EL DORADO.

Strange Nesting Place.—*Mountain Democrat*, Jnly 11: A. F. Redemeyer tells us he fonnd a hen's nest on his premises, in an oak tree, about forty feet from the ground. The hen had spotted a place where a limb forked, and had deposited several eggs in an enclosnre of young oak sprouts, which made, we suppose, a sort of rustic basket. Chickens hatched there would almost assuredly tumble to the ground. What the hen was thinking of cannot be told, but she certainly aimed high.

FRESNO.

Corn.—Fresno *Expositor*, July 11: A. Y. Easterby informs us that a patch of corn was planted on his farm this year, with a view of testing his ability to grow it without irrigatiou. The experiment he says has culminated successfully. The stalks are about eight feet in hight, and are full of good sized ears of corn. He informed us also that about fifty men were engaged in harvesting the grain crop on his farm. The grain is tnrning out well.

INYO.

Bishop Creek.—Cor. Inyo *Independent*, July 4: I am happy to report that onr destructive visitants, the army worms, have "ordered au armistice," having ceased depredations. Much of the corn that was supposed ruined is coming out fairly. Many have replanted. Potatoes and other vegetables are some injnred. I heard that abont the 3d instant frost killed many of the vegetables in Round valley.

KERN.

Crops.—*Southern Californian*, July 9: Persons who have been passing through the western portion of our valley during the past week or two report us that the grain fields are looking splendidly. There will be a large yield of corn in the valley this season—many farmers trying it this year who heretofore entertained doubts about it being a safe crop to plant. And to see the amount of hay—wheat, barley, and alfalfa—cocked up all over the valley, one would think Kern Island had the contract to supply the entire State. The price of hay ranges from $8 to $14 per ton, aocording to kind, and whether baled or loose.

Vine Culture and fruit growing is not now an experiment with us. A fow days ago we were in the orchard and vineyard on Mr. Reeder's place and found the trees loaded to distress with apricots and apples, and the vines one solid cluster of grapes. Mr. Stine also has a fine orchard and vineyard, and has this season an abundance of frnit. This woek we have had the pleasure of eating just as fine blackberries, cultivated ou Kern Island, as we ever saw.

LAKE.

Alfalfa, Etc.—*Bee*, July 6: Wm. Stonebreaker, whose ranch is situated in Big valley, has 18 acres of alfalfa in a flonrishing condition. In this field he has 20 head of cattle grazing the year round. He speaks in high terms of the success of his alfalfa crop. There are on his place 36 almond trees, which are loaded with fruit.

MARIN.

Tomales Items.—Marin *Journal*, July 9: The hay crop, which is being generally cut, is very heavy. A large piece on Warren Dutton's ranch is said to be cntting seven tons to the acre. The potato crop is not qnite so thrifty as we hoped, owing to a lack of fogs. Rust is appearing in the grain on many places. Grasshoppers are more plentiful than we need.

NAPA.

Hops.—Calistoga *Press*, Jnly 11: The number of acres planted in hops in this county the present season is considerably larger thau ever before. The crops are looking finely.

NEVADA.

Tall Oats.—*Foot-Hill Tidings*, July 11: P. L. Stull sent to our office a sample of oats from a field in Penn valley, which stands fnlly five feet ten inches high. H. B. Nichols has a field which will average five and a half fect high. These fields have only such water as nature gives them. Why is it that so many fields will hardly pay to cnt?

Prolific.—A. Delano of this place has in his garden a Siberian crab-apple that is now in bloom for the second time. It has apples of the first and second growth, all thrifty. He has also a yonng fig tree, planted in March, which is now about an inch in diameter and five feet high and has upon it two perfect figs. Our red mountain soil cannot be beaten for growing fruits of all kinds. The fact is now conceded on all hands.

PLACER.

Grapes. — Placer *Argus*, July 11: There never was a finer prospect for grapes in Auburn than the present season. The vines are loaded with bunches of unusual size.

Mr. Bernhard's silk worms are doing remarkably well, and are beginning to spin.

SANTA CLARA.

Italian Rye Grass.—Gilroy *Advocate*, Jnly 11: It will be remembered that early in the spring we noticed some of the pncnliarities of the above grass, and stated that Mr. D. C. Riddell, of this city, had a small quantity of seed to dispose of to those wishing to experiment in its growth. Mr. George Somers secured some seed and planted a small patch the latter part of March. This week we saw some of the grass grown from it, which is about three feet high, and is a fair sample of the whole patch. It is a fine, delicate looking grass, and grows very thick. The heads are fully a foot in length, and filled with seed. There is but little root, so it requires a moist soil to grow in. On the proper gronnd, three or fonr crops a year may harvested, and it is said to be very nntritious. It is a perennial plant, and grows thicker every year, like alfalfa, possessing this advantage over that grass, that gophers or squirrels will not molest it. It appears to ns that farmers possessing low, moist land would do well to give it a fair trial.

SAN JOAQUIN.

The Harvest.—Stockton *Independent*, July 10: Generally throughout the valley the farmers are putting in their best licks on the harvest field. In the course of a week or 10 days threshing will be general, and wheat will be bronght forward more freely for shipment. Our wharves should be cleared and ready to meet the demand for their use.

SISKIYOU.

Commencing.—Yreka *Union*, July 11: The farmers of Scott valley are commencing to cut their hay. It is said some meadows will turn out splendid crops and others but indifferent ones. Some have been injured by the high water in Scott river, which, getting ont of its banks, has overflowed them. The river has been much higher this snmmer than nsual, caused by the melting of the vast, almost unprecedented, banks of snow in the Salmon mountains. The remarkable coldness and backwardness of the season prevented the melting of this snow till a mnch later period than usual. The effect has been to injure more seriously than in ordinary seasous the overflowed lands.

SOLANO.

Figiculture.—Benicia *Tribune*, July 11: Mr. William Blake has shown us three figs, fully ripe, of this year's growth, from a tree scarcely three years old. One of them measured eight inches in its smallest circumference, and ten in its larger.

Fruit.—Ripe peaches and apricots in abundauce, and samples of second crop strawberries have been for sale during the past week.

STANISLAUS.

Self-Feeder.—Stanislaus *News*, Jnly 11: J. M. Bohannon, who has had a practical experience of over 20 years in this State, as a farmer and thresher of grain, has now succeeded, after several years close application, and by practical tests, in producing a self-feeding apparatus, that can be attached to any of the threshers now in use, by placing it beside the derrick table. In company with Mr. Ross, himself a practical farmer of 20 years' experience, we visited Mr. Maze's machine last Wednesday, to witness the work of the self-feeder attached to his Russell thresher. It was, when we witnessed its operations, doing good work. The advantage it possesses is, that it feeds the entire length of the cylinder with a continual supply. It regnlates and scatters without help by hand; admits the shelled wheat to pass on to the grain-carrier under the cylinder, without coming in contact with the teeth; thus protecting the grain from breaking. By arranging the stacks, the feeder can be supplied from either side. Mr. Ross gave it as his opinion that it was a perfect success, possessing many advantages over hand-feeding. One of which is, that the heat of the sun has no effect on it, that it never complains of being tired or unwell, and that it soon will be in as general use as is the derrick fork, of which eight years ago there was such a general complaint becanse it reduced the labor force employed in the harvest field.

TUOLUMNE.

Fruit.—Tuolumne *Independent*, July 11: The fruit crop promises to be immense in this county. Many in this vicinity have to shake off the fruit to prevent their trees breaking down. That which remains will be much finer by this thinning out process.

TULARE.

Cotton Growing.—Visalia *Detta*, July 9: We recently called attention to the enterprise of Jackson & Co., in attempting the cultivation of cotton in this connty. It was our privilege, on Sunday last, to inspect the growing crop. One field, of sixty acres, presents a splendid stand, and will soon be in blossom. The other field having in a great measure failed to come np, owing to the lumpy character of the ground, and much of what did come np having been destroyed by grasshoppers, the crop was not deemed worth cultivating; and the land being of the driest kind of plain land, we were astonished to find that where the cotton appears it seems to show but little need of moisture, though it has had no irrigation or rain since it was planted, and is, in some cases, putting forth the blossom. Enough will be demonstrated by this experiment to show that large bodies of land in this valley are well adapted to the cultivation of this textile fiber, and that it will bear the cost of transportation, and will become an important crop, by enabling ns to diversify onr industries and thereby give the farmer employment during the whole year.

VENTURA.

Something New.—Ventura *Signal*, July 4: Hon. L. C. Granger has introduced into this country what we hope may develop into a great indnstry. While traveling in Mexico, he procured some of the seed of the cotton tree, which he has distributed to some of his friends. He informs us that in Mexico the tree grows to about the size of a peach tree, and at six years of age will produce 100 ponnds of cotton almost equal in texture to the celebrated Sea Island cotton. We hope that more of the seed may be secured, as from what Mr. G. informs ns, we have no doubt that it will succeed. If so, it will prove to be a most valnable acquisition to onr many sources of wealth.

YOLO.

Army Worm and Blackbirds.—Yolo *Mail*, July 11: N. Wyckoff, of "Alfalfa Ranch," informs us that the army worm has been destroying the alfalfa for some time, and that the probabilities are that seed will be short on account of their depredations. He also informs us that for the past few days thousands of blackbirds visit his fields every morning and feast upon these worms until the heat of the day, when they fly away to where there is water, He thinks that if the water ditch was on his ranch the birds would stay there all day. As it is they make sad havoc of the worms, and save mnch that wonld otherwise be destroyed.

Wheat Movements.—A considerable amount of wheat is coming into town for storage in warehouses, but transactions are light. The past week has been very dull, owing to the fact that the farmers are bnsily engaged in cutting and threshing. The Grangers' Warehouse Association of this place have purchased a lot, west of the railroad and south of Lincoln avenne, but there has been no work done in the bnilding line. The wheat crop is tnrning out beyond the expectations of the farmers, and the grain is very large and plump. It would seem from present movements that the farmers are not willing to part with their marketable crop in a hnrry. They are preparing for a siege of waiting for a market to suit them, which, we take it, says: We are organized for protection, and you, Mr. Bnyer, must pay for what you get. This is the correct principle. Too many of them have been compelled by the pressnre of debts, herotofore, to sell at a disadvantage.

Severe Affliction.—Our long time agent in this city, and carrier of both the Rural and Scientific Press, Mr. A. C. Knox, has been suddenly struck down by a disease which, for the present, at least, must render him utterly incapable of transacting any business. In fact, he has been unable to make to us a complete report of how his business as a carrier stands; hence subscribers in this city must bear with ns, should any irregularity occur in the delivery of their papers, or their acconnts. Mr. Knox has been connected with ns, in one capacity and another, for some eight or nine years, and has ever proven himself a most faithfnl and honest agent. We trust that he may ere long be once more restored to full health and reason, and long continue to enjoy the society of his now afflicted family and many friends.

J. H. Ashley has handed the Castroville *Argus* a bnnch of "White Australian" wheat, some of whose heads measure seven inches in length, and are all very full and heavy. The berries are very large, plump and bright.

The San Joaq nin Valley Sportsmen's Club offer a reward of $25 to the informer for each conviction for violation of the game law in that valley. The State also gives the informer one-half of the fine imposed.

Francis Bateman had his left leg terribly mangled by a threshing machine, on a ranch near Grayson, Stanislaus connty, on Friday last. The limb was successfnlly amputated.

George Hoag, of the Glenn ranch, is running a thresher with a 25-inch cylinder, at the rate of 216 sacks per hour, or a little more than 5,000 bnshels per day.

There never was a finer prospect for grapes in Aubnrn than the present season. The vines are loaded with bunches of unnsual size.

Joe Ballou, of Colusa connty, recently threshed 258 sacks of wheat from twelve acres of land—over fifty bushels per acre.

Three irrigation ditches are to be shortly opened near Bakersfield, Kern county, connecting with Buena Vista lake.

In Butte county the prices of land vary from $10 to $75 per acre.

Dr. E. J. Fraser, Homœpathic Physician and Surgeon, has removed his office and residence from 102 Stockton street to No 305 Kearny street, northwest corner of Bush. 6v7-3m

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., July 14th, 1874.

For Week Ending Jnne 30th, 1874.*

Animal Trap.—Richard S. Pardee, San Diego, Cal.

Apparatus for Conveying and Cooling Washed Ores.—Robert Teats, Central City, Colorado Ter.

Car Coupling. — Gabriel Thomas, Reno, Nevada.

Plate Rack.—Johu J. Collins, Lodi, Cal.

Indexing.—Walter Knight, San Andreas, Cal.

Process of Taking Photographic Pictures.—Nathaniel Weston, S. F., Cal.

Re-issue.

Shoe and Die for Grinding and Amalgamating Machines.—Francillo G. Belknap, Washoe, Nevada.

———*The patents are not ready for delivery hy the Patent Office nntil some 14 days after the date of issne.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possihle (by telegraph or otherwise) at the lowest rates. Ail patent hnsiness for Pacifio coast inventors transacted with perfect secnrity and in the shortest time possihle.

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on Septemher 21st snd closing Septemhsr 26th. R. S. Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhihition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhihit will present their applications for space at as early a day as possihle, addressing their applications or inqniriee to the Secretary of the Board of Managers, Mechanics' Institnte, No. 27 Post street, San Francisco, California. In order to secure space applications must he in before the 20th day of July, 1874.

The Fiftesnth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose Octoher 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaqnin Valley Agricnltnral Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Nspa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continuss four days. J. B. Hovt, President; J. E. Willis-ton, Secretary; J. B. Frisbie, Treasurer.

Our Agents.

Our Friends can do mnch in aid of onr paper and the cause of practical knowledge and science, hy assisting Agents in their lahors of canvassing, hy lending their influence and encouraging favors. We intend to send none hut worthy men.

L. P. McCarty—General Agent.
A. C. Knox, City Soiiciting and Collecting Agent.
W. H. Rattenberry—California.
Chas. W. Otis—Solsno County.
C. M. Daly—Colusa County.
Chas. T. Bell—Alameda, Santa Clara and Santa Cruz Counties.
J. D. Carey—Sonoma County.
J. W. Anderson—Orange and Santa Ana, in Los Angeles County, Cal.
Hood Alston—San Luis Ohispo, San Bernardino and SanDiego Counties.

The End-Shake Thresher.—The following letter is from Wm. P. Harkey, Esq., Sheriff of Snter connty, referring to the value of the Lanfenberg End-Shake Shoe for threshing machines:

Yuba City, Cal., March 25, 1874.

Messrs. Treadwell & Co., San Francisco.—*Gentlemen:* In regard to the Lanfenberg End-Shake Shoe, which I bought of yon last season, I will say I have given it a thorough trial, and if I could not get another I would not take One Thonsand Dollars for it. I nsed it throughout the season on a Russell Separator, which I had run previously with a side-shake, and it saved me a great deal of trouble and much loss. It saves all the grain. I consider it the best and most valuable improvement on the threshing machine yet hronght out. It is absoluteiy indispenaable to the economical working of a good thresher. Wm. P. Harkey.

13v7-3m

Campo, San Diego Co., Cal., July 3d, 1874.

Messrs. Dewey & Co.—*Gentlemen:* To-day I received the patent and other papers of my animal trap, that you so successfuily worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long. I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into yonr hands.

I remain yours truly, A. M. GASS.

One of our most valued exchanges is the Pacific Rural Press, published by Dewey & Co., San Francisco, California. Every number contains a vast amonnt of general news from the far west, besides much valuahle information in the way of Grange news.—*The Farmer's Friend, Mechanicsburg, Pa.*

Plainfield, Jnly 4th, 1874.

Messrs. Dewey & Co.—*Dear Sirs:* I acknowledge receipt of yours of 2d inst., incloging my Lettere Patent. I thank you for the interest you have taken in obtain ing the same. Yonrs truly, M. W. COON.

The little anecdote of "How it saved a man's life" is a very funny story told about the Blanchard Chnrn. Send to any dealer in first class dairy implements for a circular containing it.

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S. F. MARKET REPORT.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

[By our own Reporter.]

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, July 15th, 1874.

With few exceptions, the general Produce market has remained stationary during the week under review. What fluctuations have occurred, however, have been for the better in nearly every instance. The course of the Eastern and foreign Grain markets has not yet to be determined with any degree of accuracy, though all interested are busily engaged in forecasting the chances.

Receipts of Produce are daily increasing, and the handling of the incoming crops gives a some appearance of activity to this market. The summer Fruits and Vegetables alone make a good showing, while the Wheat, Barley, Potatoes, etc., are being already received in quantities which speak well for the season's crops. If Grain growers were decided upon selling at present rates, shipments to this city would now largely increase. As regards the export of Grain, the prevailing views of farmers are well expressed in a communication on another page.

Barley.—An improvement is noted. New is doing better; while old Feed is in demand, stocks having run short.

Beans.—The demand is fair. Prices are a little stiffer, and Small White have been advanced ¼c ₱ lb.

Beeswax.—An advance is noted.

Broom Corn.—Nothing new to report. There have been no sales of importance for a long while. The present state of the market is expected to continue through August, when the new crop will cause a change.

Buckwheat.—There is very little in the market. Latest transactions were at an advance.

Dairy Produce.—Butter is firm at unchanged quotations. The tendency to-day is buoyant. California Cheese is inactive and stocks accumulate. Eastern Cheese is now selling at about 75 per cent. of its price last January, and cannot be disposed of at a profit. Factory prices at the East, as we see by exchanges, are quite as high, or higher than, rates for the same article here, after freight, etc., has been paid.

Eggs.—The price of fresh California has been advanced 2c. ₱ dozen. Oregon and Eastern are not effected by the change. Ducks' Eggs are selling at 17½@20c. ₱ dozen, and Farallones at 20c.

Feed.—Quotations remain as before, with the exception of Hay and Straw, which are weaker. Corn Meal is very firm.

Flour.—The Flour market is very dull; and, at present prices for Wheat, Flour can not be a very profitable article—at least to the millers. A slight movement in Superfine has occurred, caused by low freights to China, which have influenced orders.

Fresh Meat.—Mutton has advanced 1c ₱ lb, and Pork ½c. Beef is quiet.

Game.—There is little in the market. No change in quotations.

Hides.—Rates have been advanced 1c.

Honey.—Receipts are full, and prices unchanged.

Hops.—A small shipment was received last week. There is very little activity in the market. The new crop will soon be in, and create some business.

Nuts.—Peanuts have fallen again 1c ₱ lb. Other kinds remain as before.

Oats.—Supplies are coming forward freely. No change.

Onions.—Have advanced considerably during the week.

Potatoes.—A large advance has taken place. Half Moon Bay are 50c ₱ cental higher than last week. Mission, which are not so good at this season, advanced 15c ₱ cental. Santa Barbara are also up. Sherman Island (Sacramento River) are not of sufficiently good keeping quality for this market. Old crop Potatoes can hardly be sold at any figure.

Poultry.—Turkeys are again higher and buoyant. Chickens and other Poultry are steady.

Provisions.—Hams and Bacon are firmer.

Rye—Is inactive, and 10c. lower, as per last sales.

Seeds.—Business slack, without change. When the fall demand is made we will give a fuller list.

Wheat.—The appearance of the Wheat market is rather better. Receipts for the week amounted to 40,120 centals. Business was not active until yesterday, when a more firm feeling was shown. Exports are as yet small. From the report of the National Bureau of Statistics we learn that the breadth of Wheat, both Winter and Spring, has been increased. The indicated aggregate increase is 107 per cent. Combining Fall and Spring sown, the area in comparison with last year in each State is thus indicated: Maine, 90; New Hampshire, 92; Vermont, 95; Massachusetts, 89; Connecticut, 100; New York, 100; New Jersey, 99; Pennsylvania, 103; Delaware, 101; Maryland, 103; Virginia, 103; North Carolina, 106; South Carolina, 108; Georgia, 115; Alabama, 107; Mississippi, 150; Texas, 135; Arkansas, 149; Tennessee, 120; West Virginia, 102; Kentucky, 109; Ohio, 103; Michigan, 103; Indiana, 106; Illinois, 109; Wisconsin, 103; Minnesota, 100; Iowa, 110; Missouri, 111; Kansas, 123; Nebraska, 116; California, 110; Oregon, 115. Reports from Great Britain are to the effect that there was danger of a scarcity before the harvesting of the new crop was accomplished. Wheat crop prospects in France up to the middle of last month were favorable; also good in Germany. In Austro-Hungary prospects had brightened and it was thought an average crop would be gathered. It has been said, heretofore, that about 75 per cent. of an average would be the yield in that country. In the south of Russia prospects still held favorable for a good crop. Should a sufficient amount of rain fall in Europe, the Wheat crop is expected to be fully up to the average.

Wool—Is steady. Receipts are larger. Eastern markets show a favorable state of trade.

DOMESTIC PRODUCE.

WEDNESDAY M., July 8, 1874.

BEANS.			
Beans, sm'l wh.₱ lb	5½@		5¾
do, butter	6	@	7
do, large, do	6	@	7
do, bayo	2¾@		2½
do, pink	1¾@		2
do, pea	5½@		5⅝
do, Lima	6	@	7
BROOM CORN.			
Per ton	$80	@	200
DAIRY PRODUCE			
Butter, Cal. choice ₱ lb	30	@	32½
do, good	27	@	30
do, inferior	22½	@	27
do, firkin	25	@	28
do, pickled	30	@	32½
Cheese, Cal. new	8	@	14
do. Eastern	13	@	16
EGGS.			
Eggs, Cal. fresh ₱ dz	28	@	30
do. Oregon	22	@	24
do, Eastern	19	@	20
do, Ducks'	17½	@	20
FEED.			
Bran, per ton	16 00	@	17 00
Middlings	26 00	@	27 50
Hay	9 00	@	14 00
Straw	8 00	@	—
do ₱ bale	75	@	1 00
Oil cake meal	—	@	32 50
Corn Meal	42 00	@	43 00
FLOUR.—Superfine & Extra.			
Alviso Mills, bbl	4 25	@	5 75
California	4 25	@	5 75
City Mills	4 25	@	5 75
Comme'l Mills	4 25	@	5 75
Golden Gate	4 25	@	5 75
Golden Age	4 25	@	5 75
National Mills	4 25	@	5 75
SantaClaraMills	4 25	@	5 75
Genesee Mills	4 25	@	5 75
Oregon	4 25	@	5 75
Vallejo Star	4 25	@	5 75
Venus, Oakland	4 25	@	5 75
Stockton City	4 25	@	5 75
Lambard. Sac.	4 25	@	5 75
FRESH MEAT.			
Beef, fr quality ₱ lb	7	@	8
do, second do	5	@	7
do, third do	4	@	5
Veal	4½	@	6
Mutton	5	@	5½
Lamb	5½	@	6½
Pork, undressed	6½	@	6¾
do, dressed	9¼	@	9¾
GRAIN, ETC.			
Wh't Cal. c'st.cl.	1 70	@	1 75
do new	1 62½	@	1 65
do, shipping	1 72½	@	1 77½
do, milling	1 75	@	1 80
Barley, Feed	1 37½	@	1 50
do new	1 00	@	1 20
do, Brewing	1 55	@	1 70
Oats, good to choice	1 50	@	1 75
do common	1 45	@	1 50
Corn, White	—	@	2 00
do, Yellow	—	@	2 05
Buckwheat	—	@	3 25
Rye	1 40	@	1 50
HOPS.			
California, 1873	35	@	37½
East'rn, '73 ch'ice	37½	@	45
MISCELLANEOUS.			
Beaswax, per lb	27½	@	30
Honey, choice	22½	@	27½
do Dark	8	@	10
do Strained	8	@	12½
Pulu	—	@	9½
Onions	1 00	@	1 10
NUTS—JOBBING.			
Cal. Walnuts	13	@	14
Peanuts per lb	6	@	7
Chile Walnuts	10	@	11
Pecan nuts	13	@	15
Brazil do	12½	@	14
Coc'anuts, ₱ 100	9 00	@	10—
Alm'ds h'd shell	10	@	12½
do, soft	18	@	24
Filberts	18	@	—
POTATOES.			
Sweet, per 100 lbs	—	@	—
Cuffee Cove	—	@	—
H. M. Bay	1 60	@	1 75
Pigeon Pt	—	@	—
Humboldt	—	@	—
Petaluma	—	@	—
Mission	1 15	@	1 37½
Salinas	—	@	—
Bodega	—	@	—
Sac. River	60	@	90
S'ts Barbaral	10	@	15
Old Potatoes	50	@	75
POULTRY & GAME.			
Live Turkeys, hens per lb	10	@	21
do gobblars	17	@	19
Hens, per dz	7 00	@	8 00
Roosters, young, large	6 50	@	8 50
Broilers	3 00	@	6 00
Ducks, tame, doz	4 50	@	6 50
Geese, per pair	1 50	@	2 00
Hare, per doz	2 50	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	—	@	—
Mallard Ducks	—	@	—
do small	—	@	—
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	1 00	@	1 25
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 00	@	1 50
do tame	4 00	@	5 00
Venison, per lb	—	@	—
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medium	—	@	13
do Heavy	—	@	12½
Eastern do	13½	@	14
Hams, Cal	13	@	13½
do Whittakers	—	@	16
do Dufield, ch	—	@	15
do Plankton & Armour	—	@	14
do Boyd's	—	@	14¾
do Stewart's	—	@	14¾
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard, Cal	13	@	14
do Eastern	13	@	14
SEEDS.			
Alfalfa	13	@	15
Canary	5	@	6
Flaxseed	5	@	6
Ky. Blue Grass	40	@	50
Millet	12	@	15
Mustard, white	2	@	3
do. Brown	3	@	4
Italian Rye	25	@	30
Perennial do	30	@	35
Timothy	13	@	15
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Clover Red	—	@	20
do White	60	@	75
Alsike	—	@	—
Esparto Grass in Packets	—	@	1 00
WOOL, ETC.			
Spring, short, lb	22½	@	25
do cnoice Nort	24	@	28
Medium grades	18	@	22
Fall clip	—	@	—
Burry	14	@	18
Hides, dry	17	@	19
do wet salted	8	@	9
Tallow, Crude	6½	@	7
do Refined	7½	@	9

FRUITS AND VEGETABLES.

WEDNESDAY M., July 15, 1874.

Sicily Lemons have been received, and are selling at $15@16 ₱ box. Apples are much cheaper. Really choice Cherries command high rates. The first of the Black Currants are in market, and are held at 20@22½c ₱ lb. Watermelons are coming in more freely, and have been reduced in price from $50 to $32@36 ₱ 100. Canteleups sell at $40@62.50 ₱ 100. Sweatwater Grapes have made their appearance. There are no changes in Dried Fruit.

Asparagus is becoming scarce. Shell Beans are selling at from 2c to 6c ₱ lb for Cranberry and Windsor. The first Cranberry Beans came in to-day, and sold for 3c ₱ lb. Peppers have declined 5c ₱ lb. Green Okra is much more plentiful, and the price has been reduced.

FRUIT MARKET.			
Tahati, Or. ₱ M	35 00	@	40 00
Lorita, do	—	@	—
Cal. do	—	@	—
Limes, ₱ M	—	@	15 00
Cal. Lamons, ₱ M	—	@	40 00
Australian do	50 00	@	—
do per box	7 00	@	8 00
do Sicily ₱ b'x	15 00	@	16 00
Bananas, ₱ bnch	3 50	@	5 00
Cocoanuts, ₱ 100	9 00	@	10 00
Pinaapples, ₱ dz	7 00	@	9 00
Apples	2½	@	5
Charries	5	@	10
do choice	10	@	25
Blackberries	10	@	15
do wild	—	@	—
Strawbarries ₱ lb	8	@	12
Gooseberries	—	@	—
Raspberries	10	@	11
Currants	1	@	3
do black	20	@	22½
Apricots	1½	@	2
Plums	2	@	15
Peaches, ₱ lb	3	@	10
Paars, Eating	1 00	@	2 50
do Cooking	—	@	—
do, Bartlett	—	@	—
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmal's ₱ 100	32 00	@	36 00
Cantelo's ₱ 100	40 00	@	62 50
Pomegran's, ₱ dz	—	@	—
Figs	12½	@	15
Grapes, Bl'k H'g	—	@	—
do Muscat	—	@	—
do Malavo'sia	—	@	—
do Swaatw'r	10	@	15
do Mission	—	@	—
do Rose of Peru	—	@	—
do Tokay	—	@	—
do Morocco	—	@	—
do St. Peter	37½	@	50
DRIED FRUIT.			
Applas, ₱ lb	6½	@	8½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	11	@	12½
Apricots, ₱ lb	—	@	—
Plums, ₱ lb	8	@	10
Pitted, do ₱ lb	15	@	20
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	8	@	10
White, do	10	@	15
Prunas	6	@	8
do German	12½	@	15
Citron	30	@	35
Zante Currants	8½	@	8½
Dates	12½	@	—
VEGETABLES.			
Asparagus	8	@	10
Beets	—	@	1
Cabbage, ₱ 100 lbs	—	@	2 00
do new, doz	50	@	60
Carrots, ₱ 100 lbs	1 00	@	1 25
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	6	@	8
Graan Peas	2½	@	3
Green Corn ₱ doz	18	@	22
Sum'rSquash, ₱ doz	4	@	5
Marro'fat Sq'sh, tn	60	@	—
Artichokes, ₱ doz	15	@	25
String Beans, ₱ lb	—	@	5
Lima Beans	—	@	—
Parsnips	12½	@	15
Shell Baans	2	@	6
Peppars, ₱ lb	12½	@	20
Okra ₱ lb	25	@	40
Okra, Green	18	@	20
Cucumbers, doz	10	@	15
Tomatoas	3	@	5
Egg Plant ₱ lb	12½	@	15
Rhubarb	2½	@	3
Lettuce	12½	@	20

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, parad, ₱ lb	40		
do unpaired, ₱ lb †	32		
Peachas, do, ₱ lb †	12½		
do parad, ₱ lb	30		
do do ₱ lb †	30		
Bartlatt Pears, parad, lb	50		
Pears, parad (sliced) lb	20		
do do (ring) ₱ lb †	18		
Paars, 10-lb boxes, family use, extra	22½		
Sackel Pears, unpar'd, lb †	12½		
Currants, stemmad, lb	40		
do unstammad, ₱ lb †	32½		
Royal AnnCherries, pitted, ₱ lb	25		
KentishCharrias, pitted, ₱ lb	55		
Apples, pared (ring) lb †	12½		
do do (whole), ₱ lb †	12½		
Apples, 10-lb boxes family use, extra	18		
Plums, pitted, ₱ lb †	25		
do do lb	40		
Rhubarb, ₱ lb †	35		
Corn, ₱ lb †	30		
Beans, ₱ lb †	60		
Potatoes, ₱ lb †	14		
Sweet Potatoes, ₱ lb †	15		
Onions, ₱ lb †	40		
Beef, ₱ lb †	40		
Tomatoes, ₱ lb †	75		
Squash, ₱ lb †	20		

*In caddies. †In bulk.

GENERAL MERCHANDISE.

WEDNESDAY M., July 15, 1874.

Bags and Bagging are firm at noted rates. Australian Coal is now selling at $10 ₱ ton. Lehigh and West Hartley are also lower. Oils continue low. A large stock was lost by the fire in the warehouse of Allync & White. The demand for Salt is light; Liverpool Fine will go no higher than $23 ₱ ton. Changes in Spices have been downwards. Hawaiian Molasses has declined from last week's rates, falling back to old prices.

BAGS.			
Eng. Stand Wht.	14¼	@	14½
Detrick's Machine Sewed, 22x36 E	—	@	13½
do 22x36, do E W	—	@	14
do 20x40, do A	—	@	14¼
Flour Sacks ½s	10	@	11½
" " ¼s	6¾	@	7
Stand. Gunnies			
double seam	15	@	16
single seam	13	@	13
" Wool Sacks	65	@	—
Barlay Bags 24x36	—	@	15¼
do 23x40	—	@	15½
do 24x40	—	@	16¼
do 28x36	—	@	17
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in. gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15
CANNED GOODS.			
Asst'd Pia Fruits in 2½ ₱ lb cans	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl	—	@	3 50
Sardines, qr box	75	@	—
do hf boxes	3 00	@	—
COAL—Jobbing.			
Australian, ₱ ton	10 00	@	—
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11—
Oumberl'd, cks	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	19 00
Liverpool	11 00	@	12—
West Hartley	12 50	@	—
Scotch	9 50	@	10 00
Scranton	15 00	@	17 50
Vancouvar's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
CentralAmeric'n	22	@	23
Costa Rica, per lb	23½	@	24
Guatemala	21	@	22
Java	28½	@	30
Manilla	22	@	—
Ground in cs	—	@	30
Chicory	10	@	—
FISH.			
Pac. Dry Cod, new	5	@	6
cases	6	@	7
do boneless	11	@	12
Eastern Cod	7	@	8
Salmon in bbls.	8 00	@	—
do ½ bbls	4 50	@	—
do 2½ lb cans	—	@	3 00
do 2 lb cans	2 65	@	2 75
do 1 lb cans	1 75	@	—
Do Col. R. ½ lb	—	@	—
Pick. Cod, bbls.	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mess.	3 00	@	3 50
" Ex mess. ½s	—	@	12 00
Sm'k Herr'g, bx	50	@	55
NAILS.			
Assorted size, lb	4¾	@	7
OILS.			
Pacific Gluc Co. Neat F't No. 1	—	@	1 00
Pure	1 25	@	—
Castor Oil, No. 1	—	@	75
do do No. 2	—	@	60
Cocoanut	45	@	50
Olive Plagniol	5 00	@	—
do Possal	4 75	@	—
Palm	9	@	—
do Bagicalupi	—	@	—
Linseed, raw	—	@	92
do boiled	—	@	97
China nut in cs.	—	@	82½
do bulk	70	@	72
Sperm, crude	—	@	40
do bleachad	—	@	2 00
Coast Whales	35	@	40
Polar, refined	50	@	55
Sperm	1 40	@	1 50
Lard	95	@	1 05
Coal, refined Pet	37½	@	40
Oleophina	—	@	34
Devoa's Bril't	26	@	29
Long Island	—	@	34
Eureka	37½	@	40
Devoa's Petro'm	26	@	29
Barral kerosene	—	@	26
Olive	4 00	@	9 50
Downer Kerosa'e	—	@	42½
Gas Light Oil	—	@	34
PAINTS.			
Atlan. W. Lead	7½	@	12½
Whiting	—	@	2
Putty	4½	@	5
Chalk	—	@	2½
Paris White	2¾	@	—
Ochre	—	@	3½
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	1 00	@	1 25
RICE.			
China No. 1, ₱ lb	6½	@	6¾
do 2, do.	5½	@	5¾
Japan	5½	@	6
Siam Cleaned	7	@	—
Patna	—	@	6¾
Hawaiian	7	@	7¾
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	20 00	@	23 00
do coarse	15 00	@	20 00
SOAP.			
Castile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Allspice, per lb	15	@	16
Cloves	45	@	47½
Cassia	22½	@	25
Citron	—	@	30
Nutmeg	—	@	1 07½
Whole Pepper	17	@	17½
Pimento	—	@	15½
Gr'nd Allsp'c	—	@	1 00
do Cassia	—	@	1 50
do Cloves	—	@	1 50
do Mnstard	—	@	1 25
do Ginger	—	@	1 00
do Pepper	—	@	1 00
do Mace	—	@	1 60
SUGAR, ETC.			
Cal. Cube per lb	10½	@	—
Partz' Pro. Cube bbl or lb bxs	—	@	11
do in 50 lb bxs	—	@	11½
do in 25 lb hxs	—	@	11½
Circle A crushed	—	@	10½
Powdered	—	@	10¾
Granulated	—	@	10
Dry granulated	10	@	10½
Hawaiian	8	@	9
California Beet	—	@	10½
Golden C	—	@	9½
do Key'g grada	—	@	6½
Cal. Syrup in bls	—	@	27½
do in ½ bls	—	@	30
do in kegs	—	@	35
Hawaiian Molasses	10	@	20
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@	1 00
Gunpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@	1 25
Young Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	45	@	55
Dwarf Twist	57	@	62½
12 inch do	57	@	62½
Light Pressed	65	@	75
Hard do	60	@	70
Conn. Wrap'r	40	@	50
Penn. Wrapper	20	@	30
Ohio do	7	@	15
Virgi'a Smok'g	60	@	95
Fina ct che'g, gr	8 50	@	9 25
Fine cut chewing, bac'ts	75	@	80
Banner fine cut	—	@	90
Eureka Cala	8 75	@	9 00
TURPENTINE.			
Eastern	70	@	75

LEATHER.

WEDNESDAY M., July 15, 1874.

The Leather trade continues dull. Jodots alone are buoyant, and unless the production is increased an advance may be expected.

Olty Tannad Laathar, ₱ lb	25@29
Santa Cruz Laathar, ₱ lb	25@29
Country Leathar, ₱ lb	24@28
Stockton Leathar, ₱ lb	25@29
Jodot, 8 Kil., per doz	50 00@ 54 00
Jodot, 11 to 19 Kil., par doz	66 00@ 90 00
Jodot, saoond choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornallian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Baaumervilla, 15 Kil	60 00@ —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robart Calf, 7 and 9 Kil	35 00@ 40 00
Franch Kips, ₱ lb	1 00@ 1 35
California Kip, ₱ doz	40 00@ 60 00
French Sheap, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Backs, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheap Linings	1 75@ 4 50
Bast Jodot Calf Boot Lags, ₱ pair	5 00@ 5 25
Good Franch Calf Boot Legs, ₱ pair	4 00@ 4 75
Franch Calf Boot Legs, ₱ pair	4 00@ —
Harnass Laatber, ₱ lb	30@ 37½
Fair Bridla Leathar, ₱ doz	48 00@ 72 00
Skirting Laatber, ₱ lb	34@ 37½
Walt Leathar, ₱ doz	30 00@ 50 00
Buff Leathar, ₱ foot	18@ 21
Wax Side Laathar, ₱ foot	17@ 19
Eastarn Wax Leather	—@—

LUMBER.

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CARGO PRICES OF PUGET SOUND PINE REDWOOD.

Rough, ₱ M	$16	00	
Rough rafusa, ₱ M	12	00	
Rough clear, ₱ M	32	50	
Rough clear rafuse, M	22	50	
Rustic, ₱ M	30	00	
Rustic, refusa, ₱ M	24	00	
Surfacad, ₱ M	26	00	
Surfacad refuse, ₱ M	16	00	
Flooring, ₱ M	30	00	
Flooring, refuse, ₱ M	20	00	
Beaded flooring, ₱ M	32	50	
Beaded floor, refuse, M	22	50	
Half-inch Siding, M	22	50	
Half-inch sidlng, ref, M	16	00	
Half-inch, Surfaced, M	25	00	
Half-inch Surf. ref., M	18	00	
Half-inch Battens, M	22	50	
Pickets, rough, ₱ M	12	00	
Pickets, rough, p'ntd	16	00	
Pickets, fancy, p'ntd	25	00	
Shingles, ₱ M	2	25	

Retail Price.

Rough, ₱ M	20	00	
Fancing and Stapping, M	37	50	
Fencing, 2d quality, ₱ M	30	00	
Fenoing, ₱ linaal foot		10	
Flooring and Stcp, ₱ M	30	00	
Flooring, narrow, ₱ M	32	50	
Flooring, 2d quality, M	25	00	
Laths, ₱ M	3	25	
Furring, ₱ linaal ft		¾	

REDWOOD—Retail.

Rough, ₱ M	20	00	
Rough refuse, ₱ M	16	00	
Rough Pickets, ₱ M	18	00	
Rough Pickets, p'd, M	20	00	
Fancy Pickats, ₱ M	30	00	
Siding, ₱ M	27	50	
Tongued and Grooved, surfaced, ₱ M	32	50	
Do do refuse, ₱ M	22	50	
Half-inch surfaced, M	40	00	
Rustic, ₱ M	35	00	
Battens, ₱ lineal foot		¾	
Shinglee ₱ M	2	50	

METALS.

WEDNESDAY M., July 15, 1874.

The metal market remains quiet. Quicksilver is steady and firm at $1.35 ₱ lb.

Amerlcan Pig Iron, ₱ ton	—	@	40 00
Scotch Pig Iron, ₱ ton	—	@	40 00
White Pig, ₱ ton	—	@	50 00
Refined Bar, bad assortment, ₱ lb	—	@	3½
Refined Bar, good assortment, ₱ lb	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5¾
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	— 08	@	— 09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	— 9½	@	— —
Norway Iron	— 8	@	— —
Rolled Iron	— 6	@	— —
Othar Irons for Blacksmiths, Miners, etc.	—	@	— 4½
COPPER.—			
Braziers'	— 31	@	— 32
Copper Tin'd	— 45	@	— —
O. Niel's Pat	— 50	@	— —
Sheathing, ₱ lb	— —	@	— 24
Sheathing, Yellow	— —	@	— 25
Sheathing, Old Yallow	— —	@	— 12½
Composition Nails	— 24	@	— —
Composition Bolts	— 24	@	— —
TIN PLATES.—			
Plates, Charcoal, IX ₱ box	—	@	16 00
Plates, I C Charcoal	14 00	@	14 50
Roofing Plates	12 50	@	15 00
Banca Tin, Slabs, ₱ lb	— 33	@	— 37
SEEL.—English Cast, ₱ lb	— 20	@	— 25
Anderson & Woods' American Cast	— 10	@	— 17
Drill	—

ATTENTION GRANGERS, ATTENTION!

PATRONIZE THOSE WHO SUSTAIN YOU.

WEED. THE BEST WEED.

IMPROVED SEWING MACHINE.



SPECIAL ARRANGEMENTS WITH THE ORDER THROUGH MR. I. G. GARDNER, AGENT OF THE STATE GRANGE.

THE MANUFACTURING INTERESTS ARE IDENTICAL WITH THOSE OF THE PEOPLE.

—THE—

WEED SPEAKS FOR ITSELF.

All purchaser have the privilege of returning their machiues at any time within thirty days and having their money refunded if the machine should not prove in every way as recommended, *provided only* that they will first notify us of any fault they may find and give us an opportunity to set them right by explaining the cause of the difficulty.

A. MEAD & CO., General Agents,

No. 152 New Montgomery Street, - - - - - - SAN FRANCISCO.

22v7-1am-4m

GEO. H. TAY & CO.,

614, 616 and 618 Battery St., S. F.,

OFFER FOR SALE

IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

RUBBER HOSE, ETC.

STOVES and RANGES,

THE RICHMOND RANGE,

THE HENRY CLAY,

THE EMPIRE CITY,

THE ALVARADO.

THE MONITOR, wrought iron body, cast iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

MILK PAILS, PANS, CHEESE HOOPS, ETC.

BABBIT METAL.

Wire for Fencing and Baling.

ALSO, METALS, HOUSE FURNISHING HARDWARE, JAPANNED GOODS, ETC., ETC.

22v7-3m



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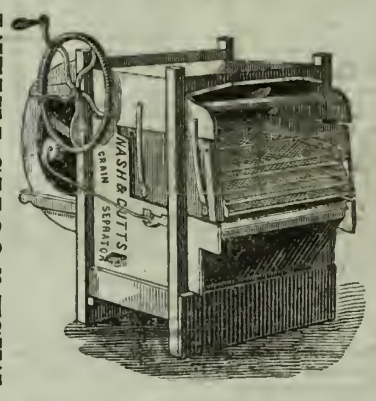
ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,

1v8-3m 43 & 44 Cal. Market, S.F.

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT GRAIN SEPARATOR AND FAN MILL.



THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars addr ess

NASH, MILLER & CO.,

No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

---

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINIS INSIGNIS, Etc.

For Sale, wholesale or retail, by

B. F. WELLINGTON,

(Successor to E. E. Moore).

425 Washington St., San Francisco. 22v7-1y

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

SAMUEL HILL, General Agent.

18v7-3m

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.

316 California Street, - - - SAN FRANCISCO.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

Ask for LEA & PERRINS' Sauce, and see name on wrapper, label, bottle and stopper.

Wholesale and for export by the Proprietors, Worcester; Crosse & Blackwell, London, &c., &c., and by Grocers and Oilmen universally.

1v8-1y

Brittan, Holbrook & Co., Importers of Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

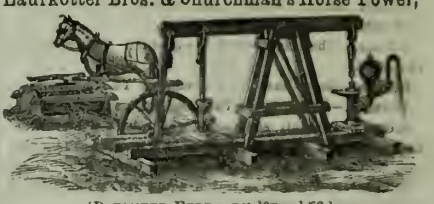
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 2,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

v7-2m-3m Cor. J and 10th Sts., Sacramento.

DAIRY PRODUCE

DEPARTMENT

OF THE

CALIFORNIA STATE GRANGE,

P. OF H.,

414 & 416 Sansome St., Cor. Commercial,

SAN FRANCISCO, CALIFORNIA.

J. H. HEGLER, Manager.

We are now prepared to handle and dispose of all Dairy Produce, Eggs and Poultry.

This house is under the immediate control of the California State Grange; the Business Manager a thoroughly practical farmer and dairyman, Master of Bodega Grange and General Deputy for California for the organization of Granges in any part of California. Special rates to members of the Order; though any one may sell through our house and avail himself of our mode of doing business.

In shipments give plainly the name and P. O. address. Any persons wishing legitimate information concerning our business should write to the house, and are cautioned against accepting for facts many rumors now current. All sales guaranteed. ja31-tf

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CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St.,

14v7-3m bet. Montgomery and Kearny Sts., S. F.

Stock Notices.



SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,
eow El Dorado, El Dorado County, Cal.



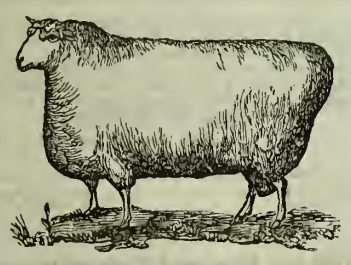
300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m



A. G. STONESIFER,

BREEDER OF

Pure Blooded French Merino Sheep,

Has for sale a choice lot of Rams and Ewes, on the Oristimba Ranch, six miles west of Hill's Ferry, Stanislaus County, Cal. 22v7-3m

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

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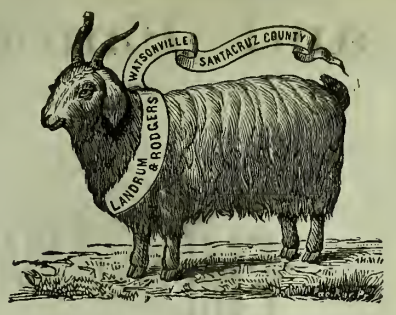
MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

JERSEY CATTLE.

A few head of very choice Jersey Cows—Heifers and and Bull Calves—for sale. Apply to
15v7-3m R G. SNEATH, Menlo Park.



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to he as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,
13v7-eow-tf Watsonville, Cal.

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand tweive Thoroughhred Jersey Bull Calves, bred hy me from my last importation to California, and will sell them cheaper than they could he brought from the East.

A. MAILLIARD,
17v7-3m San Rafael, Marin Co., Cal.

STANDARD SOAP CO.'S CARBOLIC SOAP FOR SHEEP WASH!



COMPOSITION—OLEIC ACID, NICOTINE, SULPHUR, CARBOLIC ACID & ALKALI.

It destroyes and removes Scab, Ticks, Fleas, Mange, Scratches, Insects on Plants and Trees, Foot-Rot, etc., etc. Being strongly impregnated with CARBOLIC ACID, it is one of the best disinfectants known. Its healing, cleansing and disinfecting qualities are unsurpassed.

The STANDARD SOAP COMPANY also manufactnres Laundry Soap, Family Soap, Hard Soap, Soft Soap, Marine Soap, Kane's Condensed Soap, Washing Powder, Washing Fluid, Liquid Laundry Blueing, Harness Soap, Thomas' Cool Water Bleaching Soap, Thomas' Patent Glycerine Soap, Mottled and White Castile Soap, Silicated Saponia, Bay Rum, Florida Water, Hair Oils, Extracts, Perfumes, Colognes, Cosmetics, etc., etc.

204, 206 and 208 Sacramento Street,
16v7-3m SAN FRANCISCO, CAL.

NOTICE TO FARMERS.

Something Entirely New.

HOME SEWING MACHINE.

This machine is manufactured after an experience of twenty years. It contains within itself every known improvement. **It is the best** because the **simplest, easiest to understand** and by far the **lightest to run**, and the equitable adjustment of all its parts makes it the **most durable** Machine in the market. Take the INTERESTED STATEMENTS OF NONE, but

EXAMINE for YOURSELF.

SEND FOR A CIRCULAR.

It uses a **Shuttle, Straight Needle, Two Threads**, and makes a stitch alike on both sides.

E. W. HAINES, Agent,
17 New Montgomery St., Grand Hotel Build'g, S. F.

We also continue to sell another machine, the

HOME SHUTTLE SEWING MACHINE.

Price, $45.

Mme. Demorest's Reliable Paper Cut Patterns. Send for a Catalogue. 15v7-eow-6m

THE CELEBRATED NEW DRAW-FEED WHEELER & WILSON SEWING MACHINES

Are withou exception the most desirahle for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in puhlic favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.

E. W. HARRAL, Agent,
20v7-4m-15p 427 Montgomery street, S. F.

WHALE OIL SOAP,

—FOR—

Destruction of Bugs on Plants, Etc.

PHŒNIX OIL WORKS.

517 Front Street.....SAN FRANCISCO.
20v7-1m

Agricultural Articles.

FOR THE HARVEST OF 1874.



☞ Hoadley Engines, Russell End-Shake Threshers, Pitts' Powers, Treadwell's Single-Gear Headers, Whitewater Wagons, etc., etc. Send for our Illustrated Price List, to TREADWELL & Co., San Francisco.

MATTESON & WILLIAMSON'S AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have heen long in the husiness and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can he relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton. Cal.

THE CELEBRATED MITCHELL WAGON



15v7-3m

WATERHOUSE & LESTER,

IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

☞ Send for price list.

ALSO AGENTS FOR

Woolsey's Patent Wheels,

The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has the metallic-shouldered hand; and it can be repaired as easily as the common wood wheel.

☞ Send for illustrated circular. Adddross

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122 and 124 Market street, and 19 and 21 California street, } SAN FRANCISCO.
17, 19 and 21 Seventh street, - - SACRAMENTO.
21v7-3m

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

O. OREGO. S. O. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
24v5-3m San Francisco.

H. C. SHAW,

STOCKTON, CAL.

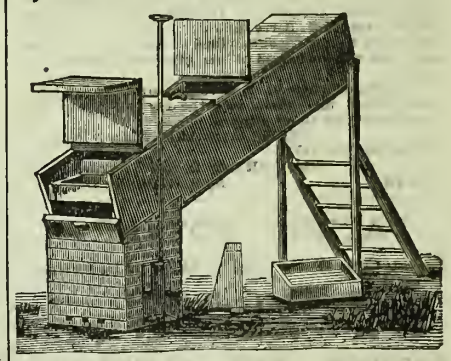
Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
14v7-3m Box 95, Stockton, Cal.

Ryder's American Fruit Drier.



This DRIER is a perfect success in the East, and will be on this Coast when its merits are known. Its cheapness brings it within the means of every Fruit Grower. The uniformity and perfection of its work challenge comparison. The principle claimed for this Drier (and violated in all other Driers in use), is, that no moisture shall come in contact with the fruit after the cut surfaces are once sealed by the heat, to open the cells and allow the aroma and fine qualities of the fruit to escape, which makes it undeniably the most perfect, as it is the most simple mechanical method for cureing Fruits, Vegetables, Meats and Grains ever invented. This Drier can make Raisins and the most beautiful crystalized fruit confection, equal to any imported. Can any other Drier do this? The fruit cured on this Drier last season, in this State, took the premium at the State Fair. Our Factory Drier will cure 60 bushels of peaches in a day. Send for Circulars. Farm, County and State Rights, and Driers with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

THE CELEBRATED LUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

J. M. KEELER & CO.,
Commission and Forwarding Merchants.

Agents for Eastern Manufacturers, 306 California street, San Francisco.

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can he had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.

Agency for the Decker and Emerson Pianos.

Matchless in Tone and Finish.

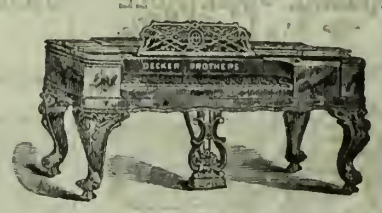
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Artists' Testimonials.

THE KING OF PIANOS IS



THE "DECKER."



$360.

THE ONLY FIRST-CLASS PIANO SOLD —AT A— LOW PRICE.

KOHLER, CHASE & CO., General Agents,

633 CLAY STREET, - - - - - - - - - - SAN FRANCISCO.

TREADWELL & CO.

We certify that the partnership of Treadwell & Co., doing business in San Francisco, California, is composed of Leonard L. Treadwell and James F. Place, who both resids in the city and county of San Francisco, and William O. M. Berry, who resides in Oakland, Almeda county, California.

San Francisco, Cal., May 26th, 1874.

LEONARD L. TREADWELL,
JAS. F. PLACE,
WM. O. M. BERRY.

STATE OF CALIFORNIA,
CITY AND COUNTY OF SAN FRANCISCO.

On this May 27th, 1874, before me Henry C. Blake, a Notary Public, in and for said city and county, personally appeared Leonard L. Treadwell, James F. Place and William O. M. Berry, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

HENRY C. BLAKE, *Notary Public.*

Filed May 1st, 1874.

WM. HARNEY, County Clerk,
By S. C. ELLIS, Deputy.

jy4-4w

PACIFIC POTTERY,

Depot—No. 3 California St., San Francisco.

N. CLARK & CO.

Manufacturers of

EARTHEN AND STONEWARE,

WATER AND SEWERAGE PIPE.

Our Vitrified Iron Stone Pipe has been thoroughly tested on private estates and public works, and its merrits are fully endorsed by the leading Architects of the State.

J. B. OWENS, Agent.

m9-hp-3m

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA.

Is now prepared to sell rights and furnish the necessery machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

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11v7-6m

H. K. CUMMINGS. 1858. H. H. HALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the producer

4v23-1y

MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to

B. F. CLAYTON, San Jose.
Or C. J. CLAYTON,
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10v7-6m

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,

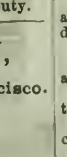
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MANTEL PIECES, ETC.,

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21v2-1y





CHEAP HORSE CORN-PLANTER.

INVENTOR'S DESCRIPTION.—I am aware that a quadruped has heretofore been used in combination with an agricultural implement, and consequently I do not claim such a combination broadly; but what I claim, and desire to secure by Letters Patent, is—

1. The planters B B, in combination with the beast A, constructed and operated as described.
2. The bands *i i*, and pulley *c c*, in combination with hind legs of a cheap-horse A, to operate the planters and prevent kicking, substantially as set forth.
3. I claim the cheap-horse A, clipped, as shown, in combination with a corpulent driver D, to prevent his traveling too fast, as described.
4. I claim the guide *o*, in combination with the "tail of a cheap-horse," when said tail is put on in a vertical position, as shown and described.
5. In a cheap-horse corn-planter I claim the tail *b*, when arranged vertically, to frighten the crows, *a a*, as set forth.
6. I claim the worms (not shown) in combination with the "early birds" *a a*, for the purpose set forth.

The yellow dog, with few friends, being an old device and somewhat at a discount in these days, we do not *set anything on him*, but merely throw him in to accompany the driver D, to give general effect to the patent after it is granted.

The above is dedicated to despairing inventors. It goes to prove that the field of invention has not yet been exhausted. We have not had the pleasure of reading the specification of the inventor, but we can easily conceive of the beautiful pen pictures which its writer might indulge in. The cheap horse made useful, the neat mechanism and its splendid adaptability to the construction of the horse. The advantage of "arranging" the tail "vertically." The benefit of the exercise upon the "corpulent driver," and to end the whole, a dissertation upon the "worms" and the "early birds," not to say anything of the "yellow dog." These points of advantage ought to satisfy the mechanical appetite of even a cheap Patent Agent; but jesting aside, the above comical representation is but little inferior to many inventions which have been made the subjects of letters patent, as a glance through the Patent Reports will show. If any inventors are able to improve upon the above invention we will be most happy to send them one of our Patent Circulars with full instructions "How to apply for a patent."—*Mining and Scientific Press, S. F.*

Eggs! Eggs! Eggs!

For hatching, from reliable breeding stock; one of the oldest and best yards of pure bred poultry in the United States.



M. FALLON

SEVENTH AND OAK STS., OAKLAND.

Offers for sale Eggs from the following varieties of fowls:

Light and Dark Brahmas,
Buff, Partridge and White Cochins,
Spangled, Golden and Silver Polish,
Spangled, Golden and Silver Hamburgs,
Pure Whitefaced Black Spanish,
Silkies, Game, Leghorns, White & Brown,
Silver Gray Dorkins and Houdans,
Aylesbury and Rouen Ducks,
Bronze Turkeys, the largest in California

ALSO, CHESTER COUNTY WHITE PIGS, CHINA PIGS.

7v6-tf-16p2

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts., SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

A Beautiful Brass Mounted Pocket

MICROSCOPE, said by a celebrated physician TO BE FULLY EQUAL IN POWER TO ONE HE PAID EIGHT HUNDRED DOLLARS ($800) FOR. Just the thing to look at mites on trees, shrubs, grain, or on sheep and calves. A look through it will astonish you. *Every Granger should have one.* Sent free to any address on receipt of ($1) one dollar green backs or postage stamps. Address, CHAS. P. KIMBALL, 513 Hayes street, San Francisco, California.

3v23-1m

Davis & Sutton, Commission Merchants,

For California Fruits; also for the sale of Butter, Eggs, Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.

3v8-1y

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BRANDON & ROGERS,

California Land Agency,

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Buy and sell unimproved lands, farms and city property throughout the State of California. Farms to exchange for city property and city property for farms. Eastern property to exchange for California property. Tracts favorably located, furnished for Colonies. A large list of property to select from. Money invested for other parties on advantageous terms. Long experience in the business and extensive acquaintance in California and the Eastern States, enable us to effect speedy and satisfactory sales and exchanges.

20v6-1y-16p

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IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

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GARDEN TOOLS, TREES, PLANTS, Etc.

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Between Battery and Front.

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FARMERS writes for your paper.

IMPROVE YOUR POULTRY.

It Costs No More to Keep Good Fowls than Poor Ones!



OAKLAND POULTRY YARDS,

COR. 16TH AND CASTRO STREETS, OAKLAND, CAL.

A few trios of imported Dark Brahmas, of the celebrated Black Prince strain, for sale at $30 per trio. Also, one trio imported Golden Polish, at $30.

For further information send stamp for Illustrated Circular, containing a full description of all the best known and most profitable Fowls in the world, to

GEO. B. BAYLEY,
P. O. Box 659, San Francisco.

9v7tf

POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m 304 California Street.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, JULY 25, 1874. [Number 4.

A New Phase of Irrigation.

In the valleys where irrigation has been most extensively introduced, a noticeable change has occurred in the atmosphere; greatly modifying the discomforts of the heated term in those localities. The oppressive heat of midsummer in some of the most favored valleys in the State has heretofore been an objection in the minds of many to locating there; but by a liberal supply of water in these localities, and by the growth of grasses, fruit trees and other vegetation, that this irrigation has promoted, the summer atmosphere has become much more bearable. In Kern county, especially, where probably more has been done in the matter of irrigation than in any other portion of the State, this climatic change is quite perceptible. Still more extensive schemes of irrigation are about to be inaugurated there; and with the probable increased improvement in the atmosphere which this will produce, will add greatly to the attractions of San Joaquin valley. The probability is that the irrigating enterprises of California will result in something more permanent than an increase of the crops to which it is applied. For the moisture that is thus artificially brought to these dry, languishing places encourages permanent vegetation there; and this vegetation in its turn promotes moisture and tempers the severity of the heat; thereby reducing the necessity of irrigation, and making these fruitful regions far more desirable as permanent homes.

A Kern county exchange credits the growing alfalfa crop with aiding materially in modifying the heat and dryness of former summers. The increased acreage given to this crop in Kern county is quite extensive, and the breezes that come across these rich, green, almost matted fields, if they are not equal in their fragrance those that come from "Araby the blest" are good enough for "all practical purposes;" and if those who breathe this alfalfan breeze do not go into poetic ecstasies at its approach, they will at least feel inclined to take off their hats to it respectfully, and even thankfully.

That these climatic changes are being effected by irrigation, satisfactory evidence proves, and science affords ample illustration of the mode by which it is done; but, while we are considering the climatic benefits derived from a limited system of irrigation, in an extremely dry region, we would call the attention of those living in places surrounded with a damp atmosphere, to the danger of excessive irrigation. San Franciscans, especially, would do well to consider whether their profuse irrigation is not really injurious to the health of the city. When, to the cold fog which hangs about our dwellings morning and evening, a copious watering is added to everything surrounding the house, a condition of the atmosphere is produced which does not offer a safe retreat to persons afflicted with pulmonary diseases. It is believed that diseases of this class are on the increase in San Francisco; and it is remarked that while some are coming here to escape consumption, others are leaving for the same prudential reasons.

This artificial dampness is undoubtedly even worse than that which is caused by excessive rain; and if people possessing weak, or partially diseased lungs, can not safely remain in an atmosphere naturally damp and chilly, it is, we think, at a still greater risk that they pass their time in neighborhoods where the bare earth, the grass, shrubs, walks and streets even, are very day, and in many cases twice a day, drenched with cold water that has not been properly prepared for this purpose by passing through the air that surrounds us. A delicate person would probably incur less risk in going abroad on a regular damp day than on a dry one, when the warm, dusty streets and sidewalks are interspersed with crossings and other spaces that are as wet as they can be made, and that, too, with the coldest of water.

Do we not use more water about our houses than accords with good health or even with comfort? While our friends in other portions of the State are panting and languishing during midday, and in the morning and evening hours are tempted into out-door strolling, and are justified in the use of any means for "cooling off," we are only comfortably warm at midday; rather preferring the sunny side of the street; while the semi-daily fogs drive us indoors morning and evening, throwing a wet blanket over all out-door enjoyments. Is every house in the city, no matter what the condition of its inmates may be as to comfort and healthfulness, to be drenched, with all its surroundings, just for "the fashion of the thing," or because California generally is to be recognized as an exceedingly dry climate? Those who are concerned for their own health or that of their families, and those also who are sensitive about the reputation of California for healthfulness, would do well to give a thought to this matter.

Dr. Hubbard, of Lagoon valley, near Vacaville, Solano county, is an unlucky man. A few days since three horses were stolen from him. He expected to raise about $2,000 from his cucumber crop this season, but the bugs got a corner on them, and not one is left. During this season he sent 10,000 choice fruit trees to the East, but the vessel which they were upon was wrecked on the passage.

Some years ago Robert E. Smith, a son of the late Jacob Smith, found a grain of wheat in a lot of coffee purchased from W. M. Williamson, at that time a grocer in Santa Rosa. From this grain sprung the variety of wheat now universally grown throughout Sonoma county, known as the Smith Club. It is, as its name indicates, a club wheat, large heads, hardy, white and of superior flouring qualities.

The Schussler vineyard, in Yuba City, presents this season a healthy and prolific appearance. The crop will be one of the largest ever raised. It is estimated to produce about 15,000 gallons of wine.

Mr. Wadsworth Demurs.

The readers of the Press are hereby informed that Mr. Wadsworth has not entered a formal demurrer against the statement made in our last week's issue; but he entered our office on Tuesday of this week, his face beaming with the old-time smile, and exhibiting other manifestations of improved health. The extremely discouraging statement in the Press of last week, in regard to the health of Mr. Wadsworth, was dissented to by some members of our office; still it was allowed to be put in print as the foreboding of one of his nearest and dearest friends. But the writer ate his words with a very good grace; in fact, seemed to rather relish the feast; while the subject of the notice, with other friends present, had a good laugh over the affair. A change of medical treatment, with the aid of a few weeks' enjoyment of mountain air and exercise, have produced a marked improvement in the condition of Mr. Wadsworth's health, and we know that the readers of the Rural Press will rejoice with us at the gratifying intelligence.

He returned to Sacramento on Tuesday of this week, with the avowed determination of affording himself ample time for rest and recreation.

The Alden Fruit and Vegetable Preserving Company, of San Jose, has commenced the erection of a four-story building on the lot near the Black Bridge, east side of the Guadaloupe creek. It is expected that the factory will be in operation in two or three weeks.

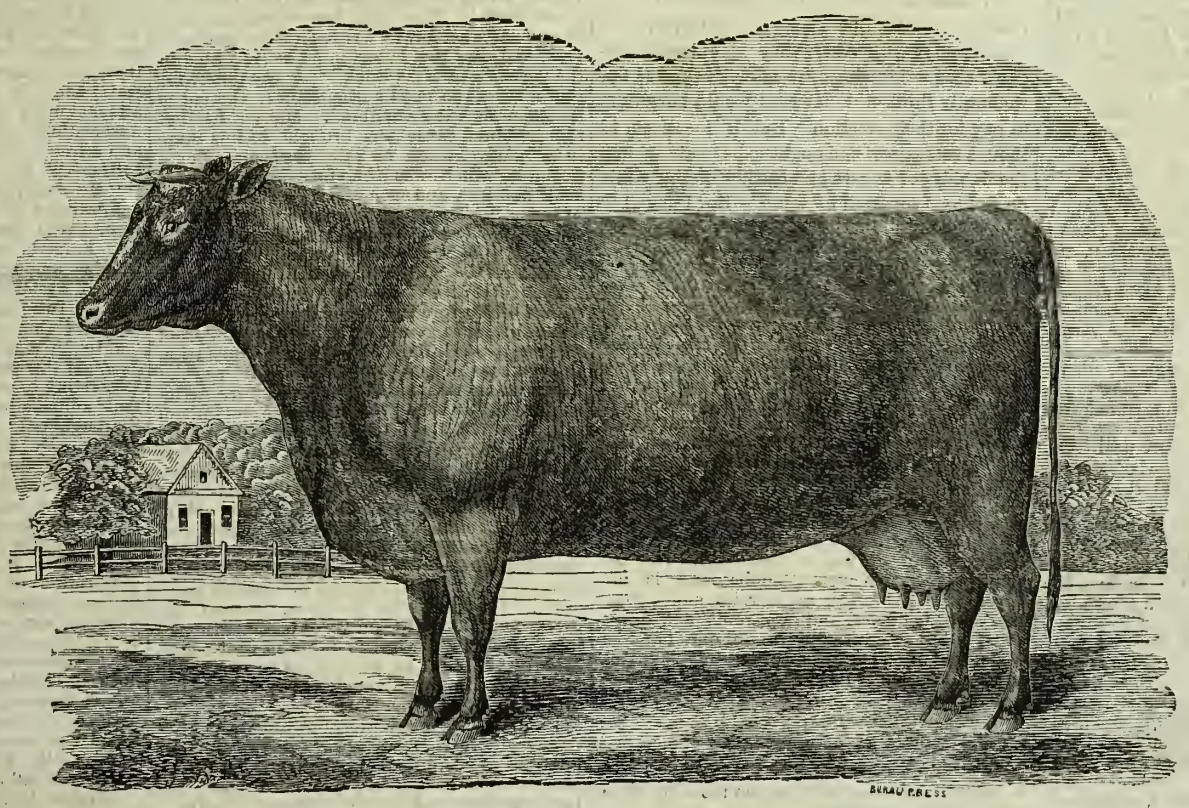
The grasshoppers made a clean sweep in Sheridan valley, Montana, this year. The valley is usually one of the most fertile and prolific in the Territory, but the pests have eaten "every green thing" this season.

Middle Bar, Amador county, last week had a sensation, in the shape of a four legged gosling. The two extra legs, which were probably intended for a twin gosling, came out near the root of the tail.

The title of the famous Santa Ana ranch, Ventura county, has been perfected, and it is the intention of the owners to immediately offer it for sale in small parcels to actual settlers.

Short-horn Cow "Louan 44th."

We give in the present issue of the Press the portrait of another member of the celebrated Gabilan herd of Short-horns, the property of J. D. Carr and W. S. Chapman, of Gabilan, Monterey county. This is another of the cuts executed by the Rural Press artist, and its publishers feel a pride in the artistical and mechanical production, akin to that which the owners of the herd feel in the valuable subject of the sketch. Our portraits of stock have met with marked favor from stock-breeders and fanciers, and we have the satisfaction of announcing that we have on hand several cuts of animals belonging to the Gabilan herd, which we propose to give in succession in the pages of the Rural Press.



THE SHORT-HORN COW, "LOUAN 44TH."

The subject of the accompanying portrait and sketch, Louan 44th, is of a red color; every other point in her personal appearance is faithfully portrayed by our artist. She was calved January 31st, 1867, and was bred by Mr. Jeremiah Duncan, of Paris, Kentucky; sire, Duke of Airdrie; dam, Louan 24th, by Duke of Airdrie, 2743. The record of her previous pedigree is as follows: 2d dam, Louan, 2d, by Gold Dust, 534; 3d dam, Louan by Otley, 4632; 4th dam, Cambria by Bertram, 2d, 3144; 5th dam, Virginia, 2d, by Bertram, 1716; 6th dam, Lucilla, 2d, by Memnon, 1223; 7th dam, Virginia, by General, 272; 8th dam, Rosemary, by Flash, 261; 9th dam, Red Rose, by Petrarch, 488; 10th dam, Bright Eyes, by Alexander, 20; 11th dam, Red Acomb, by Traveller, 655; 12th dam, by a son of Bolingbroke, 86.

Duke of Airdrie, 2743, by the old Duke of Airdrie, and from the fine cow, Nannie Williams, (portrait in vol. 2, A. H. B., p. 492,) was one of the best bulls of his day in America, and won many prizes.

Otley, bred by Mr. Fawkes, was by Norfolk, 2377.

The Louan tribe is highly valued in the United States. Rosemary was imported about 1820; Virginia became the property of Col. Powel, from whose hands the family went to Mr. Williamson, the breeder of Louan, who was sold to Mr. Duncan, and from whom he has bred the present famous tribe.

Louan, 2d, is portrayed in vol. 2, A. H. B., p. 448, and her brother, d'Otley, 432, in the same volume, p. 132.

The army worms are rapidly disappearing from the vicinity of Sacramento. Although they have created much trouble, it does not appear that they have done much damage.

Mr. Storey, in the Mission valley, San Diego county, had a yield on his place of 40 tons of hay from seven acres, sowed at the rate of 100 pounds to the acre.

In the valley of San Pasqual, San Bernardo, Poway and vicinity, San Diego county, there will be between 30,000 and 35,000 sacks of grain put up this year.

There arrived, lately, from Wisconsin, 127 thoroughbred Merino sheep, consigned to Major Beck, of Sacramento.

Very little wheat and barley are arriving in Marysville, the farmers being too busy with their harvesting to bring their crops in.

William Ball, of Crescent City is trying the experiment of raising tobacco. He has 400 plants in a most thriving condition.

Merced shipped 1,350 tons of new wheat up to 18th inst.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

External or Skin Poisoning.

EDITORS PRESS:—Having noticed several communications in your paper within a few months past upon external poisoning and its remedies, and being at this time somewhat afflicted, it occurred to me that I might add something that would be beneficial to others thus unfortunately afflicted. I assume to claim that I have had as long and severe experience in external poisoning as any person in California. If I have not, may God pity the greater sufferer.

My first experience commenced in the spring of 1856—was poisoned two or three times that season—I suppose by poison oak. From that time, in the summer season, for twelve years, I was very frequently poisoned, and seldom entirely free from it until late in the fall. I never dreamed that there was any other shrub or weed except the oak that would poison badly, although I would frequently and most usually get poisoned so badly that I could hardly see, my eyes becoming completely closed; when positively I had not been within half a mile of poison oak; but supposed that I was sufficiently sensitive to take it from others who had been handling it, and chanced to come near me. But, to my surprise, I accidentally discovered that the blame was chargeable to another (to me) accursed weed, though a very valuable and popular medicinal herb; being no less than the vermifuge of commerce, from which the liquid is extracted. The herb or weed grows extensively throughout California; especially in and near country villages and farm houses.

About six years ago, while one day at work at a certain place among the shrubbery and flowers in my garden, I got badly poisoned. Being positive that I was not mistaken, I had a curiosity to investigate carefully next day, and see if anything of a suspicious character could be found in that locality. To my surprise, found that I had the previous day tramped down a large and vigorous weed of the vermifuge persuasion.

Then I then and there withdrew the oft repeated curses I had been wont to bestow upon the character of poison oak, and transferred them *en masse* upon the whole vermifuge family. To confirm my suspicions more positively, in relation to the newly discovered poison, by touching it to the back of my hand it invariably left a satisfactory index of its character. Vermifuge has a long tapering root similar to a carrot. The leaves and stalk are dark green, and when small the leaf resembles peppermint. It grows in rich, moist land, four or five feet high, with numerous branches from top to bottom; break or bruise the stalk and it emits a strong odor; I can smell it as far as I could smell a skunk, and it poisons me as far as I can smell it. Am not sure I was ever poisoned by oak. Have never yet seen or heard of another person having been poisoned by the weed. If there are such in California I would like to have him or her publish the fact in the PRESS. There are a great many remedies for external or skin poisoning. Some are easily cured, while others require strong applications. A remedy that will cure a Frenchman will not always cure the Dutchman. I think from observation, that there are not more than one person in four that will poison—even by handling poison oak. Some it will but slightly affect, while others cannot go near it without getting badly poisoned. Mild cases are frequently cured by washing in a strong solution of salt or saleratus in water, which would have no perceptible effect upon a severe case. The most effectual remedies within my experience are the following, to wit: Solution of sulphate of zinc, sulphate of copper, (blue-stone,) sugar of lead, alcohol, Radway's ready relief—and other preparations of a similar character, put up in 90 per cent. alcohol; strong camphor, and wild sun flower blossoms steeped strong. After the swelling has somewhat abated, and the skin has become rough and sore, it is very soothing to wash in water as hot as can be borne; then apply a coating of glycerine, saturated with a few drops of carbolic acid; or if not at hand, use the sun flower wash, or any other glutinous substance that will close the pores of the skin and exclude the air, which greatly alleviates the usual annoyance of severe itching. There is no certain preventive to surface poisoning within my knowledge. Washing in strong salt and water after being exposed is the best I have tried. Many persons have told me that they had established a lasting preventive to poisoning oak by eating the leaves. I ate some once or twice; they did not poison me, nor prevent my being poisoned by vermifuge. I have never heard of a person being internally injured by eating the leaves of poison oak. I knew one man whose lips were slightly poisoned. C. S. S. H.

Knight's Ferry, July 10th, 1874.

Items from Santa Clara.

EDITORS PRESS:—Believing a collection of items and the experience of practical farmers make your paper one of the best in the State, I venture to send a few lines on—"Does it pay to harrow grain." It certainly does if done when the grain is well rooted. I tried it on a field of 30 or 40 acres for the purpose of killing mustard, and the result was death to the mustard and an increased vigor to the wheat. The weather happened to be very favorable—a few dry days, then a shower.

Large quantities of hay have been cut in this valley, and hay presses are in demand. Many fine looking fields of wheat were cut for hay, which will help reduce the wheat crop. Although the wheat fields look fine, the yield will not be as great as anticipated, from the fact that the meshes on wheat contain only two kernels instead of three and four—occasionally three can be found. With few exceptions the berry is fine and plump. Last week heading commenced in earnest, and this week threshing machines will be humming lively, creating a demand for men and muscle. Prices for heading are from $1.25 to $2.00 an acre; threshing per bushel, three to four cents; wages for feeders and engineers, $4 per day; field hands, $2.00. Santa Clara Grange still flourishes, and considering the work to be done by farmers, it is well attended.

The excitement over Local Option is subsiding into a conviction that good will result from the action of the License men at San José. The California *Agriculturist* advocates water fountains—certainly a practical method to help close some of the many rum holes that are scattered over the country. How many temperance people have by necessity been compelled to patronize them because they were the only places where water could be found. Why cannot our town and county roads be furnished with fountains for man and beast, such as the enclosed print represents? A. R. W.

Santa Clara, July 13th.

[If fountains such as the cut alluded to represents could be put along our country roads, and supplied with water, they would undoubtedly become blessings in many respects; but we hardly think the farmers would be willing to pay for their erection. But it does seem as though some provision ought to be made against the liability of horses and cattle suffering while on the road for want of water.—ED. PRESS.]

Products of Arizona.

EDITORS PRESS:—To give you a few more notes about the Colorado bottom land here, near Yuma, I send you enclosed a sample of opium which I have raised. The poppy seed must have been of inferior variety, as the heads were only as large as cherries. I have a few cotton plants on strong alkali soil growing very fine. I planted in February 100 fruit trees; some of them, where slightly alkali, are unhealthy, but the others on strong adobe land without alkali, perhaps 60, are splendid, strong and healthy as possible; apples, peaches, almonds and walnuts have already branches 4 to 5 feet long; some peaches even had fruits. Hemp is ten or twelve feet high. But for other things this strong adobe land is not adapted; strawberries, raspberries and gooseberries do not grow, and hop roots and grape cuttings are an entire failure; not one hop root came, and of 600 grape cuttings only 30 lived, and even these did not grow, but dried up after a short time. P. E. ARNOLD.

Yuma, Colorado, July 7th, 1874.

[The sample of opium sent by our correspondent has been shown to parties competent to judge its merits, and is pronounced by them a fair article; containing a good percentage of morphine. If it were properly prepared for market it would probably be worth $8 per lb. People, however, before embarking in opium culture, should consider that experience, as well as cheap labor, are essential to success. It is not by any means enough that the soil and climate are favorable to the growth of the poppy; it is very important that the opium should be prepared after the approved method, and be put upon the market as a standard article.—EDS. PRESS.]

From Riverside.

EDITORS PRESS:—Our settlement commenced in the fall of '70, has proved a success. Most of us came here intending to raise semi-tropical fruits. Many thousands of orange, lemon and lime trees are now set out in orchards, also many almonds and English walnuts, and tens of thousands of the raisin grape. Quite a quantity of raisins will be manufactured here this year. A few limes and lemons will also be raised. A few orange trees are nearly large enough to bear. People are still setting out orange trees from our own nurseries. Some will continue setting out until September. This locality seems well suited to their growth. Our hay and barley crops are good. Threshing will soon commence. We shall have a large surplus of barley, consequently there is not a very active market for it. Before another crop is harvested we hope and expect an extension of the S.P. Railroad to give us a market in the mining regions beyond us.

Yours respectfully, O. TRAVER.

Riverside, July 12th, 1874.

CATTLE BREEDERS.

Colonel Younger on Pedigrees.

EDITORS PRESS:—In reply to certain queries put by Colonel Younger through the June issue of the *California Agriculturist*, I beg to make the following statement: The cattle exhibited by Page brothers in 1872 at the Bay District and Sonoma and Marin fairs (excepting Maggie and Kittie shown at the latter as grades) were thoroughbred Short-horns. Their pedigrees were then, and do now remain unknown, for reasons herein after stated. Page brothers, on being requested by the officers of the Bay District Agricultural Society to exhibit said cattle, declined to do so, owing to the lack of pedigrees; but these gentlemen said the latter would be unnecessary, if satisfactory evidence could be given that the blood had been kept pure. The officers of the Sonoma and Marin society made similar statements, and on this understanding, the cattle in question were exhibited at both fairs. Strange to say, this evidence was not called for at the first mentioned fair, when Colonel Younger was an exhibitor, but was exacted at the second, where Colonel Younger was not represented. I need scarcely add that the officers of the latter society expressed themselves as thoroughly satisfied with the evidence adduced. It may appear a little odd that Colonel Younger, who at the time he was competing with Page brothers' cattle was so indifferent as to their breeding and pedigree, should now become so solicitous in that very respect; this, however, is very easily accounted for; people living in glass houses are not much given to throwing stones; at least, not until their own have been badly smashed.

"But," asks Younger, "if they have no Short-horn pedigree, what excuse have you to offer for showing them as thoroughbred cattle? I have failed to find them in the 'American Herd Book.'" The writer has yet to learn that an animal must have a written and known pedigree, and that the latter must be recorded in the "American Herd Book," (or any other, for that matter,) to entitle the subject thereof to its claim as a thoroughbred. Many a head of thoroughbred cattle was brought to this State in early days, when no value was placed on a pedigree, which was therefore laid carelessly aside and lost, and such was the case with those of the cattle in question. As Page brothers did not come to this country until some years after the pedigrees were lost, and on inquiry found that the cattle had changed hands some three or four times after they started across the plains, and before they came into their hands, and as moreover one of the parties could not be found at all, they came to the conclusion that what information they might acquire would be open to doubts, and therefore relinquished the search. The pedigrees and bills of sale, however, had been there, and the purity of blood was always appreciated, and care had been taken to perpetuate it. The only difference between Colonel Younger's and Page brothers' exhibition is this: The former exhibited certain cattle as thoroughbred, which had spurious pedigrees, whilst the latter showed thoroughbred cattle for which they neither then, nor have since, claimed to possess pedigrees. The loss of the pedigree, however, has surely not affected the purity of blood, although it may have the pecuniary value of the animal. And if the blood be pure, what is lacking to make the animal a thoroughbred? "Registration in the 'American Herd Book,'" says Colonel Younger, if I misinterpret him not. But is that proof of purity of blood, or non-spuriousness of pedigree? Let me refer him to his own cattle as recorded in the herd book, and let the public draw its own inference therefrom.

The 12th volume of the A. H. B. admits that the pedigrees of Colonel Younger's cattle, as recorded in the 11th volume, are partly charged as being spurious, or forgeries, and that others are probably incorrect. In other words, Mr. Allen admits that he is as liable to error as any other man; and therefore, that record in his book is neither proof of purity of blood nor of authenticity of pedigree. When the Cattle Breeders' Association protested against Colonel Younger's cattle at the State fair of '73, and this gentleman stood up to make his *defence*, he admitted to the judges that one of the male ancestors in the Lou Talbott pedigree was unknown. Why, then, did he have it recorded in the 11th volume A. H. B.?

Now that I have got on the "Younger pedigrees" again, I may as well ventilate them a little further. As published in the RURAL PRESS, by Colonel Younger himself, his pedigree for Lucky Lass runs back to Old Pink, by Goldfinder, (2066), and there stops. As recorded in the A. H. B., it traces through Pink, by imp Goldfinder, (2066), to imp Young Mary, by Jupiter, (2170), etc., one of the most popular pedigrees in the country. When asked how this change came about, Colonel Younger answered: "Mr. Sweezy will give his reasons, if he has not already done so—why, Young Mary was attached to the Vanmeter pedigree;" *i. e.*, the pedigree traced only as far as Old Pink, by Goldfinder (2066). I am not aware that Mr. Sweezy ever did publish his reasons; (Mr. Sweezy, by-the-by, is the gentleman who, to use the Colonel's own words, "arranged his pedigrees for him;") but, he did state to the writer, at Sacramento, that a San Francisco copyist was employed to transcribe Colonel Younger's numerous pedigrees after they had been arranged, and that having copied that of Lucky Lass as far as Old Pink, by Goldfinder, (2066), he inadvertently skipped to another pedigree, and continued to copy from that. At the time these pedigrees were being arranged there was not, to my knowledge, a bull or cow in the State whose record traced to Young Mary by Jupiter; but, even supposing there had been a thousand of them, I cannot but wonder what such a pedigree was doing in a San Francisco copyist's table. Surely, neither Colonel Younger nor Mr. Sweezy sent it there, for the pedigrees in question had no call for its use.

Colonel Younger, in his letter to the *California Agriculturist*, dated April, 1873, predicts that Lucky Lass will be as celebrated in her posterity as Duchess 1st; he also states that Kate Hughes had produced a calf every year from 1862 to 1871, and was still stout and looked as if she would produce 10 more calves. I will close this epistle by offering Colonel Younger my sincere sympathies, inasmuch as the A. H. B., Vol. 13, does not contain a single pedigree which traces, on the side of the dam, to the California Duchess, *alias* Lucky Lass, or to her sister in affliction, Lon Talbott. It is true that he always keeps those strains through Glencoe. Jeff. Davis and others; but unless the old volumes of the A. H. B. are looked back to, which persons but slightly acquainted with his pedigrees are unlikely to do, these valuable crosses are liable to pass undetected and unappreciated. Please inform us what has become of them, Colonel, or what has happened to them. Have they, in their prime, ceased to breed, or have you, out of pure love for our neighbors across the water, "sold" them, even as you did Glencoe, to go to Japan? WILFRED PAGE.

San Francisco, July 15th, 1874.

P. S.—Since writing the above, I have received the July number of the *National Live Stock Journal*, which has something to say on the Colonel's letter to the *California Agriculturist*. I quote as follows:

We have received from the editor of the *California Agriculturist* a leaf of his paper, containing a long letter from Colonel Younger * * * We presume the object of sending this was, that we should comment upon it. We will say, therefore, that we consider the letter in very bad taste. It appears to be merely personal attacks upon the members of the Breeders' Association. (The *Journal* might have added and a free puff and advertisement of his own cattle.—W. P.) * * * * *

"He next pays his respects to Mr. Page, for exhibiting a lot of grades, so called, because he cannot find their pedigrees in the Herd Book. The animals are named, and we believe we recognize among them some of the cattle purchased by Mr. Page when in this section, a year or two ago." (The *Journal* is mistaken. None of the cattle which were purchased by me, in 1873, have been attacked by Colonel Younger through the press.—W. P.) "It is interesting to read Colonel Younger's diction, that animals recorded in the Herd Book are thoroughbred, and those not recorded are grades. By this rule, previous to the publication of the eleventh volume of the Herd Book, his herd was a herd of grades — a proposition which few people will have the hardihood to dispute — but after the publication of the eleventh volume they were thoroughbreds. It is true, we believe, that the publication of the pedigrees in the eleventh volume furnishes the only claim Colonel Younger can advance in favor of the cattle being thoroughbred. But we must insist that the admission of the pedigree to the Herd Book does not make an animal one whit more or less a thoroughbred than it was before. It may enable a person to impose an animal upon those who know nothing about pedigrees, but that is all. It was a grade before it was recorded; it will be a grade afterwards.

Colonel Younger claims that his cattle are the finest and best in the State, and that he believes them to be thoroughbred.

[The *Journal* here credits the Colonel with too much modesty. These are the Colonel's own words: "They are the noblest race of cattle in the world; and I believe mine to be such (the noblest race? W. P.); and as far as color, symmetrical form and high finish are an indication of high breeding, they (his own cattle, of course, not the race in general—W. P.) have no superiors in this or any other country." W. P.] "This may be true; we have not seen the cattle. But some of the pedigrees recorded in the eleventh volume are so ridiculous and absurd, and some of the others go so far beyond the authority of the gentleman who bred their ancestors, that Colonel Younger could never pass them as thoroughbreds outside of California. W. P."

A SULPHUR BATH.—A recent visitor to the celebrated stock ranch of E. W. Chapman, Merced county, thus describes, in the *Resources of California*, the manner in which the sheep are treated for the prevention of a disease extremely troublesome in the sheep-fold: The day we were there Mr. Smith had the flock in the corral, and was engaged putting the sheep through a bath highly charged with sulphur and lime. There was a long, narrow vat that contained the liquid, which was heated to a certain temperature by the introduction of steam through the bottom of the vat. By a nice arrangement of fences, each sheep was forced to enter the vat at one end, and work its way through the liquid to the other end, where it passed out. This bathing process is required to be done twice a year as a preventive and cure for a skin disease called "scab."

The Dairy.

European Varieties of Cheese Made in America.

The manufacture of Swiss and Limburger eheese is now quite extensively oarried on in this country, and it is said to be of excellent quality—quite eqnal to any that is imported. The Limburger variety, when in its prime condition, according to the German taste, requires to go into consumption at once, as it is liable to deteriorate if kept long after it is fnlly ripe. On this account there is considerable risk in its importation; and, besides, the cost is more than for the eheese made in America. Prohably the largest quantity of Limhurger made in one locslity is in Northern New York—Jefferson county taking the lead. In previons numbers of the *Rural* wo gave a pretty full account of the Limburger factories of Jefferson county, some of which are very elahorate and expensive structures. They are modeled after Europesn plans, though of course much lsrger than the German establishments. There is quite a numher of factories manufacturing Swiss cheese in New York, and a good article is produced. We do not know to what extent Limburger and Swiss cheese is manufactured at the West, but a considerable quantity is msde in Wisconsin. In Greene county alone more than hslf a million pounds were produced during the year 1873—the milk of 1,880 cows heing nsed for the purpose. For the present year it is estimated that the milk of 2,310 cows will be employed in making Limhurger cheese in the county of Greene. A number of factories in the vicinity of Oshkosh, Wis., are engaged also in the manufacture of Limhurger and Swiss cheese. These varieties of cheese eommand a larger price than the ordinary style of American cheese, they being mostly retailed at from 23 cents to 25 cents per pound.

Where experienced and skilled German manufacturers are employed to take charge of manufactories, the net returns to dsirymen delivering milk at these factories are much better than st the ordinary factories for making American cheese. There are several other European varieties of cheese that could he made in this country with profit, and we hope to see some of our dairymen engage in the production. There is a demand for Edam cheese in our lsrge cities, especially in New York, and a considerable quantity of this variety, we understand, is imported from abroad. We ought to be able to make all the cheese needed in the country and we ought to make it of as fine flavor and qnality as thst which is produced abroad. It would be well if some of our factories should turn their attention to some of the varieties of European cheese for which there is a demand in this country, hut which have not heretofore been prodnced by us.—*Rural New Yorker.*

The Prices Obtained for Young Bulls.

The following extract from a correspondence in the *Country Gentleman* was written by one of the most successful breeders of Short-horn cattle in the country:

The sales of a few weeks past have demonstrated that the Short-horn interest is covering a large amount of territory, and that it is losing nothing in the vicinity where the sales are held, as at each one a new set of local bidders are seen and many purchases are made by them. The great difference in the price of bulls and cows is commented on by some as a bad omen—as ruinous to breeders, with the remark that there are too many of them, and that they should be castrated, etc. I think quite the reverse, because where the animal is well enough bred with form, color, etc., sufficient to make him good enongh to go to the head of a Short-horn herd, it is the exception for him to bring prices that cannot be afforded by his breeder. This is as it should be, for unless he is a combination of all that is good he should take his rank among the high grades and common cows of the farm.

Almost any breeder can take a desirable cow or heifer with advantage into his herd at a reasonable price—hence they are customers at the sales, with ideas educated up to better prices than novices. Not so with hulls; they (the breeders) are sellers, not buyers. The young and cheaper class of bulls then find customers among the farmers, who can always use them to good advantage on their native and grade cows, and not being educated as to the real advantage in their use, do not pay at first what should be paid for such stock, but having once used a thoronghbred bnll they are sure to be better customers forever afterwards.

Even through Central Illinois there is scarcely one good Short-horn bull to a township, while there should be one within a short distance of every farmer's cows, if not on every farm, and this will answer the question of the number being too large. Who can say then that it is not better to put the young bulls up at public sale and sell them, though they do not hring so large prices at present as we would like—to have them at work as missionaries, bringing money into the farmers' pockets who use them, and thereby making them better customers to all fnture sales, than to have them bottled up in our barns waiting better prices.

Harris Lewis says he has found as high as 30 per oent. of cream in the last pint of milk drawn from a cow, when the first pint from the same cow had only 9⅛ per cent.

Grass and Hay for Milch Cows.

A correspondent of the Utica *Herald* holds the following gronnd in relstion to the feeding of milch cows on grass snd hay. The important point to Western dsirymen is one made in relation to cutting hay when young:

I find that grass alone, whether green or cnred, answers all purposes the year round (by grass, I inelude clover), with this one important qnslification—that it be cut green and well cured. This makes about half difference; that is, there is abont as much available substsnce in one pound of green feed dried, as in two pounds when ripe. I know instances where cows have been kept during the winter on 25 pounds of ripe hay per day. They were, of course, not in good condition. But, instead, double the available nutritive substance, which an eqnal weight (25 pounds) of green-dried hsy would have furnished, and you would have had double the nutritive benefit, which would have brought your cows to a high condition. Or supply the deficiency hy grain, sufficient to reach this condition, and the amount would have been considerably more than is usually fed with old ripe hay, showing thus that good green hay takes the precedence over the usual ripe hay and grain, heing besides much chesper.

Grsss, green or dried, if of a good quality, and fed all that is wanted, will produce a maximum quantity of milk, the superior quality of the milk more thsn making up what may be lacking in quantity, so that so far ss milk alone is concerned, grass (green or dried) stands first as a feed, surpassing all other feeds, whether single or combined. And it will sustain the animal while giving milk and while in calf, and fat her when free of the drain. Grsin donbtless would aid in the fattening process.

The Origin of Duchesses.—A writer in the *Mark Lane Express* gives the following history of the most valuable family of Short-horns. He says: "As the Duchess tribe is so famous, and sells at such enormous prices, I msy here give a few particulsrs concerning it. The first of the family we hear of, was bought by Charles Colling from the Duke of Northumberland's agent at Stanwix, a massive, short legged cow, of a yellowish-red color, with the breast near the gronnd. She hsd a wide bsck and was a great grower. Colling called her "Duchess," and had often described her to Bates as a very superior animal, particularly in her handling, and told him he considered her the hest cow he had ever seen, but that he could never breed so good a cow from her. She wss descended from the old stock of Sir Henry Smithson, of Stanwix. Thomas Bates bought from Colling one ot the descendants of this cow in 1840, for 100 guineas, being the same I mentioned as being such a fine dairy animal, and he bought another at Colling's sale in 1810. For the latter he paid 183 guineas, and styled her "Duchess First," and from her all the present family descended. Bates said he was induced to select this trihe from having found that they are great growers and quick feeders, with fine qnslity of meat, consrming little food in proportion to their growth, and also finding that they are great milkers."

Hard on the Cities.—One of onr cotemporaries, in commenting on the high prices sometimes paid for butter in the cities, is disposed to consider them as no indication of the value of the butter, hecause the people in the cities see so little really prime butter, that they are not qualified to judge on so fine a point. Perhsps there may be some truth in this, but we are inclined to regard the city people as pretty good judges on this point. There is no class of people in the world so particular as to what they eat as the residents of cities, and no mode of life so well calculated to create and nourish fine distinctions in the matter of flavor. Let anyone take a plate and make the rounds of the city markets, and he will travel far, as a general rule, before he finds butter as rank as that which can be found at almost every country store; and the commodity which the merchant keeps for sale is a pretty fair indication, the world over, of what his customers demand. So far from the city people lacking in a discriminating taste in the matter of butter, we have sometimes thought them over nice in this psrticular, displaying altogether too much taste. Let no one delude himself with the idea that he can make an inferior article of butter and succeed in working it off on city people under the impression that it is a choice article.—*National Live Stock Reporter.*

Causes of Odor.—Improper substances in the vicinity of milk and butter will taint them. A piece of veal on the cellar floor; a pond of impure, stagnant water; a kerosene lamp used in the milk room; a piece of soap left on a pan cover; coal oil in a country store; decaying vegetables; putrid animal matter in a cow pasture; cows drinking filthy water; partially decomposed milk, cream or cheose adhering to the dairy vessels, on the floor or shelving.

Garget Remedy.—Dr. Bronson of Michigan writes the New York Tribune: My remedy for garget is one tablespoonful of saltpeter cvery other day for three days, then skip a few days, and feed again if a cure is not effected. I think three doses will heal the most obstinate case. By-the-way, any person who keeps cows, should feed to each the ahove dose of saltpeter once in two weeks through the milking season, and there will be no complaint of garget.

Good dairymen are the men who have the good cows, because they are the ones who take good winter care of their herds.

Poultry Yard.

Will Greased Eggs Hatch?

It has long heen a settled fact that eggs for tshle use may he preserved for a considerable time hy rubbing them over with lard or butter; thus filling the pores of the shell and preventing evaporation and staleness of the contents. These eggs, however, were snpposed to he irremediably used up for hatching purposes. Indeed, this idea was so generally accepted that no one ever thought of questioning its correctness, and consequently no one attempted to get chickens out of greased eggs. But now all is chsnged, and we find that buttering eggs is not only no detriment, but a positive advantsge to eggs which have to be kept a week or ten days hefore they can he put under the hen.

Recently, a gentlemsn in Ireland reported to the *Fancier's Gazette* that some relatives of his had at one time au Ayleshury duck and drske which had been accidentslly poisoned. They had at the time, however, seven of their eggs which had been buttered for preservation for the table, and these, with muoh fear as to the resnlt, were placed under a hen, and produced six strong young ducklings, although the eggs were six weeks old at the time they were set. Since that time they and their neighbors have always set greased eggs, with the most gratifying results.

Although this statement was received with a howl of incredulity, it has sinoe been confirmed by the reported experiences of others. One gentleman ststes that he possessed a very choice strain of fowls; and, to prevent his neighbors from hatching the surplus eggs he sold, he carefully buttered them. Soon, however, he found that his choice fowls were becoming quite common in the neighhorhood; and, to satisfy himself if the thing could be done, he set some huttered eggs himself, and found that they hatched as well as the others. The theory is that the nest and the feathers of the hen rub off the grease and free the pores of the shell, thus admitting the air, which is doubtless essential to the vitality of the egg.—*National Live Stock Journal.*

Best Age of Hens.—A pullet hatched early in the spring begins to lay at the spproach of winter, and pullets hstched lste in the summer begin to lay in the ensuing spring, and it is by saving a certain proportion of pullets from the early and late broods, that you make sure of winter eggs; a few early hatched chickens for catching the highest markets, and a numerous flock of chickens in the warm months, when rearing is less precarious. The hen continues in her prime for two, and at most three yoars—therefore save every year pullets equal to a third of your brood stock, selling off at a trifling price the same number of aged hens, or offering them up in a stewed dish or well-baked pie. However, I made no scruples about keeping a heavy, symmetrically-made, splendidly feathered "partlet" of four years, for the sake of her stock. Many farmers grumble about their poultry, from not paying attention to such a simple matter as looking over their brood stock once a year, drafting all the old dames (known hy the developed scales on their legs), and reserving from the market basket the most promising young pullets raised during the season.—*Exchange.*

A correspondent of the N. Y. *Tribune* is evidently not a believer in turkeys. In answer to the question, "Why were Job's turkeys poor?" he says: "Because he had no neighhors npon whose crops they conld get fat—and hereby hangs a tale; many a tale, in fact. For turkeys are like hees; you cannot keep them at home. Where grain is raised, turkeys are an intolerahle nuisance, and for every dollar they put into the pocket of a farmer's wife, they take five out of the farmer's or his neighbor's. Upon grass fields where grasshopers are plentiful, or upon tohacco fields where the frightful tohacco worm is abundant, turkeys may pay for their feed and depredations upon the grain fields at all seasons of the yoar; I do not believe that even at $1 a pound turkeys, as usnally raised, ever pay their cost.

Chicken Cholera.—This is a malady of which little is known. We have obtained all the information we could, respecting this disease, since it first prevailed at the West a few years sgo. There is a very malignant type which almost always proves fatal; and a milder form which appears in some localities, destroying not more than half or one-third ot the birds attacked. The hest medicine that has been reported is alnm-water made strong, and given for drink, mixed with their soft feed. Many of the medicines advertised for the cure of the disorder aro entirely worthless.—*Live Stock Journal.*

Success in the breeding of fine poultry depends upon the same goneral principles which give success in any other business in lifo. Money capital alone is no more sufficient here than in trading or manufacturing. Good judgment, energy and porseverance are some of the prime essentials, and timo and experience are necessary for the acquirement of a cultivated and enlightened judgment.

Buckwheat is muoh liked by poultry, is greedily devoured, and is more productive of eggs, early and in abundance, than any other grain.

Horticulture.

Accidental Naturalization of Plants.

It is well known that many of onr most pernicious weeds are foreign plants, thst have been accidentally introduced into this country, where they have become naturalized, and have spread in some cases far more rapidly than on their "nstive heath." M. Balansa relstes two striking csses of this kind in his aceount of New Caledonia, the island to which so msny of the French Communists have been transported. In the first instsnce, abont four years ago, a gendarme, who wss transferred to this island from Otaheite, brought with him a bolster filled with the feathery seeds of *Asclepias curassavica*. Having occasion to wssh the tick eover, he opened the bolster at the Pont des Francais, when some of the seeds were carried off by the wind, and the plant has since then increased to snch an extent as to seriously interfere with cultivation, its roots running undor ground to considerable distsnces, and sending up shoots in all directions, so that it is difficult to eradicate it. In the second case M. Balansa relates that, a few years ago, some hoxes arrived from Sydney containing various articles packed in Europesn hay. This was thrown out and left on the ground where the hoxes were unpacked. In the following yesr a new graminaceous plant was ohserved growing plentifully where the hay packing had been left. This proved to he common couch grass, (*Triticum repens*), and it has spread so rspidly that M. Balansa states it is already exterminsting the native grssses.

Melon Culture.—The hest soil, says *The Rural Messenger*, is that which admits of ready drainage. Watery as the fruit is, it does not require much rain to produce it. In fact, the vines flourish and bear even on a bsnk of sand. We would then select the lightest piece of ground available—gray and sandy—and put it in good order, using plenty of rotten msnure to each hill. Digging holes of sufficient size, and depositing the manure in them during the winter, is doubtless the method to be preferred; hut if this has not already been done, we must resort to some other plan. We would still make an excavation, and manure liberally, with a view of retaining moisture in time of drouth Mnch depends on giving the plants a vigorous start. Force their early growth with a free application of bone phosphate to the hill. Keep the ground clear of grass and well stirred until the vines hegin to cover it, but as the roots run to the full length of the vines, and grow as fast, the working should not he more than two or three inches deep. With this treatment, we believe there would be few failures in growing water-melons, and as they are a favorite with all classes, it is well worth the trouble, whether for market or private use.

Drying Figs.—Pick the figs when thoroughly ripe, dry them on racks, as yon would other fruit, in the sun, four or five days, or until the water they coutain is thoroughly evaporated. If there is any dew, cover them nights. Then place them in a vessel perforated with holes, like a colander, and dip them into boiling water for about one minute, after which again expose them to the sun until the surface water is evaporated; then lay them in wood, tin, earthen or other vessels, and press closely so as to exclnde the air and cover securely. In this way it is asserted figs have been preserved equal to the best imported. The scalding answers the double purpose of killing all insect eggs and softening tho skin of the fruit so that the sugar will come to the surface, as may he seen on imported figs.—*Moore's Rural New Yorker.*

Fumigation for Plants.—Mr. J. C. Niven, of the Hull Botanical Garden, recommends tobacco fumigation (in London *Garden*) for cleaning green flies from certain house plants infested by them. His plan is to lay the plant on its side in a wash tub, throw over it a damp towel, or hetter, "a bit of glazed calico lining," and then, through an opening at the bottom, have your husband, insert the end of a pipe, and through it let him blow tobacco smoke until the plant gets a good fumigation. The flies will be found at the hottom of the tub when the operation is finished. The plants should be perfectly dry when the oporation is performed, hut, if a towel is used, it should be freely washed and wrung out before using, and be without holes. The pipe-stem should reach to the bottom of the tub.

Causes of the Rotting of Fruit.—According to Decaisne, the rotting of fruit is prodnced hy two microscopic fungi, which develop in moist confined air; namely, *Mucor mucedo* and *Penicillium glaucum*, infinitely minute germs of which are continually floating in the atmosphere, and which attack more especially any injured or abraded portion of the snrface. If now, the fruit be wrapped up in cotton, or with soft tissue-paper, or, still better, with waxed paper, or tin foil, the introduction of these germs will be prevented, and the fruit oan be kept for a long time without any appreciable change.

Asparagus Culture in Germany.—It is asserted that noar Braunoschweig, Germany, 25,000 acres are cultivated in asparagus, most of which is canned. The variety cultivated is called "Rose Hollande." We have received and eaten samples of this German canned asparagus, and it is most excellent.

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

What They Say of Us.

That the Grange is the great absorbing theme among politicians and all others, as well, is becoming more and more apparent. We see evidences of this fact all around us. The consideration of the question appears to effect people in diverse ways. Some affect to be immensely pleased at our wondrous growth, and pat us on the back in a most patronizing way—see the *Bulletin*, *Chronicle*, etc. Others, again, appear to snap and snarl every time the idea of the Grange movement comes into their mind—see the *Commercial Herald*, *Post*, etc.

The *Bulletin* of Tuesday last devotes a column or so to a detail of the recent growth of the Order, and proceeds to analyze it, to learn what its portent may be—from a political stand-point. We quote from the article two paragraphs as follows:

In the country at large there are 20,000 Granges. It is estimated that they number at least one million of voters. We have here certainly an enormous power, especially when we consider the classes which are sure to unite with it. The Granges lead the attack in most of the States upon the monopolies. All other citizens of the same way of thinking join them. The Granges are the foes of high taxation. The owners of property everywhere in city and country strike hands with them. The Granges are opposed to corruption in all its forms. All those whom salary-grabs, moieties, rings and credit mobiliers have alarmed are likely to make common cause with them. The laboring men are also organizing in several of the States. Whenever they appear on the scene they fraternise with the Grangers. They want to save their little homesteads from confiscation for taxes. They also know that the less taxation the greater the general prosperity. It is not too much to say that we have here, beyond question, at this time the strongest and most compact political element in the country. A million voters (and that estimate is low), with so many and such powerful and extensive affiliations, are a power which cannot be coughed down or thrust aside, especially in view of the disorder which prevails in the ranks of the old parties. * * *

It is also to be noted in this connection that the purposes of the Grange movement are expanding with its growth. The Granges at first had no object but to eliminate unnecessary middlemen, and secure that influence for the farmer in the general management of the affairs of the country, which he considered had heretofore been denied to him. By the inexorable logic of facts they advanced from this stage to an opposition to monopolies, high taxation, and malfeasance in office. They are also gradually taking ground on the other great national questions of the day. The general tendency in the central States is to occupy a safe middle ground on the financial question. Of the soundness of the proposition, which is gaining popularity among them, there can be no question.

A Grange Disbanded.—The papers throughout the country, unfriendly to the Granges, are publishing, with an evident chuckle, the fact that "Good Hope Grange," McDonough county, Illinois, has disbanded; giving, as a reason therefor, a string of resolutions charging that the State and National organizations have become arbitrary and tyrannical; that they are collecting large sums of money from subordinate Granges; that the Order has degenerated into political partisanship, and that it has become burdensome and expensive to its members. The objections urged are quite amusing to those who have a knowledge of the workings and principles of the Order; and we opine there are but few members who are not fully satisfied from the very reading of the resolutions, that they betray a sore-head origin, and that the membership was mostly made up of disappointed politicians, who had hoped to secure through the organization some sort of individual benefit. Whether that be so or not, the Order can well spare a single, discontented, individual organization out of the 20,000 Granges which go to make up the present aggregate throughout the country. One twenty-thousandth part of the Order has gone back. Well, as we are now adding to our numbers from twelve to fifteen hundred Granges per month, we presume the loss of a single one in Illinois will not prove very disastrous, after all.

Brother or Sister, what have you done for the Order?

Growth of the Order Here and Elsewhere.

The first Grange instituted on the Pacific coast, by Bro. Baxter, our first organizing deputy, was established at Napa City on the 20th of March, 1873—just sixteen months ago. To-day the enumeration stands as follows:

California	220
Oregon	152
Washington Territory	35
Montana	18
Colorado	61
Idaho	2
Nevada	4
Total	492

One year ago there were but about 4,500 subordinate Granges in the entire Union, and only 12 State Granges. To-day there are not less than 20,000 subordinate Granges, with 35 State Granges.

A noble army is that which has been thus organized under the banners of the Patrons of Husbandry, and a vast army, too, thoroughly disciplined and drilled, not to kill and destroy, but to save and build up. The emblems of this great army are simply the pruning hook and other tools connected with the peaceful work of agriculture. Since the world began no movement has been initiated by man having so wide a scope for good, or so well designed to carry out the great work for which it was intended. Till now the farmer has toiled on in isolation and neglect. Ignorant or unmindful of his numbers and his power, he has suffered under the rule of a reckless minority, retaining for his labors only a bare support; while the surplus of his legitimate winnings has built cities for others, inaugurated railroads, whitened the ocean with commerce, and enriched every class in the community but his own. Two years ago the pretensions of the agricultural community to exercise an influential part in transacting their own legitimate business, and to take an active interest in the management of public affairs, was ridiculed and sneered at. To-day they hold within their grasp the destinies of more than half the States of the Union—and all this has been done through the influence of the Order of the Patrons of Husbandry.

The magnitude of this movement and the celerity with which it has been advanced to its present greatness, points clearly to the fact that its source and springs of power lie far too deep for casual examination—that its growth is not the passing frenzy of a moment, and that the day is past when there can be any doubt as to the permanence or power of the Order. The causes which have called it forth will as surely produce their desired effects as the melting snow on the mountain side will find its way to the valley below. Would it not be well if those who look upon this movement with scorn and contempt, or pronounce its leaders "a band of charlatans," should pause and consider against what they are precipitating themselves?

What Does All This Mean?

The Fourth was very generally celebrated by the Patrons of the Western States, and the assemblages in some instances reached many thousands in number. Grange picnics and celebrations are becoming more and more frequent, and are attended with constantly increasing numbers.

A few weeks since, while Hon. J. W. Childs was addressing an assemblage of six thousand farmers at Coldwater, a telegram was received from Marshall saying that C. L. Whitney, Esq., was addressing an equally large congregation of farmers at that place. Reports from the immense Grange picnic, recently held in St. Joseph county, Michigan, state that a procession of fourteen hundred teams was formed, and the crowd was estimated by thousands. The *Northern Grange* in alluding to the immensity and frequency of such gatherings among the farmers, very pertinently asks—"What does all this signify?" Does it mean that the farmers are supremely happy, and come together in vast multitudes simply to congratulate and felicitate each other on their good fortune? Would that this were the case; but we fear it is not so. Deep-seated causes underlie such demonstrations. They are not for mere show or pastime; they mean much which it would be well for the country to early comprehend. They contain no threats or hinster, but they mean that a giant has been awakened from a long sleep, and is about to take a position as a peer of the realm. In short, it all means simply that new light is dawning upon the seven hundred thousand hard-worked, poorly-paid, but thinking farming people of Michigan. That the voice of the agricultural people, which has hitherto been uttered only in single chorus from the isolation of the farm, and hence unheeded, shall, by reason of its combined volume, reach the ear of authority in the remotest corners of the land. May the ear of authority heed the voice of the people.

Keep Awake. — Patrons, attend all your party conventions. Keep bad men out of official positions, both in the conventions and on your party tickets. See that the right kind of men get the proper recognition. Reform within your own party lines. Keep the bad elements down.

The Grangers and the Fourth.

The Fourth seems to have been very generally observed by the Grangers throughout the State, by special celebrations, conducted under the auspices of the Order; or, by a public turnout of members of the Order in regalia, as a feature in citizens' celebrations. The crowded state of our columns for the last week or two has prevented us from giving such notices of these celebrations as we should have been pleased to have done; but we make room to-day for quite a lengthy account of the celebration at Petaluma, furnished by an esteemed correspondent. We have already given, through a correspondent, a lengthy reference to the gathering at Walnut creek. We should judge from accounts in our exchanges that many other gatherings, equally as well attended, and fully as interesting, were held at quite a number of other localities.

At Santa Rosa it was estimated that over 5,000 thronged the main thoroughfares. In the procession the firemen, all in new uniforms, led the van, having placed the Grangers and invited guests between their ranks, as a post of especial honor.

At Watsonville the brotherhood and sisterhood had a grand time. The celebration was the largest ever witnessed at that place. The procession was divided into three divisions, each headed by a band of music. The Watsonville and Pajaro Granges occupied prominent places in the procession.

At Sacramento the Granges celebrated on their own account, made a fine display, and enjoyed an excellent picnic. It is reported to have been a very pleasant affair.

At Los Angeles the city was full of people from the surrounding country, who had come in to witness the display. The Grangers in regalia acted a prominent part in the ceremonies, several hundreds being in the line of procession.

Abide by the Principles of the Order.

"Let the Patrons of Husbandry abide by all the great principles enunciated at St. Louis, and the Order will continue to grow until it spreads over the whole country and takes in every farmer. But let it once go into politics as an organization, and it will die like a tree poisoned at its roots. No secret association can control the political destinies of the Republic. The attempt to do it will wreck any secret Order. Recognizing this truth, the St. Louis platform says: 'We emphatically and sincerely assert the oft-repeated truth taught by our organic law, that the Grange, National, State or Subordinate, is not a political or party organization;' further, it declares that 'no Grange, if true to its obligation, can discuss political questions, nor call political Conventions, nor nominate candidates, nor even discuss their merits in its meetings.'"

Such is the sensible advice of a journal friendly to but not connected with the Order—the *N. C. Observer*. The Order cannot go into politics, as an organization, without involving itself in disaster, if not destruction. But all Patrons have important political duties to perform. It is the duty of every Patron to go first into the primary meeting of his own party and there use his best exertions to secure the nomination of honest and capable men. If he fails in that, it is his next duty to look around him, without regard to party, and select from any party men that are honest and capable and vote for them. If he cannot find such in nomination by any of the existing political organizations, then let him and his brother Patrons cast about and select from the people at large such as are fitted for the offices to be filled, and vote for them. Let Patrons persistently pursue this course, and we shall soon find all our offices filled with honest, capable and consistent men, and an end put to the flagrant acts of corruption and misrule, which are now bringing disgrace and ruin upon the country.

Secrecy.—Some people do not like secret societies. Some churches deem it impossible for men to be Masons, Odd Fellows and Christians. Yet we find some of the best and purest men in the land in these Orders. We hear from time to time charges of all kinds uttered against the secret societies. These charges are, from the nature of the organizations against which they are brought, very difficult to meet and refute. Yet we believe that in the main they are baseless. A great society can afford to keep on in the even tenor of its way, letting those who make guesses exercise their ingenuity. So long as its members are satisfied it is all well enough. Men will differ in their views on secret societies, and we presume to say it is all right enough to stay in them or stay outside of them.—*American Patron.*

Woodville Grange, Tulare Co.—We append hereto the names of the officers of this Grange, which have not yet appeared in the Rural Press. J. A. Slover, M.; Thomas Lewis, O.; J. H. Grimsley, L.; T. P. Fuqua, S.; W. Spence, A. S.; R. McKee, C.; T. J. Bay, T.; John Stewart, Sec'y; Frederick Hensley, G. K.; Mrs. J. M. Slover, Ceres; Mrs. Virginia Ramey, Pomona; Miss Jennie Roach, Flora. This Grange was organized May 29th, by Deputy H. B. Jolley. It conferred its first degree on the 4th inst., and is progressing slowly but surely.

Death of Benjamin Cahoon.

Probably the Order in this State has not been called upon to part with a more substantial and honored member, than has been missed in the person of Benjamin Cahoon, Master of Santa Cruz Grange, who died on the 29th ultimo.

The deceased had reached a very advanced age. Coming to this State in the prime of life, he has here completed his years. As a public and business man in his native State (New York) he occupied prominent and honorable positions, and it was in keeping with his spirit of energy and enterprise that he was found, early in the excitement of 1849, on his way to these shores. Mr. Cahoon was one of the passengers on the "Panama," which left New York in February of that year, and was chosen President of the company, which, in accordance with the times, was formed to try the fortunes of its members in this distant land of gold. He lived to see and join in the celebration of the 25th anniversary of their arrival at this city—June 3d, 1874—"a quarter of a century in which his active and useful life has been cast with the mighty upspringing of this State, and rapid growth in settlements, towns and cities, and wonderful progress unto its present attainments."

To have one's life connected with such a history from the beginning; to have been continually a participator in such a progressive change and upbuilding of a great State, in all that goes to make us what we are (a Christian and an educated people), seems to be the rarest privilege and grandest opportunity of mortal life.

The deceased was buried in the Odd Fellows' cemetery, by the Granger Ritual, at his own request. Bro. D. C. Wardwell, present Master of the Grange, officiated, assisted by Chaplain Kooser. The Grange of which he was Master attended his funeral in a body, and after returning to their hall passed the following resolutions:

Whereas, It has pleased Almighty God to remove from our midst by death our late brother, Benjamin Cahoon, Past Master of Santa Cruz Grange, No. 68, from his labors in this field to a higher and better sphere, therefore be it

Resolved, That in all submissiveness we humbly bow to the Divine Will, believing "He doeth all things well."

Resolved, That in the death of our late Worthy Master and charter member of this Grange of Patrons of Husbandry, we have lost a zealous and active member, and the community a good and true citizen.

Resolved, That in token of respect to his memory the charter of this Grange be draped in mourning, and the brethren wear the usual badge for thirty days.

Resolved, That a copy of these resolutions be spread in full upon the minutes, and transmitted to his relatives, attested by the Secretary over the seal of the Grange.

New Granges.

Sycamore Grange was organized by General Deputy J. W. A. Wright, at Sycamore, Fresno Co., June 6th, with fifteen charter members. A. C. Bradford, Master, Jas. A. Allen, Secretary. This Grange makes a small beginning in numbers, but it is thought there is material enough along that portion of the San Joaquin river to increase its membership to 30 or 40 within a few months. The organization of this Grange was furnished us in due season, but, by inadvertence, was overlooked at the time.

La Honda Grange, La Honda San Mateo county, was organized July 17th, by B. V. Weeks, Deputy, with 16 Charter members, and the following list of officers: Maurice Woodhams, M.; Chas. C. Rogers, O.; Chas. B. Sears, L.; Henry Webber, S.; Henry Steinberg, A.S.; Richard T. Ray, C.; Joseph W. Hoskins, T.; Wm. A. Saunders, Sec'y; Isaac M. Baker, G.K.; Martha Ray, Ceres; Emma L. Johns, Pomona; Delia C. Johns, Flora; Ettie E. Sears, L.A.S.

Farmers' Union, San José.—As an outgrowth of the Grange movement, a large number of the farmers of Santa Clara county have formed themselves into a joint stock company to be known as "The Farmers' Union," for mercantile purposes, and purchased the well known and large establishment of Pfeister & Co. of San José, as a basis of operations. The Union has been organized with the Hon. William Erkson, of Alviso, as President, and H. E. Hills, an old and experienced tradesman, as Business Manager. The Board of Directors consists of the following well known and substantial farmers: Wm. Erkson, David Campbell, L. F. Chipman, James Singleton, Horace Little, Thos. E. Snell, J. P. Dudley, C. T. Settle, and E. A. Braley. The Union is now fairly launched on the sea of trade, and the farmers generally will no doubt regard it as an enterprise especially their own. This may be regarded as one of the most important local co-operative enterprises, which have thus far grown out of the Grange movement in this State.

The Fourth in Sacramento.—A noticeable feature in the public procession of Sacramento was the members of Sacramento Grange, P. of H. The Grange division was led by a large wagon, displaying farmers' implements and products, followed by a threshing machine, a reaper, a seed drill and a new horse rake. The officers and members were ont in full regalia. The ladies also appeared in full force. The whole formed a most important and prominent feature in the procession, and attracted much attention.

Notes on Inyo and Kern Counties.

EDITORS PRESS:—Being really pressed for time, in my recent trip to Kern and Inyo to organize, and to Sonoma county to address Petaluma Grange on the 4th, by their very kind invitation, I have not yet given you as many items as I wished in my former note, announcing the seven new Granges.

In all of Inyo county, which has been known heretofore through its Cerro Gordo, Excelsior, Panamint and other mines, as a rich mining district, there are now three or four hundred farmers who must rely entirely on irrigation for their farms, gardens and trees. But by this means they are succeeding admirably, and to a stranger who first sees their coarse, sandy and intensely arid looking soil, their success seems truly wonderful. Nowhere in our State does one see more forcibly illustrated all around him the truth so well expressed by some one, in the words, "water is the wealth of California"—without it, how could we develop our vast mineral and agricultural resources? Owens' valley and Round valley, from 4,000 to 4,500 feet above the sea, extending 100 or 120 miles northwest and southeast, and from five to 25 miles wide, are almost a rainless region. While the coast had about 24 inches of rain the past year, and San Joaquin valley about 13 inches, the barrier of the Sierras from 13,000 to 15,000 feet high, west of Owens' valley, so takes the moisture, by natural laws, from the air and clouds passing over them, that this valley, 4,000 feet above the sea, has annually less than three inches of rain. Nearly all this came the first week in December last, in the form of snow, which was more than two feet deep. Besides that, for a year they have had but a few very light showers.

Independence, a pretty town, of several hundred inhabitants, lies just under the three peaks of Mt. Whitney, the highest of which towers 11,000 feet above the town, making it, as you know, the highest mountain in North America, except Mt. St. Elias. It has a handsome courthouse, which is really a credit to the county. It is quite a common sight to see a rain or snow storm raging high up on Mt. Whitney, while all is calm and sunshine in the valley below. This occurred while I was there, June 21st, and was, indeed, a grand sight.

Consequently, Whitney and adjoining mountains are covered far down their sides with deep masses of snow.

At Independence, you see it all through midsummer lying low down and only eight or nine miles distant. It is easy to go to the snow and back in a day, and bring a supply of it to use as ice. This is frequently done. But the many unfailing streams of water, clear as crystal, which flow from all points of these mountains into Owens' river, are so cold that when the water is taken up at night and placed in porous earthen jars, no ice is needed. These streams are well utilized to irrigate and cultivate the farms, gardens and nurseries. It is the easiest region to irrigate I have seen outside of the Kern river country. It is astonishing what a change is made by plowing and wetting the soil.

Land, which on the surface looks as dry and parched as the Sahara, has a good subsoil, that produces barley, wheat and potatoes well, but does not make such good corn. Much soil near the river is full of alkali and is very wet, but most of it is excellent pasture land and may eventually be improved for cultivation. The farmers have a good market from mines and trade, getting from three to five cents per pound from barley, wheat and potatoes. Two mills in the valley convert their wheat into flour. A narrow gauge road is being talked of to extend from Los Angeles, and perhaps connect with the Central Pacific about 200 miles north of them.

They have six good farming centers, which from south to north are Lone Pine, Independence, Fish Spring, Big Pine, Bishop Creek and Round Valley.

Bishop Creek is the largest and most flourishing community of farmers. The Master of Bishop Creek Grange, T. J. Furbee, has been appointed Deputy to organize Granges in Inyo and Mono counties. The farming and mining prospects of all this region are decidedly promising. I found the same to be true of the Tehaichipa region, which is in Kern Co., some 200 miles to the S.W. of Independence. But in Tehaichipa and adjoining valleys they farm as yet without irrigation. They have excellent crops this year and a cool, delightful and healthy climate, being about 4,000 feet above the sea. Some good land, well furnished with wood, can still be found there subject to homestead and pre-emption.

But before taking leave of Owens' valley, allow a few words about Owens' lake. It is a very curious sheet of intensely salt water at the south end of Owens' valley, some 26 miles long and nearly as broad in its widest part.

As the Dead Sea has in its waters no living forms, and as Salt lake has none but a small worm, so the waters of Owen's lake have in them no fish or other living form unless it be a small worm. Still, gulls and some other water fowl frequent its waters. Its characteristic feature in natural history is the presence of myriads of a small species of diver or grebe, an awkward water bird like the common mud hen, which can neither fly nor walk well. The same birds are found in San Francisco bay. Those in question probably lay their eggs and breed in floating as well as stationary nests, among the adjoining tules of Owens' river. These birds float on the lake in vast numbers, and there seems to be no end to them except when heavy storms sweep over the lake and lash its waters into angry waves.

Then immense numbers, perhaps the old ones and others weakened by insufficient food, are destroyed and washed ashore. This happened some two months since, and now tens of thousands of their bodies line the shores in a wide and almost unbroken streak. With their white breasts turned toward the sun, they look like a line of breakers along the lake. Between them and the lake is another repulsive sight. Just on the water's edge is a black line composed of millions and millions of flies, sometimes a foot wide and several inches deep. Ever and anon the salt water washes partly over and sweeps large lumps of them into the lake. The passer-by can but wish all of them could have the same fate. There is nothing attractive about Owens' lake, except its wide expanse of water. Portions of its bed were sunk by the terrible earthquake in March, '72. A small but trim steamboat now makes regular trips from Passmore's on the north to the Cerro Gordo landing on the east, and Carthago on the south side of the lake. In its trip it now passes over the site of a spring, where the stage horses used to be watered in passing. You see crevasses and sinks several feet deep at various points in the valley. Although light shocks are still frequent, the people feel secure from future casualties, because the adobe houses, which were made masses of ruins by the earthquake, are replaced by wooden buildings of the balloon style. They could be rolled over like a large dry-goods box, without breaking up. A rough, but altogether pleasant journey of two weeks, over 750 miles, crossing and re-crossing the Sierras five times, was necessary to plant the work of our Order in Owens', Tehaichipa, and their neighboring valleys. It was a great satisfaction, however, on reaching home July 1st to know so large a number of earnest friends of our cause are left in these distant regions of our State, although but little time was left to prepare to meet the Patrons of Petaluma on the Fourth. Many thanks for all the friendly acts experienced on this memorable trip. May our new members receive the full benefits of the Order. Yours fraternally,

July 15th, 1874. J. W. A. WRIGHT.

Washington Monument Fund.

EDITORS PRESS:—Will you be so good as to publish the following preamble and resolutions of Azusa Grange, P. of H.? I heartily coincide with so noble an undertaking and hope the example set us will arouse a spirit of emulation in all the sister Granges of our State, which shall bring forth results that shall swell the heart of every Patron and patriot with satisfaction and joy. Let us put our hands to the plow, my brothers.

W. H. BAXTER, Sec'y State Grange.

WHEREAS, The lingering incompleteness of the "National Washington Monument," the corner stone of which was laid 4th July, 1850, is a standing reproach to the degenerate sons of so illustrious a sire—the Father of his Country. Therefore,

Resolved, That we, the members of Azusa Grange No. 94, of Los Angeles county, California, agree to make a fund by annual contributions for two years of 50 cents for each member of this Grange, to be called the "National Washington Monument Fund."

Resolved, That all subordinate Granges in the United States be invited to co-operate in this movement; in order to raise sufficient money to complete said monument by the 4th of July, 1876.

Adopted by Azusa Grange July 3d, 1874.

WINDSOR GRANGE. — At a meeting of the Windsor Grange, held June 20th, the following resolutions were adopted, a copy of which was forwarded you for publication in the PRESS, June 23d, which has not as yet appeared in your paper, therefore I send you another copy for publication:

If he who by labor causes two blades of grass to grow where but one grew before, is a benefactor of his race, then he who turns any of the productions of that class of labor against itself should be considered an enemy of his kind. And,

WHEREAS, The Patrons of Husbandry are an organization of that class of laborers; and,

WHEREAS, manufacturers and venders of ardent spirits, under special privileges and licenses, are destroying the fruits of our lands and turning the same against us in the form of spirituous compounds, thereby debasing our sons, demoralizing our daughters, destroying the peace of our homes and leeching an army of drones, criminals and prostitutes upon the industries of the toiling millions; and,

WHEREAS, There is not an inspiration that nerves the hand but must pay tribute to this Moloch, which claims its 30,000 victims in these United States annually; therefore be it

Resolved, That we as Patrons and producers use all legitimate means to free ourselves from this moral, social and financial blight. And further, be it

Resolved, That we as an integral part of the great industrial hive, request our brothers to do the same.

Resolved, That a copy of these resolutions be sent to the RURAL PRESS for publication.

J. H. MCCLELLAND, Sec'y.

Windsor, July 20th, 1874.

EVERY PATRON HAS A DUTY TO PERFORM.—No one individual member of our Order is free from all obligations of effort. We all have something to do — some duty to perform — brother or sister. If you can do no greater work you can see to it that every man and woman in your Grange is indebted to you for some good word, or friendly gift. Have you made your neighbors glad to say they know you, and regard you as a good friend whom they love to meet? If not, you have not done your full duty. A Patron makes others happy —and makes himself the happiest of all. Like a good soldier, he faces duty, and is cheerful.

The Fourth at Petaluma.

EDITORS PRESS:—Perhaps no more enjoyable celebration of our truly national anniversary was participated in by the Patrons of our State than at Petaluma, under the auspices of Grange No. 23, L. W. Walker as Worthy Master, assisted by a membership of more than a hundred earnest workers in our Order.

No allusion to this having yet appeared in the columns of the RURAL, perhaps a brief account of it will not be unacceptable to your readers.

At the appointed hour for the festivities to commence, a large number of Patrons, including many members of neighboring Granges in Sonoma county, gathered in their large hall.

After appropriate introductory exercises, the Declaration of Independence was impressively read by brother W. W. Chapman, marshal of the day.

The oration of the occasion was postponed until the afternoon, on account of the missing of a train on the Visalia railroad by the undersigned, who by the very kind and highly appreciated invitation of the Grange, had promised to address them.

Then a most sumptuous dinner was served in the Grange hall and enjoyed with commendable zest, not only by Patrons, but many outside friends, with whom it is always a pleasure for Grangers to share such cordial and friendly festivities; for the whole spirit of our Order teaches us to value and desire the most hearty sympathy and co-operation of our friends outside, as well as of the members inside the gates.

At last, by traveling all night on a freight train, by taking the 9:30 boat from the city to San Rafael, and a rapid buggy drive of 22 miles, I had the pleasure, though travel-worn and weary, to share with them in the closing part of their exercises.

Immediately on my arrival, a procession of Patrons without regalia, but each wearing a badge marked with the letters P. of H., was formed and marched to the theater, where we found a large audience gathering. The Star Spangled Banner was well sung by a choir formed for the occasion. Then followed the address, and the exercises closed with a Grange song.

No one enjoyed the day more than the writer. Every evidence that could be desired was shown that our large audience was in hearty accord with the ideas of reform, harmony and hearty co-operation throughout our entire country, and the desire of all good Patrons and their friends to return as nearly as we can "by our united efforts to the justice, wisdom, fraternity and political purity of our forefathers," ere the dawn of our centennial.

For such was the theme of our address.

After these public exercises, we returned to the hall and enjoyed an hour of fraternal conference over the work and business plans of our Order.

Then came a time for *rest*, and you may be sure it was highly relished, indeed could not have been more enjoyed than it was under the hospitable roof, and in the pleasant family circle of Bro. Walker.

He has a large and excellent dairy and grain ranch six miles from Petaluma on the edge of Marin county, in a really picturesque little valley under the shadow of high and well wooded mountains. Such valleys and mountains abound in Sonoma and adjoining counties. Indeed, it has been my privilege to see no more attractive portion of our State, filled as it is with well improved homes and farms. His is the first regular dairy ranch I have had an opportunity to visit. It was a decided curiosity to a farmer in San Joaquin valley, where we rarely milk more than two or three cows, to see 1,000 pans or more of sweet milk, a store room well filled with casks of 260 pounds of butter each, and hugh troughs of sour milk and butter milk almost large enough to swim in, and numbers of fine hogs fattened on the latter. He milks from 100 to 150 cows, and yet considers this quite a moderate dairy business.

Indeed, in the midst of the profusion and comfort seen there, one is almost tempted to add a verse or two to the song, "I want to be a Granger," etc., beginning somewhat in this way:

I want to be a dairy man
And let my farm to Swiss,
Where a bath in a trough of buttermilk
Is a treat you needn't miss.

But poetry not being my forte, I'll turn this over to others to finish

May our Petaluma friends enjoy many pleasant returns of the Fourth in their handsome and thriving little city. Yours, fraternally,

J. W. A. WRIGHT.

July 15th, 1874.

GRANGERS' BLACK BOARD.—The Patrons in some portions of New York have adopted the plan of keeping a black board always in readiness at their meetings, on which are entered by the members, as they come in, stock and other property, for sale or exchange, stock strayed or stolen, and such other information as they desire to bring before members. This is said to work admirably, and many sales and other transactions grow out of this mode of advertising. As meetings are usually held in school houses, it is easy to make the black board available.

RESIGNED.—J. H. Pickens has resigned his position as Secretary of Borden Grange, as he must be absent for some time; and John Fontaine has been elected in his place.

Card.

EDITORS PRESS:—In its answer to my article on "Shipping the Grain," which you kindly republished last week, the *Post* makes an assertion or two likely to mislead, which, with your permission, I will answer briefly.

1st. It speaks of part of the article as "an argument that high freights are to the advantage of farmers." This is a mistake. The argument is, that it is better to pay $20 and $21 per ton than the $25 or $28 paid in 1872.

Of course, the less ocean freights are, the better for farmers always, because we get better prices. We would rather pay $12 or $15 per ton, if this would properly pay ship owners, and not drive vessels from our harbor.

But they contend this would not pay. So we are willing to pay even as high as $20 and $21 for ships, rather than not to get enough tonnage, or to pay the exorbitant rates we have had to pay heretofore.

2d. It speaks of me as "formerly an agent for grain buyers, latterly a lecturer for the Graugers." Now there is no objection in the world to anyone being agent for any good firm, if parties so choose. But the statement is likely to produce a wrong impression. Once only, for a few months, in 1872, while attending to my farm, I agreed as an act of friendship for one of the best firms in San Francisco that had acted very generously towards me, and whose friendship I still highly appreciate, to become their agent at Turlock, where I lived, to ship grain consigned to them for advances in our neighborhood. I also bought and shipped for them a small amount of wheat. This is my only experience in that business, and I must say that the insight naturally given by turning attention for a short time to the handling of our grain, convinced me more than ever that the interest of agriculture in our State demanded reform in furnishing ships and other transportation, sacks, storage and money to move our crops. This our Grange movement is laboring to do, by all just and fair means and by agents of their own choosing.

J. W. A. WRIGHT.

July 15th, 1874.

VINELAND GRANGE, LOS ANGELES CO.—Royal L. Freeman is Secretary of this Grange, instead of L. S. Robinson, as published in our last Directory. Bro. Robinson is Steward.

WILD COFFEE.—The discovery of wild coffee in various parts of the State has created great interest on the subject, and the adaptability of the soil and climate of California to the growth of the genuine article. In Monterey county Mr. Waters is experimenting on its growth, at his farm, in Carmello valley. His plants this year are not looking so well as they have done, owing to their exposure to the sea breeze; but this fact does not shake his conviction that under more favorable conditions the coffee tree can be made to flourish and yield a handsome crop. Mr. Davis Divine, of San Jose, who knows something of coffee culture, writes to the Anburn *Herald* that he believes the coffee tree will flourish in Placer, El Dorado and other counties on the foot-hills of the Sierra Nevadas, after you rise 1,500 feet above the sea level, and from that to 4,500 feet. Wherever you find the wild coffee, there you may be assured the tree will flourish finely.

SHOULD WIPE HIS SPECTACLES.—The Marysville *Appeal* says: The traveling agent of the *California Granger* writes from Marysville that the country between this city and Colusa is a vast waste, having been inundated last winter. We suppose the writer refers to the tules. With this exception, from one side of Sutter county to the other is but one continuous expanse of grain fields, orchards, and growing vegetables, the land being valued at from $25 to $80 per acre.

J. E. CLARK, whose farm and vineyard is located near the Half-Way House, on the Sonora road, is building a commodious wine cellar, 40x80 feet.

THE *Union* is responsible for the statement that the Sacramentans are now obliged to carry six-shooters to protect themselves from the mosquitoes.

THE Marysville *Appeal* suggests a State fruit convention, to be held in San Francisco, to adopt a system for the better distribution of our fruit.

THE haying harvest has already been commenced in Sierra valley. Good judges estimate the hay crop of the valley at 25,000 tons.

JAKE WHITE, of the Virginia and Gold Hill omnibus line, has eleven horses laid up with the new epizootic.

A LARGE number of cattle have been driven into the mountains of Amador county, during the past week, for summer pasturage.

THE Soquel Sugar Beet company's works are completed, and will be ready to start operations as soon as the beets are ripe.

COLONEL D. B. Wilson is raising 4,000 grape vines on Wilmington plains, without irrigation.

NEVADA COUNTY will have the largest fruit crop ever produced this season.

HAY is worth $27.50 per ton in Nevada City.



Like Me.

What would happen, do you suppose,
If the mignonette should say to the rose:
"The pride of roses I hate to see,
Why don't you keep near the ground like me?"

What if the rose should say to the phlox:
"My form and color are orthodox—
To please your Maker you've got to be,
Precisely in all respects like me."

What if a grape should say to a pear:
"Why are you flaunting about up there?
Beware of swinging alone and free;
You ought to cling to a trellis like me."

What if a river should say to a rill:
"If you weren't too lazy you'd turn a mill,
Study my method, and try to be
A rushing, roaring river like me."

What if a swan should say to a crow:
"You belong to a race of so and so,
It's a deadly sin for you to be free;
Your only hope is in serving me."

What if a goose should teach a wren!
Or an eagle try to follow a hen!
What if the monkeys should all agree,
That there ought to be uniformity!

What if a man should say to another:
"Differ with me and you're not my brother;
I have the truth as the oracles tell;
Go with me, or you'll go to hell!"

—*Scribner's Monthly.*

Broken Promises.—Reader, never break your promises! And to this end, never make a promise that you are not sure you can fulfil. You may think it a trifling matter to make an appointment with a friend or agree to do a certain thing, and then fail to "come to time;" but it is assuredly not a small affair. If you get in the habit of neglecting to make good your promises, how long, do you think, will your friends and acquaintances retain confidence in you? The nearest and dearest of them will in time learn to doubt you, and will put but little faith in your words. And there is a way of half meeting one's obligations, which might be called "bending" a promise, which is also a very bad practice, and should be carefully avoided. For instance, you agree to meet a person at a certain time; but, instead of being punctual, you "put in an appearance" several minutes, perhaps an hour, after time; or you promise to do something for a friend, and only partially perform your duty. You may not have exactly broken your promise, but you have certainly bent it, which is almost, if not quite, as bad. Keep your promises to the letter, be prompt and exact, and it will save you much trouble and care through life, and win for you the respect and trust of your friends.

Wasted Power.—In every family there is power to let. In the development and use of this power lies the true secret of success. Parents are apt to think that their cares will cease when the little ones grow up, but every year enlarges the responsibility they have assumed. The physical needs of the children demand time and money, but when their mental powers awake and expand, the real care of parents commences. And just at this point many parents shrink from their plain duty, and place their highest privileges in the hands of strangers. Is it right to believe that a mother's whole duty lies in the adornment of her daughter's person, or that a father has performed his when he has paid his son's bills and notices his physical growth? It is so easy to select a school for the child, let others teach it, and leave the molding of its character to chance. But it is a hard, unceasing care to watch the opening mind, read the thoughts, and study the best interest of the little form that holds an immortal soul.

Work and Save Yourselves.—What a glorious thing it is for the human mind to have occupation. Those who work hard seldom yield to fancied or real sorrow. When grief sits down, folds its hands and mournfully feeds upon its own tears, there is danger of giving up in despair. When troubles flow upon you dark and heavy, toil not against the torment; rather seek by work, hard work, to divert the dark waters that threaten to overwhelm you into the channels, which the duties of life always present. Before you dream of it, those muddy waters will fertilize the present and give birth to fresh flowers in the near future. Do not give way to despondency. Work on the farm; work in the Grange and out of the Grange, and before you are aware of it, you will be on firm and soldid ground.—*Farmer's Vindicator.*

A Difference.—An hour of vice is as long as an hour of virtue, but the difference which follows upon good actions is indefinite from that of ill ones. The good, though it diminishes our time here, yet lays up a pleasure for eternity, and will recompense what it taketh away with a plentiful return at last. When we trade with virtue, we do not buy pleasure with the expense of time, so that it is not so much a consuming of time as an exchange.

My Friends, the Winnebago's—No. 1.

[Written for the Rural Press by H. B.]

As I Saw them at Pine River.

In our steamboat voyage from Buffalo to Milwaukee we stopped, for the purpose of taking in a supply of wood, at the Pine River landing on the shore of Lake Michigan. As we were to remain here nearly two hours, we took our hats and went ashore; and a very pleasant stroll we had of it. The gilding of romance being about rubbed off the red and black races in America, it would be folly to attempt to show up the Indian in a more interesting light than his pale-faced brother, so we shall make no effort to throw an undue interest about the Indian; not even the old fellow, said to be a hundred and twelve years old, who was led down to the landing by a little girl, and was the first specimen we had seen of Western Indians.

On the dock were twenty or thirty men, about half of whom were Indians, busily engaged in unloading and piling wood. Several ox teams were bringing in their heavy loads of beech and maple. Nearly all the hands of the steamboat, with some outside assistants, were rushing back and forth with their hand trucks, crowding on board a sufficient supply of wood to take us to Milwaukee. We took on about sixty cords here. There was no confusion nor unnecessary noise, and even this busy scene was pleasant; but in our stroll along the lake shore, and up to the little settlement about half a mile from the lake, we beheld some scenes that were really delightful; and witnessed some interesting phases of Indian life.

About fifty rods from the landing a charming little bay was scalloped out of the lake shore, with curves of various expressions and great beauty. As we walked along the shore of this pleasant little retreat from the busy, watery world, we saw a number of Indian cabins stretched along the opposite side. These were formed of pieces of bark, and withered boughs, leaned against a ridge pole. A few Indians were lazily at work hanging up some ragged nets, as if for repairing; others were moodily sauntering along the sand, while others still were sleeping on the ground outside their cabins. A small stream entered this bay at its upper end, and, while we stood looking at the Indian cabins opposite us, a canoe was seen coming down this stream, rowed by a broad-shouldered white man, and freighted with a very pretty white girl, about sixteen years old. She was neatly and tastefully dressed, and wore as saucy a jockey as you would encounter in a Saturday night's promenade through Kearney street.

As they came sailing slowly down into the bay, the girl shading her face with her gay parasol, the skillful oarsman performing his task carefully, but easily, with an expression of respect and responsibility upon his face, with all the natural beauties surrounding—the broad, blue surface of Lake Michigan expanding below; the delightful bay, with the Indian cabins on one side, on the other the ox-teams coming slowly down through the beech woods, the sweet stream above, with its rude bridge—such a scene was presented to our view as we had supposed could exist only in the lively imagination of poets. Then, for "a concord of sweet sounds," there was the surging of the lake, the rippling of the waters of the bay, the sprightly current of the running stream above, with the singing of birds and chattering of squirrels; while for a harsher, but still an agreeable variety of tones, there came from below the noise of the loading and unloading of wood, the voices of the workmen, with the rattling of their trucks, while farther up in the woods was heard the voices of the teamsters, urging on their deliberate beasts.

The sight of the pretty maiden sailing down the bay awakened a desire among some of our party to enjoy a similar ride. We accordingly called to the Indians on the opposite side, requesting them to bring over a canoe and give us a ride; they heard our call at once, but, although they were idle and several canoes were hauled up on the sand, we were only answered by a suspicious shaking of the hand and a cunning grin. But as "money makes the mare go," we thought it would probably make the Indian come; we therefore took a strip of fractional currency between our finger and thumb, and waved it invitingly over our head. It operated like a charm upon the "untutored mind" of our red brothers, one of whom sprung into his canoe, shoved it from the shore, and sculled it rapidly over to the spot where we were standing.

Those who were anxious to have a ride in a real Indian canoe got into the boat with him, and ordered him to "row us over the waters blue." Our vessel was loaded to its utmost capacity, its sides sinking to within a few inches of the water. There were some ladies in our party, who had been impatient to enjoy the romance of the ride, but when the boat commenced rocking in the deep water, as though it would a little rather go down than not, our fair companions lost sight of the romance of the affair, and began a pettish complaining, which was rapidly expanding into a shrill scream as we reached the shore. Our red-skinned boatman was greatly amused at this; and his face expressed as much delight as the stoical pride of his race would allow. We finally unloaded our precious cargo, and took a half-hour's stroll among the cabins.

In the open fronts of some of these cabins squaws were sitting, working silently, ornamenting baskets, mats and smaller trinkets, with beads and porcupine quills. They manifested a sulky unwillingness to answer any of our questions, pretending to not understand us. There was a dull silence prevailing in the village, that betokened suspicions fear and unhappiness; the few words passing among themselves being uttered in whispers, in their own language. On every hand were seen traces of the characteristics that are causing this miserable race to shrink like a vapor before the warm light of civilization. The butt end of a log, about three feet high, stood upright near one of the wigwams, out of the end of which a hole had been dug, capable of holding three or four quarts. This was their mill; to which the squaws brought their grists of a few handsful of corn, and pounded it with a wooden pestle. Near another wigwam an iron kettle hung over a dull fire. In this kettle a mess composed of this crushed corn and pieces of fresh fish was stewing.

A youth coming along with bow and arrows, one of our party put a shining two-cent piece in a split stick, and set it up for him to shoot at. After several trials the prize was won; when a middle-aged Indian came out of a cabin, carrying an old musket with a flint lock, and signified a desire to enter the lists. Another piece of coin was procured for a mark, and after careful preparation and deliberate aim, he fired, and missed. Overwhelmed with disappointment and mortification, he dropped his gun, rushed into the cabin, and throwing himself down, with his face upon the ground, he remained there during the remainder of our visit, and refused all comfort and consolation.

There was a marked difference between the men hanging about this little village, and those engaged with the white laborers moving wood; these were a stupid, indolent set of beings, while those appeared to be earnest and able workers, no way inferior to their white companions. The women, with their flabby cheeks, their small, twinkling eyes, their ill-shaped forms and naked feet, with toes turned in, were rather unprepossessing representatives of primitive beauty. Among the children crouched around was a good sprinkling of half-breeds. Upon the whole, we took our hasty leave quite reconciled to the strict requirements of civilization.

After our return voyage we still had a little time to spare, and wishing see to more of the stream that emptied into the bay, we turned our steps in that direction. The surroundings here were not picturesque; but of itself it was the most transparent body of water I ever beheld. It possessed another peculiarity, which was very remarkable. Anything seen at the bottom, such as logs, branches of trees, stones, etc., was completely covered with a kind of slime, that glistened like silver. We were informed that this stream was about eleven miles in length, its source being a small lake, into which the Pine river emptied. We had only time to go as far as the little settlement, about a quarter of a mile above the bay. It was composed of a few frame houses, all of them new, and was located on both banks of the stream.

We stopped for a few moments at the store, kept by a very pleasant and communicative old gentleman. He apologized for the lightness of his stock of goods, remarking that the weight of his trade was in the winter, when, by the close of navigation, intercourse with other places was cut off; and he had not yet made his fall purchases. During the winter, every one who can wield an ax can find abundance of work in the neighborhood, chopping wood for the next season's steamboat supplies. Prominent among these choppers are the squaws, who are obliged to resort to this to support their lazy husbands and needy children through the winter. He stated that at the commencement of the last chopping season, a brawny squaw came into his store to purchase an ax, and after examining his good supply, she declared that the heaviest of them, even the four-pounders, were too light. He had stored away, as an unsalable relic, a seven-pound ax, and in sport he brought this forward, when the squaw declared it to be just what she wanted, and purchased it at once.

This is all we have to say about the Indians as we saw them at this settlement. In our next we shall introduce the red men of Wisconsin.

The Young Wife.—The marriage of middle age is companionship, the second marriage of maturity, perhaps the reparation of a mistake, perhaps the pallid transcript of a hurried joy; but the marriage of the loving young is by the direct blessing of God, and the complete ideal of a lovely human life. Let those who have found that pearl hold it fast and keep it safe. Within the doors where love dwells no evil things should enter, and the loving bride who would be the happy wife must speedily guard against her own impatience and despair when the lover is emerging into the husband, the flatterer into the friend.

Value of Books.—The book, as a companion, is always at your service, always willing and pliable. You meet with men of service, good thinkers, good speakers, and you do not know how to draw them out; but a book is always open to your wish, and shuts up when you desire, something which your professor might not do. In saying these things for books, I do not forget that they are merely secondary. When the mind itself opens, they have to stand aside. Their greatest benefit is that by causing this same opening of the mind they save us from themselves.—*Emerson.*

The sunbeam is composed of millions of minute rays; so home-light must be constituted of little tendernesses, kindly looks, sweet laughter, loving words.

The Value of Time.

One fine morning, when Benjamin Franklin was busy preparing his newspaper for the press, a lounger stepped into the store and spent an hour looking over the books, etc. Finally taking one in his hand he asked the price.

"One dollar."

"One dollar!" said he. "Can't you take less than that?"

"No, indeed; that is the price."

Another hour nearly passed when the lounger said:

"Is Franklin at home?"

"Yes, he is in the printing office."

"I want to see him."

The boy immediately informed Franklin that there was a gentleman in the store waiting to see him.

Franklin was soon behind the counter, when the lounger, book in hand, addressed him thus;

"Franklin, what is the lowest you can take for this book?"

"One dollar and a quarter."

"One dollar and a quarter! Why, your young man asked only one dollar."

"True," said Franklin, "and I could better have afforded to take a dollar than to have been taken out of the office.

The lounger seemed surprised, and, wishing to end the parley of his own making, said:

"Come, Franklin, what is the lowest you can take for it?"

"One dollar and a half."

"A dollar and a half! Why you offered it yourself for a dollar and a quarter."

"Yes," said Franklin, "and I had better taken that than a dollar and a half now."

The lounger paid down the price and went about his business—if he had any—and Franklin returned to the printing office.

Milton's Daily Life.—Milton lived in a small house in London, or in the country, in Buckinghamshire. Of all consolations, work is the most fortifying and the most healthy, because it solaces a man, not by bringing him ease, but by requiring effort. Every morning he had a chapter of the Bible read to him in Hebrew, and remained for some time in silence grave, in order to meditate on what he had heard. He never went to a place of worship. Independent in religion as in all else, he was sufficient to himself. He studied till mid-day; then, after an hour's exercise, he played the bass viol. Then he resumed his studies till six, and in the evening enjoyed the society of his friends. When any one came to visit him, he was usually found in a room hung with old green hangings, seated in an arm-chair, and dressed quietly in black. He had been very beautiful in his youth, and his English cheeks, once delicate as a young girl's, retained their color almost to the end.

Few men have done such honor to their kind. Amidst so many trials (a scrivener caused him to lose $10,000; at the Restoration he was refused payment of $10,000 due him from the excise office; his house was burned in the great fire; when he died he only left $7,500, including the produce of his library), a pure and lofty joy, altogether worthy of him, had been granted to him; the poet, buried under the Puritan, had reappeared more sublime than ever, to give to Christianity a second Homer.—*Taine.*

In a moral point of view, the life of the agriculturist is the most pure and holy of any class of men; pure, because it is the most healthful and vice can hardly find time to contaminate it; and holy, because it brings the Deity perpetually before his view, giving him thereby the most exalted notions of supreme power, and the most fascinating and endearing view of moral benignity.—*Lord John Russell.*

Christianity is the true citizenship of the world; and universal peace; and the free exchange by all lands and tribes of their several peculiar goods and gifts, are possible only as all are grouped around, and united by the cross of a common Redeemer, and the hope of a common heaven.—*W. Williams.*

There is no outward sign of politeness which has not a deep, moral reason. The education teaches both the sign and the reason. Behavior is a mirror in which every one shows his own image. There is a politeness of the heart akin to love, from which springs the easiest politeness of outward behavior.

School children who read the newspapers are found to be better acquainted with geography, spelling and the meaning of words, grammar, etc., and are more generally intelligent than those who do not. This is a significant but undoubted fact. Therefore, let your children read the newspapers.

A Duluth paper says one of the streams running into Lake Superior from the north is called "Temperance river," because it is the only one of all the tributaries of the lake that has no bar at its mouth.

The churches of Christ have numbers, talent, wealth enough now to convert the world in a few years, if they possessed the full available power of the Spirit. They need means and men, but not as much as faith and love.

Every one must find out for himself the key to the riddle of life. It is of no use to have it told. Some do not hear, others misunderstand it.

A taste for farming comes late, and is often connected with high mental culture.

CHILDRENS' WAYS.—Gail Hamiltou, writing of children, says: I should be sorry to say auythiug that might aid or abet our idle, lax and worthless American fathers and mothers. But it is an iudisputable fact that children do take au immense deal of spoiling withont permanent injnry if there is good stock iu them. Nature seems to think more of suhstance than training, for she gives children not wheu people are wisest, but when they are freshest and strongest. It is delightful to see children alway behaving with perfect propriety and politeness; but if they kick and cuff and scream and grab, all is not lost. There is a certain governor whom not having seen I love, because he send word to his son that his grandson is the best little fellow iu the world if you do uot thwart him, and always obedient if you do not hurry him ahont it. The haby in breeches was standing by my chair, and I clandestinely snatched a kiss, whereupou up flew his hand aud gave me a smart slap on the cheek. It was in my heart to retort with a thump, but I refrained, and by-and-by, wheu I whispered, "Why did you strike me?" he answered innocently, "Because you stole a kiss." Innocent as an angel, for it was pure frolic, and no malice or rudeness at all. But we expect to take liberties with children, and expect them to be perfeotly wise and aware of the exact degree of respect to he observed toward ourselves.

"WHAT FATHER TAKES."—"What will you take to drink?" asked a waiter of a young lad, who, for the first time, accompanied his father to a public diuner. Uncertain what to say, and feeling snre he could not he wrong if he followed his father's example, he replied, "I'll take what father takes." This answer reached the father's ear, and instantly the full responsibility of his position flashed upou him. "Waiter, I'll take water." And from that day to this, strong drink has been hanished from that man's home.

CORVISART, a physician of celehrity, during the early portion of this centnry, was lamenting to the Abbé Sykes the death of Dr. Backer. "It was uot, at all events, for want of medical aid he died," said he, "for iu the last days of his illness we—Halle, Portal, and myself—did not quit him for a siugle instant." "Alas!" interrupted the witty Abbé, "what could he do against three of you?"

"WHERE was Bishop Latimer burned to death?" asked a teacher in a commanding voice. "Joshua knows," said a little girl at the hottom of the class. "Well," said the teacher, "if Joshua knows, he may tell." "In the fire," replied Joshua, looking very grave and wise.

AN inquring man thrust his finger into a horses mouth to see how many teeth he had. The horse close his mouth to see how many fingers the man had. The curiosity of each was fully satisfied.

"DEAR George," said an Indianapolis young woman, "I am willing to marry you if we have to live on bread and water." "Well," said the enthusiastic George, "you furnish the hread and I'll skirmish round and get the water."

IT was Sir Richard Steele that said to a certain great man whom he wished to invite, "If, Sir, you ever come within a mile of my house, I hope you will stop there."

"DRIED tongue," was the answer which a minister gave some one who asked him what he had in his carpet-bag, which contained seven sermons.

A LITTLE hoy heard his mother tell of eighteeu head of cattle being hurnt the other night. "Weren't their tails hurnt also?" inquired the verdant youth.

DONN PIATT says the proper thing to do wheu your horse is running away is "to hold fast to your seat and say your prayers; anyhow, hold fast to your seat."

A COUNTRY hoy, having heard of sailors heaving up anchors, wanted to know if is was seasickness that made them do it.

"KISSING your sweetheart," says a trifling young man, "is like eating soup with a fork; it takes you a long time to get enough."

SIAM is becoming civilized. The king has learued to read and wears a shirt.

THE newest floral sentiment—If you wish for heart's ease don't look to marigold.

"LETTING off sleep," is a little boy's definition of snoring.

THE best throw of dice is to throw them away.

HE that contemns a small fault commits a great one,

WHEN the mind is weary, the body should he active.

HE who speaks as he thinks will act as he speaks.

HE only is idle who might be better employed.

EPITAPH for a caunibal—One who loved his fellow-men.

CUNNING to the wise is au ape to a man.

YOUNG FOLKS' COLUMN.

The Power of Truth.

A little girl, uine years of age, was offered as a witness against a prisouer who was on trial for a felony committed in her father's house.

"Now, Emily," said the connsel for the prisoner, upon her being offered as a witness, "I desire to know if you understand the nature of an oath?"

"I don't kuow what you mean," was the simple answer.

"There, your houor," said the counsel, addressing the court, "is anything further necessary to demonstrate the validity of my objection? This witness should be rejected. She does not oomprehend the nature of an oath."

"Let us see," said the judge. "Come here, my daughter."

Assured hy the kind tone and manner of the judge, the child stepped toward him, and looked confideutly up in his face with a calm, clear eye, and in a manner so artless and frank that it went straight to the heart.

"Did you ever take an oath?" inquired the judge.

The little girl stepped back with a look of horror, and the red blood mantled iu a blush all over her face as she answered: "No, sir."

She thought he intended to inquire if she had ever blasphemed.

"I do uot mean that," said the, judge who saw her mistake, "I mean were you ever a witness before?"

"No, sir; I never was in court before," was the answer.

He handed the Bible open.

"Do you know that book, my daughter?"

She looked at it, and answered:

"Yes, sir, it is the Bible."

"Do you ever read it?" he asked.

"Yes, sir, every eveniug."

"Can you tell me what the Bible is?" queried the judge.

"It is the word of the great God," she auswered.

"Well, place your hand on this Bible, and listen to what I say;" and he repeated slowly and solemuly the oath usually administered to witnesses.

"Now," said the judge, "yon have sworn as a witness. Will you tell me what will befall you if you do not tell the truth?"

"I shall be shut up in State's prison," answered the child.

"Anythiug else?" asked the judge.

"I shall never go to Heaven," she replied.

"How do you know this?" asked the judge.

The child took the Bible, and turning rapidly to the chapter containing the commandments, pointed to the injunction, "Thou shalt not hear false witness against thy neighbor." "I learned that before I could read."

"Has any one talked with you about being a witness in court here against this man?" inquired the judge.

"Yes, sir," she replied. "My mother heard they wanted me for a witness, and last night she oalled me to tell her the Ten Commandments, and then we kneeled down together and she prayed that I might understand how wicked it was to bear false witness against my neighbor, and that God would help me, a little child, to tell the truth as it was before Him. And when I came up here with father, she kissed me and told me to remember the Niuth Commandmeut, and that God wonld hear every word that I said.

"Do you believe this?" asked the judge, while a tear glistened in his eye and his lip quivered with emotion.

"Yes, sir," said the child, with a voice and a manner that showed her conviction of its truth was perfect.

"God bless you, my child," said the judge, 'you have a good mother. This witness is competent," he continued. "Were I on trial for my life, and innocent of the charge against me, I would pray God for snch witnesses as this. Let her be examined."

She told the story with the simplicity of a child, as she was, but there was a directness about it which carried conviction of its truth to every heart. She was rigidly cross-examined. The counsel plied her with infinite and ingenious questioning, but she varied from her first statement in nothing. The truth as spoken by the little child was sublime. Falsehood and perjury had preceded her testimony. The prisoner had entrenched himself in lies till he deemed himself impregnable. Witnesses had falsified facts in his favor and villainy had manufactured a sham defence. But before her testimony falsehood was scattered like chaff, The little child for whom a mother had prayed for strength to be given her to speak the truth, as it was before God, broke the cunning devices of matured villainy to pieoes, like a potter's vessel. The strength that her mother prayed for was given her, and the sublime and terrible simplicity— terrible, I mean, to the prisoner and his associates—with which she spoke was like a revelation from God Himself.

YOUNG persons should, above all thiugs, beware of hegiunings, and by uo means parley with temptations; their greatest security is in flight and in the study to avoid all occasions of evil.

INDIANAPOLIS boasts of a versatile divinity student who preaches in English, prays in Armeuian, sings in Turkish, and holds his tongue in eleven other laugnages.

GOOD HEALTH.

The Human Frame.

No. 7—The Brain.

In taking up this subject we euter upou a field wherein science has made but little progress. The brain, being undoubtedly the special organ and throne of the mind, will uever be entirely nnderstood uutil that mysterious link which hinds the finite to the infinite shall have become acquainted with itself; and so, whenever the mind endeavors to aualyze its own origin, powers or manner of actiou, it draws hack awe-struck and dazed at the glimpses of that iufinity which lies so thinveiled and bewildering just beyoud its limited horizon. It has been the subject of deep and searching investigation; and, apart from its connection with the mind, no organ is better understood. Taken from the skull of the human hody, it presents a mass of a fatty structure so frail and delicate of organizatiou that we almost wonder how it is preserved from injury or destruction, even among the ordinary occurrences of our every-day life; and well illustrates the steps by which matter becomes more and more refined as its connection with mind assumes a higher and closer relation. It is composed, as is well kuown, of a gray aud a white substance, that are formed into a series of convolutions, the shape of which is familiar to all. Of these two, the gray is supposed to be the actual communicating link between the mind aud its servant, the brain, while the white connects this with the coarser tissues. This gray matter is made up of tiny cells, which vary from one three-hnndredth to one four-thousandth of an inch in diameter. The white snbstance, which forms hy far the greater part, is composed of delicate filaments which aro from one two-thousandth to one ten-thousandth of an inch in diameter. In the brain, the gray suhstance is spread mostly on the snrface; its disposition in the nerves will be given when we take up that subject.

It would be interesting, did space permit, to trace the evolution of the brain from the lowor forms of animal life up to that of man, but we can ouly give the shadow of an ontline. It begins as a simple ganglion of nervous matter, and is situated near where it is needed, regardless of auy "head." In the five-rayed star-fish, for iustance, there is a ganglion at the base of each limh, so that this familiar little fish has the advantage over mankind of possessing five distinct brains. A step higher, and one of these ganglia begins to assume a greater size than the others, and the animal begins to show signs of a centralizatiou of intellect, or in other words a head is added to its organization. This step is illustrated hy some of the molluscs and articnlata, as the *Aplysia* and centipede. Higher yet, and this centralization begins to develop different convolntions, having different offices; and it is from a hair-splitting, unscientific application of this principle that the so-called "science" of Phrenology sprung, which now so delights the souls of ignorant quacks and pretended "delineators of character!" This step is illustrated in the vertebrata, and culminates in man; where matter has progressed so far that it is capable of uniou with intelligent, reasoning mind.

As a general rule, the size of the brain is in proportion to the intellect of the individual. In the male the average weight is about 49½ ounces, in the female 44 ounces. Cuvier's brain weighed rather more than 64 ounces, that of Dr. Abercrombie 63 ounces, and that of Dupuytren 62⅛ ounces. On the other hand, the brain of an idoit seldom weighs over 23 ounces. The human brain is heavier than that of all the lower animals, except the elephant and whale. The brain of the former weighs from 8 to 10 lhs., and that of the whale, in a specimen 75 feet long, weighed rather more than five pounds.

It can sustain severe inflammations and injuries to its substance; some of the most remarkable recoveries from injuries in the annals of surgery heing those of the hraiu. Of these, the most famous occurred several years since, in this State. It is that of the miner who, by a prematnre discharge of a blast, had a "tamping iron" over two feet long and an inch in diameter driveu entirely through his skull from below upwards, and who, strange to say, recovered and lived several years after tho accident. His skull is now in a museum at Boston where it is kept as a curiosity to show the fearful apertures made throngh it by the iron as it entered and made its exit.

POISONING BY CARBOLIC ACID.—A patient in a hospital, through mistake of the attendent, took a tablespoonful of a solution of one part of carbolic acid aud six parts of water, instead of an infusion of senna. A burning sensation in the throat, vomiting, and contraction of the pupils of the eyes ensued. As soon as medical aid was at haud, the stomach was cleansed three times with water, by the aid of the pump. Still the patieut suffered severe pain, and became insensible to light. The pulse became rapid. A cold, clammy sweat, deep sloep, and finally death ensued. A post-mortem examination of the contents of the stomach, of the liver, the heart and venous blood, and of the urine was made. No carbolic acid was detected except in the stomach, from which it was inforred, either that the acid had not been diffused through the system, or that it had been diffused in so small quantity as to escape detection.—*Amer. Chemist.*

Cheese as Food.

The *Live Stock Journal* has some interesting analyses of this article of food, with deductions founded thereon, from which we obtaiu the followiug abstract: It will be seen if we compare leau beef, or lean mutton, or lean poultry, with skim-milk cheese, that one pound of this cheese is equal in snpplying mnscular force to one aud three-fourths pounds of beef or mutton, aud one and a half pounds of poultry; is snperior in fat or heat-producing power, and has more thau double the nutriment per pound. Aud a comparisou of whole-milk cheese with fat beef, muttou, or pork, shows it more than twice as rich in muscular force, and uot inferior, except to pork, in heat or fat-producing qualities. It is more than twice as valuable per weight as eggs.

Comparing it with the farinaceous grains, cheese is seen to contain two and a half times as much muscle-forming food as either wheat flour, rye meal, Iudiau meal, barley meal, oatmeal, rice or potatoes, But when we compare the carbonaceous matter of these grains (starch, sugar aud fat) with cheese, they may appear to have the advantage. But one pound of fat is reckoned by physiologists eqnal to two and one-half pounds of starch or sugar as food; and thus the fat iu cheese, instead of heing represented hy 27.50, wonld be represented by 68.75, making it equal to the starch in wheat flour. And here the dietetic philosopher will perceive the true use of auimal and concentrated food. There is no source from which we may derive the carbouaceous elemeuts of human food as cheaply as from the farinaceous grains. Many of these are relatively deficient in the nitrogenous elements—giving muscular force and power. They are also less easily digested than animal food and produce their resnlts more slowly; but when properly mingled with more nitrogenous food, snch as milk, cheese, heef, mutton, fish aud other flesh, they form a diet leaviug uothing to be desired in respect to health or agreement with taste. A small quantity of cheese taken with farinaceous food would make a proper halance of constitnents to bnild and sustain all parts of the system. Less than half as much cheese would be required as beef, or mutton or eggs.

Cheese, therefore, among the foods easily obtained, appears, chemically, to be the most energetic in sustaining the vital force of the hnman system.

Liebig well says: "There is a law of nature which regulates these things, and it is the elevated missiou of science to hring this law home to our minds; it is her duty to show why man and animals require such admixture in the constituents of their food for the support of the vital functions, and what the influeuces are which determine, in accordance with uatural law, changes in the admixture. The young animal receives in the form of casein (cheese) the chief constituent of the mother's blood. To convert casein into hlood, no foreigu snhstance is required; and in the couversion of the mother's blood into casein, no elements of the constituents of blood have been separated. When chemically examined, casein is found to contain a much larger proportion of the earth of bones than does blood, and that in a very soluble form, capahle of reaching every part of the hody. Thus even in the earliest period of life, the development of the organs in which vitality is, in the carnivorous animal, depends on the supply of a substance identical in organic composition with the chief constituent of its hlood."

TRAINING OF BOAT ROWERS. —An exchauge says: "At some of the colleges the training of the racing crews is ahout as follows: In the morning an easy walk of an hour's length, at noon a quicker walk of half an hour, and in the afternoon a pull of seveu or eight miles, after which comes a bath aud a good rubhing down. The system of diet is rather one of proscription than prescription. Certaiu articles well known to be unwholesome are proscribed. Other things may he eaten. Pastry, tohacco, coffee, pork, and all stimulauts are rulod out. The crew pnlls a plain forward and back stroke, with no special attentiou to style or scientific points, making generally 32 strokes to the minnte." To this we may add, that a crew trained in the manner described would have small chance of winning a race, at least agaiust a crew in perfect condition. The rowing is now nearly always divided into two parts, morning and afternoon, aud made so light as uever to tire the men—a most important point, according to new-school theory aud practice. The diet is but little restricted. But a crew which pulls a "plain forward and back stroke, with no special protension to style," is always at a disadvantage when pitted against those who kuow how to make the best use of their strength. There is a prevailing impressiou that "style," as it is termed, is merely for show; tho trnth is that a well-trained crew does uot waste an inch of movement nor a particle of muscle, but simply rows in the manner which experience has taught is the most effective. Sheer strength may sometimes win a single scull race; but a truly successfnl crew is one which rows with precision.

"PREVENTIVE medicine," says Dr. Henry Bowditch, iu an admirable and exhaustive paper on the subject, "is the natural outgrowth of modern thought and resonrces, stimulated by centuries of suffering and by the sacrifice of multitudes of human beings."

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SAN FRANCISCO:

Saturday, July 25, 1874.

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The Rural Press of this Week.

Our appreciation of the judgment, taste and candor of the readers of the PRESS will not allow us to suppose that they will fail to appreciate the efforts made by us to present them with a complete agricultural and family paper. It would seem almost uncivil in us to fail to return some acknowledgment for the many compliments and cheering words received from our patrons. The reader of the present number of the PRESS will find it, we confidently hope, fully up to its predecessors in interest and general appearance. Whatever particular department of farming he may be most interested in, has here its special column, to which he can turn and read with profit. In the agricultural and general news which we have gathered, a wide field of information is embraced. Our correspondence is fresh and instructive, the family reading in the home circle and young folks' column will be found of a pleasant and profitable character; and in regard to our editorial department, we can only say, that we have endeavored to handle subjects of especial interest to our readers in a manner strictly in keeping with the character of the paper. We write as to thinking people, and in the same candor with which we expect to have it received.

MR. RODMAN and several other farmers in the vicinity of Wheatland, Yuba county, have raised immense crops of Early Rose potatoes. They are now planting the second crop, which will mature about the last of October.

A FLOCK of 2,000 sheep are being herded on the banks of the river between Truckee and the mouth of Prosser creek. There is room in this vicinity for grazing fifty times that number from now to the first of November.

IT is estimated that Stanislaus county will yield 3,000,000 bushels of wheat this year, which at a net price of one cent a pound over cost of sacks and freight, will give the farmers $1,800,000.

California Wheat Exhibit for 1874.

Parties who have confined themselves strictly to facts and figures in estimating the wheat crop of 1874 do not place it so high as the popular opinion, influenced no doubt by the popular wish, had supposed the indications of the growing season would warrant. But these careful compilers have evidently gone as wide of the mark in gauging the popular expectations in this direction, as the latter party had done in estimating the coming harvest. For, from our intercourse with farmers, personally and by correspondence, and after a careful perusal of our exchanges throughout the season, we are inclined to the belief that public expectation has been kept in check to a remarkable degree; and that neither agriculture nor trade have indulged in airy castle-building to any great extent. On the contrary, there has been no evidence of want of ballast in the balloon excursions that trade and industry have indulged in during the past season at the expense of the incoming crop. The present stage of the harvest affords sufficient data upon which we can form an estimate of the amount of the present crop. The return seems to satisfy the public expectations and the same degree of satisfaction is manifested in regard to the condition and prospects of the wheat market.

The past season, it is true, has been somewhat peculiar; and in regard to the comparative productiveness of the valleys and uplands, the tables have been turned in a measure. The late rains, which favored the growth of wheat in the latter localities, were detrimental to the former, to which we had previously looked for our heaviest crops. The unexpected yield in some quarters is considered a fair offset to the partial failure in others. Large tracts of land in the Sacramento valley, where grain was late sown, have been soaked to a degree that rendered it necessary to cut the crop for hay; while in spots which were unprotected the crops have been entirely swept away by the over-flowing of the river. The Antioch *Ledger* estimates the loss from this source in that county alone at $1,000,000. The over-worked soil in the low-lands, where the wheat was allowed to mature, has not returned an average crop, signs of exhaustion appearing far more palpable than in any former season. Could these localities have escaped the reverses here enumerated, and could the higher lands, meanwhile, have yielded their present unprecedented abundance—which would have been impossible under any other circumstances than those unfavorable to the lower lying localities—we should probably be able to report the wheat crop of 1874 as double that of 1873; whereas, it is estimated by those who have reduced the matter, as far as practicable, to figures, as being about one-fourth only in excess of last year's product. We give below a carefully compiled estimate of the crop of 1873, compared with that now being harvested:

COUNTIES.	1873. Acres.	1873. Yield. Centals.	1874. Acres.	1874. Estimated yield—C'tls.
Alameda	68,000	408,000	75,000	600,000
Alpine	500	3,000	750	5,200
Amador	2,000	14,100	3,000	21,000
Butte	50,000	400,000	60,000	480,000
Calaveras	800	4,400	850	6,800
Colusa	125,000	870,000	70,000	1,700,000
Contra Costa	57,000	342,000	66,000	594,000
Del Norte	300	2,700	400	2,800
El Dorado	1,000	5,000	1,300	9,100
Fresno	20,000	110,000	30,000	240,000
Humboldt	2,500	25,200	3,000	24,000
Inyo	1,800	11,800	2,000	12,000
Kern	5,000	35,000	6,000	42,000
Klamath	600	2,000	700	4,900
Lake	4,000	28,000	6,000	48,000
Lassen	1,700	10,000	2,500	16,000
Los Angeles	1,200	7,100	1,300	10,000
Marin	3,000	21,000	4,000	32,000
Mariposa	1,000	5,000	1,200	9,600
Mendocino	9,000	63,000	9,000	72,000
Merced	250,000	1,100,000	300,000	2,400,000
Monterey	170,000	1,190,000	204,000	1,632,000
Mono	400	2,000	500	2,500
Napa	40,000	23,000	36,000	288,000
Nevada	1,000	4,200	1,200	8,400
Placer	20,000	100,000	25,000	200,000
Plumas	2,100	13,870	2,300	16,100
Sacramento	25,000	175,000	25,000	200,000
San Bernardino	2,420	18,600	3,000	27,000
San Diego	2,300	11,500	10,000	80,000
San Joaquin	225,000	1,200,000	275,000	2,200,000
SanLuisObispo	7,500	30,000	7,500	60,000
San Mateo	5,000	25,000	6,000	48,000
Santa Barbara	2,000	10,000	25,000	200,000
Santa Clara	167,000	1,102,000	170,000	1,360,000
Santa Cruz	7,500	60,000	10,000	80,000
Shasta	10,000	70,000	12,500	100,000
Sierra	1,200	7,200	2,000	16,000
Siskiyou	10,000	60,000	12,000	96,000
Solano	100,000	600,000	100,000	800,000
Sonoma	80,000	180,000	30,000	240,000
Stanislaus	400,000	1,200,000	460,000	3,220,000
Sutter	60,000	480,000	75,000	600,000
Tehama	65,000	520,000	67,000	536,000
Trinity	1,000	5,000	1,200	8,400
Tulare	30,000	120,000	50,000	400,000
Tuolumne	6,000	36,000	12,000	84,000
Ventura	.....	.....	12,500	100,000
Yolo	100,000	700,000	100,000	700,000
Yuba	20,000	146,000	20,000	160,000
Total	2,063,420	12,675,470	2,490,700	19,891,800

Barley is next in importance to wheat in this State. The average of the crop of 1874 is about 100,000 centals in excess of that of 1873, and the yield is in about the same proportion. The crop of 1874, covering 509,200 acres, is estimated at 5,986,200 centals.

The question therefore as to the amount of the present crop is about settled to the satisfaction of the country at large; though amid this general rejoicing we should consider that in many cases individual farmers, and in others whole neighborhoods, have suffered by short crops in some places, and by sweeping misfortunes in others. There are two questions yet remaining which combined may be considered as nearly, if not quite "half the battle." These unanswered questions are "what will the wheat bring in the market, and what are the facilities for sending it there?"

The commercial aspect of the wheat product has been as carefully watched as was the crop itself, in its different stages of production. It is, of course, impossible at present to fix the exact price at which the bulk of the crop can be sold; but enough is known in regard to the condition of the wheat market of the world to warrant the belief that prices will not range below those of last year. In no countries of Europe is the crop of 1874 reported as in excess of that of 1873, while in some it is known to be below the average; and when to this general supposition the acknowledged fact is added that the stock of wheat on hand, both in this country and in Europe, is cleaned out to a degree unusual at this season of the year, it is safe to conclude that all our surplus wheat will be wanted abroad at prices remunerative to the farmers. The market outlook was probably never better than at present—not exciting, but assuring.

The shipping prospects are apparently in keeping with those of the market prices. The agitation of this subject was commenced by the Granges, before the seed of the present crop had germinated; and the growth and development of this agitation has fully kept pace with that of the crop to which it related. They have already chartered a sufficient amount of tonnage to prevent monopoly in moving the present crop. Many have seemed to really believe that if our wheat was not to be shipped by certain parties, it would not be shipped at all, and would remain an "elephant" on the hands of the California farmers. This delusion is being rapidly dispelled, for that portion of the press which judges the Order by its fruits alone, are free in their acknowledgments of its efficiency in this direction. They declare that the effect of the movements of the Granges on the wheat market will be to reduce the multiplicity of commissions, and to establish a scale of freights which can not be exceeded, no matter what the advance in foreign prices for wheat may be. It is well known that there is enough chartered tonnage due here within the next forty or fifty days to impart a healthful activity to the shipping movement.

With the prospect that the immense surplus of wheat—over 600,000 tons—is to reach a market where it is wanted at fair prices, without being subjected to undue speculation, should infuse new hope and confidence into the hearts of our farmers. It will undoubtedly produce this effect; and the money which the returns from the present crop will infuse into their pockets will place them in a financial condition which will enable them to conduct their operations for the coming year with still greater profit.

"Grama" Grass.

While California dairymen, stockraisers and farmers generally are so enthusiastically engaged in investigating the merits of, and experimenting with the different varieties of grasses now grown or being introduced into the State, we suggest that a trial be given to the wonderful Grama grass of New Mexico. Not that we believe it to be any better, or even so good a hay-making or pasturage grass as some of our other well-known varieties, as clover, alfalfa, the Italian, etc., but because we think its properties make it peculiarly adaptable to many of our pasturing or dairying localities which are not suitably situated to render the others a success. The places where it promises to be of most value will be at once indicated by the short description which we here give of it.

It is a hardy perennial, with a tendency to grow in dense bunches, and in its natural home—the plains, mesas, and even mountains of New Mexico—attains a hight of from eight or nine inches to about two feet. It thrives on the most dry and sandy locations, and, in fact, seems to be, like the water cactus of the deserts of Southern Arizona, especially created to supply the place of vegetation which derives most of its moisture from the air or immediate surface of the ground. It seems to take kindly, however, to moisture, as in the vicinity of springs or streams it grows much ranker. But its great and distinguishing peculiarity consists in the fact that, when it matures it does not "dry up," like others of its class, but *cures* into good hay as it stands. The process by which other grasses return their sap and substance to the earth and air seems to be arrested by some unknown agency in this variety entirely, and the bunches remain throughout the winter as little cocks of well-cured hay.

Of course, it has not such a body as housed or stacked tame grasses, still it is very nutritive; and the Mexican *burros*, antelope, elk and black-tailed deer keep fat upon it the winter through. Now, in our foot-hills and mountain country, where the grass never is very luxuriant, and where it soon becomes worthless by drying, it seems to us that the introduction of this grass might give very good results. We are certain that, once having gained a foothold, it would hold its own thereafter without difficulty, and the expense of procuring seed sufficient to give it a trial would be very trifling.

ROBERT WATT's sheep ranch overseer, in the lower country, lately decamped, leaving his accounts minus about $10,000.

Potatoes on Dry Lands.

One of our foot-hill contemporaries has a little item, which it considers rather wonderful of some fine, large Early Rose potatoes raised on red land without irrigation; the ground prepared in the common way; seed placed on the ground and covered with about six inches of half-rotten straw. No other cultivation, it says, was given, and the yield was most excellent.

Now this recalls forcibly to our minds that the same plan was extensively practiced in many districts of "droughty Kansas," before the introduction of railroads, telegraph wires and the general cultivation of the soil had rendered this term a misnomer, and we believe it would be an excellent course for many of our foot-hill farmers, who have not good facilities for irrigation, to pursue. In the State referred to, the Blue Neshannock and Peach Blow were the varieties which seemed to do best under this treatment; but without doubt it is applicable to all varieties which mature early enough to escape the chilling influence of the straw after the cold, damp weather of late fall and early winter has set in.

The ground should be allowed to become thoroughly warmed and dried out by the sun in the spring, then prepared in the usual way and planted in hills or drills, according as preferred. Ground so treated will stand a heavier seeding than if otherwise cultivated, owing to the manure derived from the decaying straw. After the seed has been in the ground a few days—some think it best to let the potatoes get fairly up—take straw of any kind and cover to a depth of from three to six inches, and the cultivation is completed. The straw keeps the ground moist and loose, furnishes manure for the growing tubers; and last, but not least, effectually prevents the growth of weeds, as these latter must have sunshine. We have seen ground so covered in the spring, as clean as a garden bed in the fall when the covering was removed to dig the potatoes. Some cover the entire surface, while others prefer to cover only the hills, fastening each bunch of straw by placing a little earth on the edges.

Of course this method is not applicable in naturally wet, cold soils, but on dry or sandy locations one will be surprised to see the amount of potatoes so produced. The whole energy of the plant seems to be directed to the tuber, the tops in some cases not appearing above the covering.

We would be pleased if some of our foot-hill readers would give the experiment an intelligent trial during the next season, and report the result to the PRESS. A very small spot would be sufficient to test the plan, and as covering the ground is all the labor necessary to be expended in cultivation, the expense would be but trifling in case of failure, which we believe would occur very rarely indeed.

We ought, perhaps, to mention that with us the best success followed when the potatoes were lightly covered with earth, allowed to come up, and then covered with straw not too heavy and rotten; although we have known of good results from simply dropping the potatoes on the surface of freshly plowed ground and covering them with nothing but half-rotten straw, as was done in the case cited by our contemporary. In the latter case, the potatoes often present the somewhat curious anomaly of growing on top of the ground, the tubers being found half buried on removing the covering. But, from considerable experience in both methods, we prefer the former—to lightly cover with earth, and after sprouting to cover with straw. And the plan of only covering the hills with straw is perhaps preferable in close soils, as it admits of the usual cultivation between the rows.

THE ARMY-WORM AND THE BEET.—The somewhat sensational accounts of the ravages of the army-worm among the beet crops near Sacramento have been entirely disproved by the facts in the case. The worms, it is true, did make their appearance there in great numbers; but their operations were soon brought to a close by a fortunate device of the owners of the fields. A hastily recruited army, consisting of about 1,400 turkeys, was organized, which was given into the command of two Chinamen; and being driven, not led, by their skillful generals, these turkey recruits passed through the beet fields, cleaning out the destroying worms most effectually. Considerable order and discipline is said to have been maintained in this gobbling army, the Chinese marshals restraining their impetuosity, and keeping them in strict marching order. Only two or three invasions were required to make this war of extermination a complete success; and we are assured by parties directly from the scene of action that the damage to the beet crop is scarcely perceptible. Will Sacramento manifest its republican ingratitude by allowing these faithful soldiers to go the way of all turkeys at Christmas time, or will they allow them a scanty pension? For ourselves we say long life and much honor to the grand army of Sacramento.

THAT BIG ROOF.—The shingling of the vast roof of the Mechanics' Institute Pavilion is nearly completed. Fifteen men are at work at this job alone, putting on shingles at the rate of about 80,000 per day. It is estimated that 1,500,000 shingles will be used in completing the job.

Improved Water-Wheel and Pressure Regulator.

The accompanying illustration represents an improvement in water-wheels and pressure regulators, recently patented by J. E. Le Blanc, of Gold Hill, Nevada, through the patent agency connected with this office. The improvement consists in so constructing and monnting a water-wheel, and connecting it with the water-reservoir from which the water-pressure is obtained, that the same hydrostatic pressure can be maintaiued when the flow of water which supplies the reservoir is reduced as when it is abundant, thus obtaining a greater per cent. of power from the water than if the water-pressure were allowed to run down proportionately with the decrease of flow.

By referring to the engraving the details will be understood. Let *A* represent the reservoir or water-pit, in which the stream of water which furnishes the water-power is directed, in order to provide the required hydrostatic pressure. A tube or tunnel, *B*, is made through the lower part of this reservoir, so that the water in the reservoir will entirely surround the tube with an equal pressure at all points. Connecting with the reservoir at various points around this tube or tunnel are four or more pipes or tubes, *C C*, the opposite ends of which are snpported by an upright plate or support, *D*, the tubes being arranged in a circle around the tunnel, and supported likewise in the plate, *D*. Each alternate tube, *C*, is provided with a cock, *E;* or, if preferred, each tube may be provided with one, as most convenient, so that the water from all or a portion of the tubes may be cnt off at will. The water-wheel is secured to a shaft, *G*, the shaft passing through an opening in the plate or support, *D*, and through the conter of the tube or tnnnel, *B*, its ends bearing in suitable supports.

The water-wheel will thus be secured vertically close up against the plate or support, *D*, as shown.

The wheel used consists of a solid ceutral portion or hub, *f*, the outer rim of which is made conical or beveling, the largest diameter being next to the plate, *D*. To this beveled periphery is secured a series of radiating buckets or wings, *g*, which stand obliquely in one direction to the shaft upon which the wheel is secured. The outer ends of these buckets are made beveling in an opposite directiou to the bevel of the hub, *f*, aud an outside rim, *h*, is secnred around them. The hub or central portion, *f*, of the wheel is just large enough to bring the ends of the tubes, c c c, directly opposite the opening on the narrow side of the buckets, so that when the reservoir is filled and the water issues through tho tube, *C*, the streams will strike the angular buckets and drive the wheel. This construction of water-wheel is very economical, as the pressure of the water is exerted with great efficiency upon the series of buckets, and at the outer rim of the wheel.

Now, as loug as the quantity of water from which the power is derived is abundant, all of the cocks, *E*, may be left open, and the full force of the several streams be directed npon the wheel; but when the supply of water is reduced, so that when all the cocks are opened the reservoir will not be full, one or more of the cocks can be closed, thus shutting off a quantity from the wheel, and causing it to rise in the reservoir until the full pressure is obtained. By this means an equal hydrostatic pressure can be maintained in the reservoir, which will give a larger per cent. of power than if the level of the water were allowed to run down with a full head upon the wheel.

The wheel can be cased in, if desired. It can be operated either vertically or horizontally, as most convenient, as will be readily seen hy any one conversant with water-wheels, and numerous devices can be employed for reducing the delivery of the water upon the wheel, in order to maintain the level and pressure in the reservoir.

Steam or compressed air can be employed in the same manner, by connecting a pipe with a reservoir, *A*, through which the steam or air is delivered upon the wheel. Further information concerning this invention can be procured by addressing the inventor as above.

The Kansas Agricultural Exhibition.—The Secretary of the Kansas State Board of Agriculture sends us the premium list of the tenth annnal exhibition of this society, to he held in Leavenworth, September 7-11. Parties inteuding to exhibit at this fair, can obtain the requisite information by addressing the Secretary of the society, Alfred Gray, Topeka.

Tom Carroll of Los Angeles has secured a patent for a tree-lifter, designed to take up trees in such a mauuer as to retain the earth aronnd the roots, greatly lessening the danger in transplanting trees. The lifter has been tested with most satisfactory results. By its aid Dr. Hardin transplanted 5,000 trees, and so far only 15 have died.

The San Diego *Union* of Wednesday says the harvest is very abundaut at San Luis Rey, and advises the farmers inland not to sell their grain at present low prices, but to feed it to hogs to make bacon, which hitherto has been imported at a high price because of the freight charges.

The wool clip of Wasco county, Oregon, will exceed 300,000 pounds.

Useful Information about the Pre-emption and Homestead Laws.

A correspondent of the *Bulletin* writes to that paper as follows: "Could you, through the medium of your paper, put me and many others right with regard to the pre-emption law? Quite a number of settlers are now in occupation of unsurveyed lands. There is a prospect of their being surveyed this fall, but it will be too late to be of any service to those who desire to pre-empt—if, as some suppose, the law expires in September next. With regard to this, however, opinions differ. Some maintain that no legislation has affected the existing law, and others say it expires in September next. Such information as is in your power to impart will be thankfully received."

In reply to the above the *Bulletin* says: We suppose our correspondent has reference to a homestead bill which was before Congress at the last session, and which would have abolished the pre-emption laws. That bill never became a law; it passed one house and failed in the other. It originated with Drummond, Commissioner of the Land Office, who has since gone out of office. It is doubtful now if the bill ever gets through Congress. The only good purpose which the bill involved was the dedication of the entire body of pnblic lands fit for agriculture to homesteads. But the law, as it now stands, secures practically the same results. No lands fit for tillage are sold except to actual settlers. Thero is, however, still great danger that large bodies of land may be granted to corporations. The effort to secure such a result at the last session was backed by the most powerful combinatiou of corporation capitalists ever known in the country. The effort will be renewed at the next session; in the meantime, we shall have the usual number of platform resolutions against the measure, but no calling to account by constituents of their members of Congress who go directly against the tenor and spirit of their declarations.

Settlers on unsurveyed lands have *three months* in which to file their declarations, after the land has been surveyed and the plats filed in the office of the Snrveyor-General. That officer not only gives notice through the papers, as required by law, but the Register and Receiver at the District Land Office take paius to inform all persons whom they know or have reason to believe are occupying public lands in the limits of the snrveyed township. They send a printed circular, with the name of the settler filled in to the following effect:

Notice to Pre-emptors.

A B.—The plat of Township 10 North, Range 8 West, Mt. Diablo meridian, has this day been filed in the U. S. Land Office, at San Francisco.

Persons claiming the right of pre-emption on lands within said township are required by law to file their declaratory statements in this office before the expiration of three months from this date.

If settlement is made after the filing of the map, the declarations must he filed within three months from said settlement. A neglect so to file may prejudice the pre-emptor's rights as against claimants undor other laws whose applicatiens are filed within the said three months.

H. G. R., Register.
C. H. C., Receiver.

U. S. Land Office, San Francisco, Cal.,——, 187—.

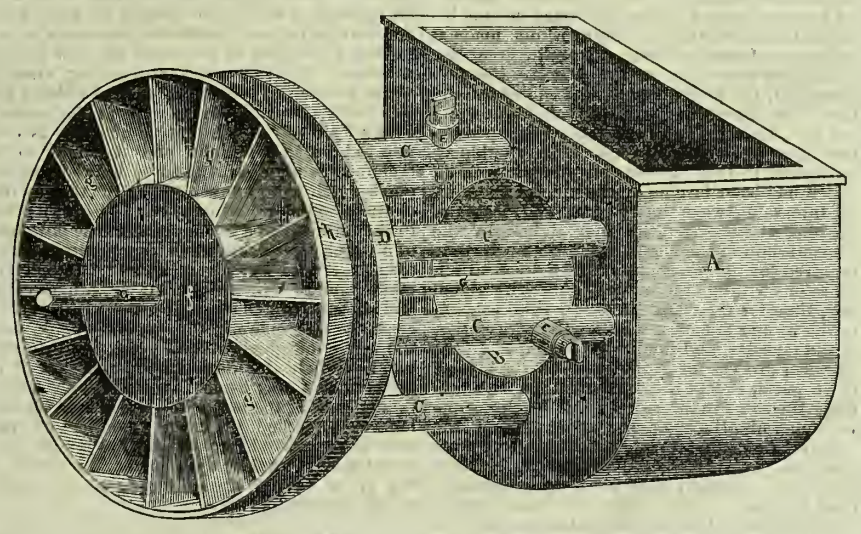
Please show this notice to your neighbors.

It may be noted, further, that persons occupying land, expecting to hold it for homestead purposes, acquire no right except what might be called the equity of settlement, until the declaratory statement has been filed. Nor does the time (five years) begin to run until such statement has been filed. The occupant has gained nothing up to that time except that his possessory right while in occnpation is good as against any outsider who is seeking to hold in the same way. The Government has a right to appropriate snch possessory holdings to its own special use at any time, and it may do this without giving the occupant the foundation of any claim whatever. Thus, when Congress granted to certain railroads tracts of public lands, no notice was taken of that class of settlers who were merely occupying pnblic land without having filed any pre-emption or homestead declaration. They were compelled either to buy of the railroad at the rates fixed by the company, which ranged from $2.50 to $10, or, being on the even sections within the lines, they could only buy of the Government at the maximum rate of $2.50 an acre. There were many men in this predicament who had been cultivating farms for 10 years or more. Some of them had never had an opportunity to file declarations because no surveys had been made. But in a majority of cases the failure resulted from sheer carelessness.

And this leads us to note another fact. There are now lying in the District Land Office of this city 1,200 patents for lands, mostly for farms. Every one of these patents ought to be taken out and recorded in the several counties where the land is situated, at once. Some of the owners probably do not know that their patents are there. But more do know; and they have been content to let them remain there, because heretofore public land was not subject to a State tax. The owner of the patent was therefore content to have his patent quietly tucked away, so long as he could escape taxation.

Hundreds have avoided paying taxes this way. But now the law with respect to taxation is changed. Possessory rights are now taxed, having a real, tangible property valuation. Besides, many of the County Assessors have adopted the plan of sending to the district land officcs to inquire if land-holders have patents there, and, these being found, the assessment is laid precisely as if the patent had been recorded in the county records; that is, more than the possessory valuation is put upon the property. There is now, therefore, no gain in witholding patents from record; but the risks are run on many, and ought not to be encountered by any prudent land-holder.

We go beyond the inquiries of a "Subscriber" to meet others, and summarize the following facts: There are two classes of public lands—one designated as minimum, rated at $1.25 an acre; the other, designated as double minimum, rating at $2.50. Title may be acquired in four ways, viz: by purchase at public sale, by private entry, by pre-emption, and under the Homestead Act. The first two ways are almost inoperative in Californiа, because no public sales are now made except now and then a "reservation," and the land heretofore marked "offered" has nearly all been takeu up which has any value. Payments may be made for public lands in land warrants, but those warrants will only be rated at $1.25 an acre; all excess, as in the cases of a double minimum must be paid for in cash (greenbacks of course). The total fees to be paid in acquiring a homestead title amount to $22. The fees for locating on a land warrant—160 acres—amount to $4, not including the fees for filing a pre-emptiou declaration. Agrioultural college script may be used to locate public lands subject to private entry in nearly the same manner as soldiers' land warrauts. But in the case of the former only three sections can be taken in any one township of land. If a settler, having made his declaratory statement, aud being a *bona fide* resident of the laud, should die, his executor, administrator, or heirs can proceed to perfect the title; the entry in that case, being made in the name of the heirs, the patent will be issued to them.



LE BLANC'S WATER-WHEEL AND PRESSURE REGULATOR.

A Band of ewes of the Spanish merino blood, belonging to Mr. Put Smith, near Walla Walla, was recently sheared, and their fleeces averaged fourteen pounds and four ounces. Twenty-three bucks, of the same baud, sheared at the same time, averaged seventeen pounds and four ounces apiece. Nearly all the bucks were yearliugs. The bucks and the ewos have recently been brought, first from Vermont to Michigan; uext from Michigan to Kelton, by railroad; and next driven from Kelton to Dry creek, a distance of 600 miles.

A combined header and thresher is being built at Modesto, and will be finished in a few days. It is stated by tho inventor, Mr. Rice, that the entire management of the machine can he done hy three men, and that 25 to 30 acres a day can be cut and threshed by it.

The Eucalyptus.

The growth of the Eucalyptus is declared to be almost fabulously rapid; but even this term fails to convey an adequate idea of the rate at which the interest in this tree has grown in the public mind. And as popnlar manias are represented at Washington—with some other failings of the American people—we find that the Eucalyptus tree has taken root there. A firm in San Francisco recently received an order from Goverument for a large quantity of the seed of this tree. A portion of the order has already been filled, from an invoice received a few days since per ship "Tartar." For the balance Uncle Sam will be compelled to wait awhile; until San Francisco can catch another "Tartar," or some other ship from Australia.

The avowed object of Government in ordering this seed, is to plant the Eucalyptus in places where miasma prevails to an extent that almost unfits them for dwelling places for man, but where it is necessary that we should maintain military posts. In this far-sighted provision for the health of our soldiers, Government has acted considerately, and wo think wisely; for although the prevailing estimate of the power of the Eucalyptus in dispelling fever has itself become almost a fever, its claims in this respect are admitted by those whose heads are not turned by anything sensational. Whatever may be the effect of the Eucalyptus trees on the health of the posts where Government plants them, the country will receive a large return in valuable timber; the value increasing as the time of the return is deferred.

We would take this occasion to put the public on their guard against plantiug seed from the Eucalyptus grown in California. They will not germinate. The tree produces seed in abnndance here. We have at the present time some of them in the office of the Press. They are all right as far as appearance goes; but those who are well posted in the matter, and could make money from the sale of them were they so disposed, dcclare that they are valueless. Use none but imported seed.

We give below a portion of an article from the *Evening Post* on the value of the wood of the Eucalyptus tree. The article was contributed to the *Post* by Charles J. Fox of San Francisco, and contains much valuable and interesting information. "There are worthless species of the gum tree and there are valuable ones. There are some (the South Australian stringy bark, for instance), which rot under ground as easily as our redwood, and there are others which will stand intact for a quarter of a century; aud while farmers and others in California are planting gum trees, it behooves them to make a proper selection.

The Jarrah, or Mahogany, of West Australia (a species of Eucalyptus), has a world-wide reputation for durability, and very justly so, for I have seen a jarrah bridge pile, after 25 years' service, taken up as sound as the day it was driven. The surface of the same pile was planed and polished and exhibited at the last World's Fair in London. I have noticed that the musenms of the other Australian colonies make a poiut of placing specimens of the jarrah in a prominent position, with incontestible proof that it resists the ravages of the teredo, is impervious to the white ant, and possesses death-dealing properties to all insects that infest and destroy timber.

Jarrah is one of West Australia's chief items of export. The other colonies have discovered and appreciate its valne for wharf and shipbuilding purposes; and India rejoices in the fact that where heretofore all its railway sleepers have succumbed to insects, the insects now succumb to jarrah sleepers.

This jarrah is a dark-colored wood, somewhat resembliug rosewood, and is hard, heavy and close-grained. It is adapted to all purposes, and is never complained of in any way except by carpenters, who say that the wood is so hard as to induce the belief that it was never intended to be worked up.

Well, what I started in to say is, that while our people in Californiа are setting out gum trees in such large quantities, they should plant none but the best species. By-and-by there will he a demand in this State for durable timber for fencing and other purposes, and many who are now planting Australian gum trees will then be astonished to find that their timber is of no use for durability, and will make but very indifferent firewood.

I am inclined to believe that all the species of eucalyptus which are now in this State came from the colonies of Victoria and New South Wales, which colonies acknowledge the superiority of the West Australian mahogany to any of their native timbers by importing it from West Australia.

The jarrah, I have not the slightest doubt, will flourish as luxuriantly here as any other species, and the seed can be obtained as cheaply and in as great a quantity as that of any other variety; but I suppose it will be found necessary to import it from West Australia.

I have no axe to grind in this matter, and am actuated only by a desire to give a little information upon a subject that may possibly prove of more importance in this State than is now supposed."

The army worm has appeared in the vicinity of Woodland, Yolo county, and a letter received from an interested party in that locality states that the clover-tops are being eaten by the worm as fast as they appear.

Miscellaneous.

Spontaneous Combustion.

In a paper on the "Ignition of Cotton by Saturation with Fatty Oils," Mr. Galletly communicates some information confirmatory of the generally received popular opinion regarding the spontaneous kindling of cotton and other open combustible substances which may happen to have imbibed animal or vegetable fatty oils. The apparatus employed consisted simply of a box, in which the cotton saturated with the oily substances was placed, and the temperature then gradually raised in some cases to 130 deg. Fah., the temperature which a body acquires by lying exposed to the vertical rays of the sun; and in others to 170 deg. Fah., about the heat attained in the neighborhood of a steam-pipe, a heated flue, or in front of an open fire. With boiled linseed oil the author found that shortly after the material had reached the temperature of his warm chamber, 170 deg., the thermometer began to rise—from 5 deg. to 10 deg. every few minutes—so that in 75 minutes from the time the box was placed in the chamber, the heat indicated was 350 deg. Fah. At this point, smoke issuing from the box indicated that the cotton was in a state of active combustion; and on returning it to the free access of the air, it burst into flames. In another similar experiment, the temperature rose more slowly, but reached 280 deg. Fah. in 105 minutes, when, from the appearance of smoke, it was plain that the cotton was burning; and the whole mass was soon in a flame on being placed in a current of air. Raw linseed oil was found not to cause ignition of cotton so readily as the boiled oil, but under conditions similar to those of the above described experiments, active combustion was going on in one case in four, and in another five hours. With rape oil under the conditions of the first experiment, the result was that the box and contents were found in ashes in ten hours—the box being put up at night, the result was only observed in the morning. Olive oil caused active combustion within five or six hours. With castor oil the contents only charred on the second day of the experiment. Lard oil, specific gravity .916, produced rapid combustion in four hours. Seal oil, specific gravity .928, the same result in 100 minutes. Sperm oil gave negative results. The author, as the result of his work, advances the opinion, from a comparison of raw linseed with lard and seal oils, that the statement is not altogether correct that "drying oils are more liable to spontaneous combustion than non-drying oils; and that the rate at which oxidation takes place does not depend chiefly on the presence of small quantities of putrifiable matters, but rather upon the particular olein or liquid fat they contain." The results of the experimental trials are stated to have been remarkably uniform. The author states that the ignition of cotton can be calculated on for any oil with the same certainty as the point at which sulphur or other combustible matter inflames in air. The heavy oils from coal and shale were found to effectually check the phenomenon above described; for when mixed with the oils above named they gave no indications of heating whatever at 170 deg. Fah.

Preservation of Timber.—Various recipes for this purpose have at different times been given, such as saturating the wood with metallic salts, coating with linseed oil and charcoal, charring, etc. When carefully applied to timber that has previously been properly prepared, these plans answer very well; but in the hands of ordinary builders, farmers and householders, they fail in nine cases out of ten, the objects to which they are chiefly applied being posts sunk in the ground. To such objects the old system of charring is frequently applied, but does not always prove effective, especially where the wood is saturated with sap. It has been found, however, that if posts be slightly charred on the surface, and then coated with hot coal-tar, they will not decay for many years. The tar must be hot, and applied to the freshly charred hot timber, otherwise it will not penetrate the pores, and failure will be the result. Merely charring a stick of wood, or painting it with coal-tar, will not preserve it; but when the two are combined, as we have directed, posts seem to last indefinitely.—*Industrial Monthly.*

The *Cultivator* gives the following recipe for making fire and water-proof paint: Slack stone lime by putting into a tub, covered to keep in the steam; when slacked, pass the powder through a fine sieve, and to every six quarts add a quart of rock salt and a gallon of water; then boil and skim clear; to every five gallons of the liquid add pulverized alum one pound, pulverized copperas half pound, and stir slowly; add powdered potash, three-quarters of a pound, then very fine sand or hickory ashes, four pounds; then use any coloring matter desired, and apply with a brush. It looks better than any ordinary paint, and is durable as slate; will stop small leaks in roofs, prevent moss for growing thereon, make it incombustible and render brick impervious to water.

Starch.—Correspondents ask what is put in starch to give the shirt bosoms a gloss. A piece of paraffin or white wax, about the size of a hickory nut, in each bowl of starch. The managers of one large shirt factory, however, assure us that they produce the polish by the skillful use of the sad iron only.—*Sci. Am.*

Velocity of Nervous Impulses.

However slow the rate of nervous movement may be, as compared with the velocity of light or the still fleeter motion of electricity, it is nevertheless so rapid that until quite recently it was thought to be immeasurable, within the limited range in which our observation of it is possible. The most widely separated points in the course of any nerve allow but a few feet of difference at best for timing the periods of sensation or volition; and the nervous impulse travels so quickly that such small distances would seem to be wholly annihilated. To our consciousness a prick on the great toe is discovered as promptly as one on the cheek; and it is only by the intervention of the most delicate and ingenious of mechanical contrivances that the difference in time is made apparent.

In all the early experiments on motor nerves, the leg of a frog had been used. In 1867, Baxt and Helmholtz applied the test to man, using an improvement of the myographicon suggested by Du Bois Raymond. The result gave the rate of conduction for the motor nerves of man, corresponding to that already obtained by Hirsch for the sensory nerves. A very careful series of experiments by the same observers, in the summer of 1869, showed a mean rapidity for the motor nerves in man very much greater, or about 254 feet a second.

The measurement of the rate at which the nervous impulse travels brainward necessarily involves a process very different from any employed in the study of motor nerves. The problem was first attacked by the Swiss astronomer, Dr. Hirsch, soon after Helmholtz took up the other branch of the investigation, and his solution of it was as ingenious as it was successful. It involved the measurement, with the delicate chronometric instruments employed by astronomers, of the difference in time between the appreciation of impressions made at a distance from the brain, say on the great toe, and others nearer, as on the cheek. Roughly described, the plan adopted was substantially this: The observer sat with his finger on a signal key, with which he announced the perception of an electric shock as soon as possible after feeling it, thus closing an electric circuit which had been broken by the shock. The minute interval between the breaking and closing of the circuit measured the time taken by the transmission of the shock to the brain, the time required for the perception of the sensation, time for willing the movement of the signal key, time for the transmission of this volition to the proper muscles, time for the contraction of the muscles, and finally the time lost in the physical process of signaling. Obviously all these parts, except the first, must be substantially the same in all experiments by the same person, using the same finger for making the signal. Any difference in the whole time must therefore be owing to the greater or smaller distance of the particular point of impression from the brain. This difference being measured with tolerable exactness, it is possible to calculate pretty closely the rate at which the nervous impulse is transmitted. The estimate first made by Dr. Hirsch was, as already noted, 111 feet a second. More recent determinations give averages ranging from 97 feet, by Dr. Schleske, to 136 feet, Wittich's estimate for a nervous impulse excited by electricity. With a mechanical stimulus, he found an average velocity of 124 feet. These figures, of course, are to be taken relatively. The rate varies in different individuals, and, doubtless, in the same individual, with varying conditions of health, temperature, and so on, the general average being about that of a high wind, a race horse, or a locomotive. Light excels it about ten million times, and electricity more than fifteen million times.—*Scientific American.*

Photography at the Bottom of the Sea.—Neumayer recently exhibited to the Berlin Geographical Society a photographic apparatus designed for the determination of the temperature and of the currents at great depths in the ocean. The invention is composed of a copper box, hermetically sealed and furnished with an exterior appendix, made like a rudder. In the interior is a mercury thermometer and a compass, each enclosed in a glass receptacle, in which are admitted traces of nitrogen gas. A small electric battery completes the apparatus. When the latter is allowed to descend, attached to a sounding line, the action of the current on its rudder causes it to assume a parallel direction, thus indicating the set of the flow by the relative position of the compass, needle and rudder. The thermometer, of course, shows the surrounding temperature. In order to fix these indications, a piece of photographic paper is suitably disposed near the glass cases containing the instruments. Then at the proper time a current of electricity is established through the gas in the receptacles, causing an intense violet light, capable of acting chemically upon the paper for a sufficient length of time to allow of the photography thereon of the shadows of the compass needle and of the mercury column. Within three minutes, it is said, the operation is complete, when the apparatus is hoisted and the paper removed.

Delicate galvanometers should never be kept in the field of permanent magnets, unless, as in the case of the mariner's compass, they are free to move in the direction of the lines of forces of the magnetic field in which they lie, otherwise they will quickly lose their magnetism.

Thallium in minerals may be detected by the spectroscope, when present in the proportion of 1 to 500,000.

Watches.

Nelthropp, in his "Trestise on Watch-work," laments that even educated men know but little of the handy machines they carry in their pockets. Most people know a watch when they see it—this they cannot fail to do; but as to distinguishing between a lever and a horizontal, still less a "verge," they are profoundly ignorant. Even in the matter of identifying a "compensation" balance, the average bearer of a watch is deficient, as is proved by the number of imitations abroad, which to the cursory observer present all the appearance of the genuine article. Mr. Nelthropp says truly that the owner of a watch ought not to be satisfied unless he knows enough about its working and construction to intelligently appreciate the really scientific workman—if he finds him—into whose hands he commits his little machine for repair. Further than this, there are many minor things about watches that ought to be known by ordinary people, which will enable them to care for their timekeepers in an intelligent manner. For instance, more watches are spoilt by hasty and irregular winding-up than by most other causes, and a thoughtful man ought to discover for himself that our author's advice on the subject is sound. A watch, he says, is much like a child, requiring uniform treatment, "that is to say plainly, not over-indulged to-day, neglected to-morrow." Winding-up should be performed regularly, with a steady and uniform motion, not moving both hands, and nearly as possible at the same hour daily. A watch should always be kept at the same temperature as nearly as possible. Left overnight on a stone mantelpiece, it is sure to gain, or if the oil gets thickened, it may stop, to be started again by the warmth of the pocket. The regulator is too often viewed as an appendage more to be looked at with wonder than to be used, while the persons who can explain the theory of its action are few in the extreme. Yet the task of learning enough about a watch to become capable of talking intelligently about it, and exercising the control over a "jobber" which that knowledge is certain to give, is but slight, and it ought to be reckoned as blameworthy to be ignorant about one's watch as to know nothing of the merits of one's boots or clothing. Mr. Nelthropp gives to the uninitiated a few hints as to the purchase of a watch which are worth reproducing. The case, be it gold or silver, should be correctly made and of fair thickness; the hinges close and smooth; the glass well fitted; the dial of clear, bright enamel; the seconds sunk, and the whole of good weight when held in the hand. When the dome is opened—for it is better that a watch-case should be so made, though more expensive—the brass-work should look well-finished, the edges smoothed off, the steel of a diamond-like polish, the jewels pale in color, but of a fine, clear luster; the action of the spiral spring should be even, when the watch is set going.

The N. Y. *Herald's* new press has attracted much attention among printers and engineers. The dimensions of this machine are as follows: Length, 11 feet; width, 7 feet; length of cylinders, six feet; diameter of main cylinder, five feet; weight, 15 tons. It is furnished with four flys, which enable it to dispose of the sheets as fast as the press can print them. The main feature of this machine is that the roll of paper is taken from the top of the cylinder and fixed on uprights at the back of the press, connected with the cylinder by means of a roller; the cutting of the paper is done *after* instead of *before* printing, the cutting cylinder being in the rear instead of the front of the machine, doing away with cams, grippers and tapes for carrying the cut sheets from one cylinder to another, and by this means obtaining a higher rate of speed. Compared with the Hoe ten-cylinder, the labor-saving is immense, when we consider that it takes 15 men to work it effectively, while the Bullock—the new press—requires the attendance of but three, and the saving in expense of running is averaged at $18,000 a year—almost the cost of the Bullock press.

New Mechanical Cutter-Out.—A firm of Glasgow ready-made clothiers have just introduced a new machine for cutting out garments which will be the means of saving much labor. The "band machine," generally in use for cutting out shirts and other articles is ill adapted for cutting out heavy garments, some more expeditious tool being needed. In the Warth machine the scissors action is substituted for the revolving blade. A piece of steel about an inch and a-half long descends upon a slot, and thus cuts its way when propelled by steam at the rate of 700 "snips" a minute, covering at the same time over two yards of material.

Paper from Jute.—The Dundee *Advertiser* has been printed on paper made entirely from Calcutta jute cuttings. The *Advertiser's* opinion of the paper is as follows: "It is an excellent paper, but not quite so bright in color as we could have wished, more resembling the color of paper supplied to print second-class books. We intend trying again to have a parcel of paper made of a good, bright color. The paper we have made is, however, very tough, splendid in every particular for the newspaper trade."

The Preece block system of electric railway signalizing is working on the principle that the trains are to be kept a certain unvarying distance apart. No train can advance until the signal is given that the line for the specific distance ahead is absolutely clear.

Zincing Iron.

The following is an excellent and cheap method for protecting from rust iron articles exposed to the atmosphere: They are to be first cleansed by placing them in open wooden vessels, in water containing three-fourths to one per cent. of common sulphuric acid, and allowed to remain in it until the surface appears clean, or may be rendered so by scouring with a rag or wet sand. According to the amount of acid, this may require from six to twenty-four hours. Fresh acid must be added according to the extent of use and of the liquid; when this is saturated with sulphate of iron, it must be renewed. After removal from this bath, the articles are rinsed in fresh water, and scoured until they acquire a clean metallic surface, and then kept in water in which a little slaked lime has been stirred, until the next operation. When thus freed from rust, they are to be coated with a thin film of zinc, while cold, by means of chloride of zinc, which may be made by filling a glazed earthen vessel, of about two-thirds gallons capacity, three-fourths full of muriatic acid, and adding zinc clippings until effervescence ceases. The liquid is then to be turned off from the undissolved zinc, and preserved in a glass vessel. For use, it is poured into a sheet-zinc vessel, of suitable size and shape for the objects, and about 1.30 per cent. of its weight of finely-powdered sal ammoniac added. The articles are then immersed in it, a scum of fine bubbles forming on the surface in from one to two minutes, indicative of the completion of the operation. The articles are next drained, so that the excess may flow back into the vessel. The iron articles thus coated with a fine film of zinc are placed on clean sheet-iron, heated from beneath, and perfectly dried, and then dipped piece by piece, by means of tongs, into very hot (though not glowing) molten zinc, for a short time, until they acquire the temperature of the zinc. They are then removed and beaten, to cause the excess of zinc to fall off. —*Technologist.*

Water-proofing Leather.—Two recipes are given in the *Artisan*: 1. Melt together beef tallow four ounces, rosin one ounce, and beeswax one ounce, and when nearly cooled solid add as much neat's-foot oil as the above mixture measures. It is to be applied with a soft rag to both soles and uppers. The leather should be warmed meanwhile before a fire, and the application well rubbed in. It requires two applications to make the leather thoroughly water-proof. 2. Dissolve three-quarters of an ounce of paraffine in a pint of lard oil. The best quality of oil should be used. It will be necessary to heat the oil in order to dissolve the paraffine. This solution may be rubbed on boots once a month, and it is said to render them perfectly water-tight, at the same time that it does not interfere with the blacking. If the solution is found to make the leather too stiff the amount of paraffine in proportion to the oil should be reduced.

To Polish Brass.—Rub the metal with rotten-stone and sweet oil, then rub off with a piece of cotton flannel, and polish with soft leather. A solution of oxalic acid rubbed over tarnished brass soon removes the tarnish, rendering the metal bright. The acid must be washed off with water, and the brass rubbed with whiting and soft leather. A mixture of muriatic acid and alum dissolved in water imparts a golden color to brass articles that are steeped in it for a few seconds.—*Jour. of Chemistry.*

The following composition is highly recommended as a varnish for wicker-work: One part of good linseed oil is boiled down to a syrupy consistence, and mixed with 20 parts of copal, or some other rich lac. This mass is then diluted with oil of turpentine to the proper thickness. The varnish dries easily, and remains sufficiently elastic to stand, without cracking, the bending of the baskets, etc.

Wax for Floors.—Heat 5 ounces of pearl-ash, 25 ounces of wax, and 20 ounces of water together, stiring it frequently until a thick mass results, from which water does not separate on standing a short time. Then add from a pint to a pint and a half of boiling water, with constant stirring. This may be colored if desired. It may be applied with a woolen rag, and thoroughly rubbed in.

A fibrous bark of the sugar palm proves to be a good substitute for bristles and animal and human hair. The treatment is simple. The bark is first immersed in water and boiled for some time in an alkaline solution; the fibers are then soaked in an emulsion of fat, alkali and water for about twelve hours, after which time they are sufficiently hard and elastic for the above-named use.

Coloring Veneers.—Raw veneers become soft and leathery after soaking for half an hour in a ten per cent. solution of caustic soda, and thorough washing; the color is then applied, and penetrates throughout the whole. After the staining is completed, the veneers must be dried between paste-boards.

Carbolic acid will arrest mouldiness and decomposition in hides, tanning liquors, etc. When applied to leather, not only is no injury done, but even improvement in the quality results, the leather becoming more soft and supple.

The Horse.

Itching Manes and Tails.

Nearly every day I see horses with manes and tails injured by rubbing. From my first experience with horses, I have been more or less troubled by their rubbing these parts, generally during warm weather. I have carefully noted the inquiries and answers in the *Rural New-Yorker* concerning horses, and am not surprised to find on this subject, as on every other, a great diversity of opinion. Some of the remedies given in the *Rural* for itching manes and tails are good. Judging from my own experience, I think I have a better one. It is better for the reason that it is cheap, always at hand, easy to be applied to the diseased parts, and in its well tried efficacy. Without attempting to convince the reader of the cause of itching manes and tails, or to persuade those who believe no remedy is good, without it is a compound of many ingredients difficult to obtain and more difficult to apply, I give the remedy and the manner of its application, and verily believe that many a horse owner will be pleased with the result when he has tried its merits.

Take common kerosene and put it in a spring bottom tin can, such as can be found in the tool box of every mowing or reaping machine, on any carpenter's bench, or at any hardware store; take the itching tail in one hand and raise it by the long hair, so that the small end of the dock will lie the highest; then squirt the kerosene on the end of the dock. In a very brief time it will spread evenly all over the tail. Then part the mane, if also diseased, and put the kerosene along the whole length. A small quantity will do, as it spreads readily and will reach every spot. The kerosene will dry off in a day or two and will do no harm, even if the parts are not washed. This, however, all careful horsemen will do as a matter of neatness, though it is not necessary, and the tail will look no worse than if no application had been made. One or two applications were in every case, in my experience, either cured, or at least been attended with very satisfactory results.—*Cor. Rural New-Yorker.*

Treatment of Colts.

Colts should be handled when quite young; better commence at once with them, and teach them to expect nothing but kindness at your hands. Don't try to "break them," as the saying is, but patiently *teach* them what is expected of them—above all, let them repose confidence in you, that they may trust you and love you, instead of standing in constant fear and dread of you. Have a pet name for them; they like it. Let them hear your voice—the more the better, so that it is gentle. Give them frequently some little tit-bits from your hand—a piece of potato, apple, carrot, or anything that is wholesome for them, and which they like. They will very soon learn to follow you, come at your call, etc.

It is astonishing how much you can teach young horses if you are firm, gentle and patient with them. Control your own temper always, and you can the better control theirs. Don't fool with them or teach them tricks, which may be pretty when young, but grow to viciousness in age. When you groom them do it with care; never bear on too hard, especially when cleaning over the cords or joints. Always afford them a comfortable shelter. It is all nonsense talking about toughening colts by exposing them to bad weather, coarse, tainted food, and other privations. It is a good way to *stunt* them, but not to improve them. See that good water is always accessible to them. Don't ask of them what they *cannot* perform. Don't over-feed.

Practice the above, and if there is any good blood in your foal, you will be liable to raise a valuable horse.—*Exchange.*

Advance in Horses.—A Canada paper says: "We recollect very well that when railroads were first being built in the interior of New England, farmers thought that horse-raising would no longer be profitable, and many breeders of our acquaintance acted on this belief, and either raised no colts at all, or much less than they had formerly done. Everybody knows these fears were not realized. Horses have been in great demand and prices have been much higher since the completion of railroads than before. The same appears to have been the case in England, as it is stated that the London General Omnibus company has purchased 22,026 horses in the last twelve years. From 1861 to 1870, the average price was about $120 each. In 1871 the average price was $140, and in 1872 nearly $165. Until 1870 the needed supplies were easily obtained in England and Scotland. For eighteen months past nearly all the horses bought have been purchased in France.

Liquefying Gases.—M. Mellens saturates charcoal with an amount of chlorine whose weight will be equal to that of the charcoal, places it in one limb of a V-shaped tube, sealing both extremities thereof, and applies boiling water to this limb, causing the volatilized chlorine to rise in the other limb, when, under the pressure produced, it may be liquefied by dipping the latter limb in a freezing mixture. He liquefies ammonia, sulphurous, hydro-sulphuric and hydro-bromic acids, chloride of ethyl and cyanogen in the same manner.

The Apiary.

The Habits of Bees and Wasps.

At a recent meeting of the Linnæan Society, Sir John Lubbock, M. P., F. R. S., read a paper on the habits of bees and wasps, more especially on their power of communicating information to one another. Although Kirby and Spence have given an interesting collection of anecdotes about the instinct of insects, they refer to no experiments as authorities for the correctness of their statements. Sir John Lubbock has made a long series of patient observations on bees and wasps about his own grounds and his own study. He marked a number of insects with different colored paints, selecting the moment when they were most intently feeding for this operation. By giving up whole days to his observations, and keeping a systematic record of the egress and ingress of his marked bees to and from the hive, and the time each spent on the honey he had placed for them, he has been enabled to collect a vast number of facts about the daily life of each bee, on which interesting generalizations can be based. On an average a bee will make five excursions in the hour from its hive, in search of honey. There seems no reason to believe, as has been formerly supposed, that bees have the power of communicating to one another intelligence as to the locality of food; and, indeed, they seem to have so little intelligence in finding their way about, that when bees visited a supply of honey put in a fresh place, they often did not revisit it. When once they became familiarized with a spot where honey was placed, they visited it with great regularity. Many popular ideas about bees are, Sir John believes, without any foundation. The sounding of frying-pans and fire-irons at the time of swarming is probably based only on superstition, for there is no proof bees can hear. Sounds from violins, tuning-forks, etc., failed to produce any effects. They distinguish color, as this experiment shows. A number of different colored glasses were "baited" with honey, and at each return from the hive the bee selected the glass it had visited before, though their relative position were often changed. They seem to have but little cunning in finding their way about, and a bee placed in a glass ball 18 inches long, with the mouth 6½ inches wide, tried for more than an hour to get out at the closed end, because that was turned towards the light, without ever attempting to escape by the open end. A number of most interesting details were recorded and Sir John hopes to continue his observations during the coming summer. If his example is followed by other apiarists, we shall soon have well-established facts supplying the place of vague traditions about the social hymenoptera.—*Exchange.*

Shaking Bees from Combs.—Mr. J. M. Marven, in the *American Bee Journal*, gives the following way to prevent irritating bees, in brushing from the combs, in subdividing: Use more care in subduing bees, in long, deep or large hives. It is generally best to manage hives, extracting honey, making swarms, etc., during a yield of honey, and before it is sealed with wax, that all the bees may fill their sacs with honey; which they will do if there is enough uncapped, and they are distributed properly. If the honey is not in a fit condition, or of sufficient quantity, food may be given to subdue the most vicious stock. The brush is one or more grape or plantain leaves rolled loosely, sometimes the end trimmed. Weeds, grass, broom, feathers or brushes may be used; and if the articles are scarce, or only one at hand, dip occasionally in water to wash off the odor, which enrages badly managed bees. Use the old-fashioned, native or black bees, with your deep frames, that drop off the comb like shot off a shingle, at the least handling.

Bee Houses vs. Hives.—Bees can and have been kept successfully in bee-houses, or large apartments; but we have yet to learn that they have been so kept with profit, in a money point of view. Occasionally, wild swarms have been found in clefts of rocks and other natural situations having much space, which have contained, according to newspaper accounts, large, amounts of honey. In the first place, the so-called bee-houses are altogether impracticable, because the bees cannot be ecomically handled. They do not swarm, and, if they keep healthy, they cease, after a time, to store honey. The best plan is to adopt some one of the movable frame hives, enabling you to keep the bees perfectly under control. Then you can examine and separate the swarms at will, or transfer combs; can arrange for cap honey; in short, can manage the swarms pretty much as you would other domestic stock.

Always have the cheerful rays of the morning sun fall upon your hives; but contrive to throw a shade upon their front for a few hours in the middle of the day, when the weather is very hot. Such a shade will be grateful to your bees.—*Nutt.*

Box honey, when removed from the hive, must be put in a cool, dry, dark place.—*Bee-Keepers' Magazine.*

Abbe Fiehol has recently constructed a new battery, using a Spanish mineral, which is probably a kind of pyrites. The battery is constant, and it has been found that, after 18 months' continuous use, it operates as well as when first employed.

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San Francisco, Cal., May 26th, 1874.

Leonard L. Treadwell,
Jas. F. Place,
Wm. O. M. Berry.

STATE OF CALIFORNIA,
CITY AND COUNTY OF SAN FRANCISCO.

On this May 27th, 1874, before me Henry C. Blake, a Notary Public, in and for said city and county, personally appeared Leonard L. Treadwell, James F. Place and William O. M. Berry, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

HENRY C. BLAKE, *Notary Public.*

Filed May 1st, 1874.
WM. HARNEY, County Clerk,
By S. O. ELLIS, Deputy.

jy4-4w

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Agricultural Notes.

BUTTE.

The Look-out.—Northern *Enterprise*, July 18: Our harvest has been superabundant—stacks of wheat dotting the whole face of the country, and granaries and warehouses filled to their utmost capacity furnish unmistakable evidence that not only will we have enough of the "staff of life" to minister to our wants, but that large supply can be made to the markets of the world. Our crop has not only been abundant, but it is of the best quality. Neither rains, winds, nor frosts have brought damage, but so genial has been their influence that they have been instrumental in producing perfect grain, plump and full. The grain-buyer, this year, cannot plead smut, shrunken or impure grain, for in every essential it is perfect, and well fitted to answer any of the purposes to which it is applied. Our orchards and vineyards also exhibit their abundance, and in all the years of fruit-growing there never has been one of larger yield, thereby bringing down the market price within the reach of the poorest. The stock interests of the country present a most encouraging aspect. Notwithstanding that some of our stock-men lost heavily from their mountain bands last winter, it would seem that the price has increased to more than make up for all loss, and at present our county can show extensive wealth in this line, and wherever it can be seen it is fat, healthy, and in good condition for market. The wool product of the county has gone beyond that of former years, and in quality is much superior, commanding the highest price.

COLUSA.

Bear in the Coast Range.—Colusa *Sun*, July 18: We are informed that several of our wool growers, who have taken their sheep to the coast range, have suffered severely from the inroads of bear of late. Old Bruin likes mutton, and his visits to the flock are of too frequent a character to meet with the approbation of the herder.

CONTRA COSTA.

The Turn-Out.—Contra Costa *Gazette*, July 18: Some threshing has been done about Bay Point and in Diablo valley during the week, and the yield is rather better in most instances than was expected.

FRESNO.

Good Corn Prospect.—Napa *Register*, July 18: A. Y. Easterby, of Napa City, who is farming in Fresno county, planted on his land this year a patch of corn with a view to test the ability of the crop to withstand the drought of summer. The experiment has culminated successfully. The stalks are now from seven to eight feet in hight, and filled with good sized ears. The general complaint in that section has been that the cool nights set the corn back; but where cotton succeeds, it would seem that corn should do well, other things being equal.

KERN.

Hay.—*Southern Californian*, July 18: Never, since the first settlement of our county, has our valley furnished such a bountiful harvest of hay. The gathering of alfalfa begins in May and ends in November. About ten tons per acre are cut each year, which sold the last season, loose on the ground, at $10 per ton. In the winter the ruling price was $20 per ton, baled. The present season there is a great abundance, but the demand promises to be correspondingly large. The farms of the lower settlement have been very productive, but the whole product will be required to furnish the new farmers who are to begin the coming season. Every pound will be required, and will be called for at the farms, without the expense of moving by the producer. Very little grain has been cut for hay, except such as was sown with the alfalfa. Some fields of wheat will yield 40 bushels per acre, and barley 40 to 50 bushels. Wheat grows the best crop where alkali is strongest. None but the Norway oat was sown the last year, its production having proved exceedingly profitable, and it being the only oat seed to be had on the island. Threshing will soon be done, and we shall be able to give the yield of Norway oats per acre.

LAKE.

From Lower Lake.—Lake County *Bee*, July 18: The crops are coming in, and are generally heavier and in greater quantity than ever before. The demand also for hay and grain will be greater this year than in any preceding.

LOS ANGELES.

Tobacco.—Los Angeles *Express*, July 18: Dr. Howard informs us that the tobacco plants at Agricultural Park have grown much better than he anticipated. They are now breast high and fully matured. He will commence cutting the crop this week, and will cure this growth himself, independent of the patent process. There are eight varieties of tobacco altogether in the patch, as follows: Florida, Virginia, Orouoco, Latikia or Turkish, Connecticut seed, and two kinds of Havana. The company are now certain of two crops this year, and believe that they will secure three. There is but little doubt now that this experiment will inaugurate another successful and important industry in Los Angeles. The company have erected a temporary curing-house near the grounds, and they intend, as soon as they shall have satisfied themselves, from the present experiment, of their ability to raise a good brand of tobacco here, to go extensively into the business. They will establish permanent curing-houses, as well as factories for the manufacture of cigars and the preparation of chewing and smoking tobaccos.

Harvesting.—The farmers are all busily engaged harvesting, and the grain crop is so heavy as to tax the best energies of our husbandmen. The crop is much more voluminous than was anticipated, as many fields of grain are suffering for the want of machinery equal to the great capacity of the growth. It is hardly necessary to repeat that we hear of absolutely nothing but good word from the farmers. The fruit crop now in and maturing is in excellent condition. Figs, apricots and nectarines, and the berries are on sale at our fruit stores, and the plum family will soon be ready for the table. Fruit-growers look forward to an excellent season in every variety. We are giving the market an excellent variety of apricots this year, larger and more luscious in many cases than before. The reports that reach us from the southern end of the county, especially from the new settlements, are all very satisfactory as to the improvement in the fruit undertaking. In the vicinity of Richland the fruits are growing finely.

MERCED.

The Product.—San Joaquin valley *Argus*, July 18: Mr. Adam Kahl, a farmer residing on Mariposa creek, measured the product of one field of grain upon his farm this season, from the thresher, which was winter plowed and sowed, and the result was a fraction over 20 bushels per acre. A great proportion of his crop was volunteer, all of which was cut and turned out pretty well. He has summer-plowed this season 1,700 acres, which he inteuds to put in grain as soon as the fall rains commence, and gives it as his opinion that good cultivation and summer-fallowing the land will ensure reasonably good crops every season. Mr. Kahl also informs us that Mr. Twichell will ship this year from Deadman's creek about 40,000 sacks, and that the Dunham Bros., adjoining Twichell, will ship about 20,000 sacks, all of which was produced upon land never before cultivated. In that section of our county there was a large amount of new land put in cultivation this year, amountiug to many thousands of acres, and the shipment of grain from the Plainsburg Switch this season will be greatly in excess of that of any former season.

MONTEREY.

The Harvest.—Hollister *Enterprise*, July 18: The din of reapers and threshers is heard in every direction over the valley, and the bulk of the harvest has already been gathered. The average yield will exceed last year's considerably. Some crops are very heavy, and the shrinkage proves not to be as serious as was feared. The wheat and barley crops in the San Juan Valley are immense. The straw is unusually heavy, and the grain sound and plump. It is estimated the yield in this section will be three times greater than last season. Long teams loaded with grain are coming to town daily, depositing their burdens in the various grain depots. From present indications, farmers ought to breath easy for a spell.

A World Beater.—Monterey *Democrat*, July 18: We spoke sometime ago of the wheat growing on the Alisal rancho in terms that might have appeared somewhat extravagant. The outcome, however, is confirming the estimates then made of the quality and yield of the crop. The Pomeroy fields were seeded in Sonora, Australian and Siberian wheats, the first mentioned being the earliest of maturity. A goodly portion of the Sonora grain is now harvested and it turns out 20 sacks to the acre, a ton to the acre that is to say, or, in other words, 33 bushels and a fraction, of bright, thin-skinned grain. The latter varieties, Siberian and Australian, are more prolific and weightier than the other, and as this season nothing has interfered with their maturity, Mr. P. expects to harvest considerably more bushels from them. It will take near two months to harvest the whole, and we intend to keep the track of the farm in order to report the aggregate yield.

NEVADA.

Haying.—*Foot Hill Tidings*, July 18: Haying season is here, and farmers generally in this vicinity are making a good crop.

SAN BENITO.

Harvest Notes.—San Benito *Advance*, July 18: The harvest is proceeding very vigorously. The headers, more numerously than ever before, are gathering up the heads, and the steam threshers are all in full operation, filling up bales of sacks to the joy and pride of the farmer. In the run to San Juan this week we saw a perfect ocean of waving grain. For miles around us the golden grain presented a grand prospect of promised bread for the millions. The whole of this extensive tract is especially adapted to cultivation. The fertilizing process it has undergone for years, the natural richness and fertility of the soil, and the moist vapors constantly descending from the neighboring hills, combine to make it one of the most promising sections of the county for future farming operations on a grand scale.

SANTA CLARA.

Threshing.—Gilroy *Advocate*, July 18: The farmers in this vicinity are now very busy threshing, and new wheat will soon begin to come in. We believe the yield meets the expectations of all. A large quantity of hay has been cut in this vicinity this season, probably a larger amount than ever before, and it is now being haled, either for shipment or for local trade. Prices range from $10 to $12 per ton.

SISKIYOU.

New Hay.—Yreka *Union*, July 18: Considerable new hay has been hauled into town during the last week or 10 days. Most of it is a mixture of wheat or barley and wild oats; or wild grass of some kind; or alfalfa. But little timothy has as yet been brought into market.

SOLANO.

Crop Yield.—Benicia *Tribune*, July 18: Andrew Goodyear, an extensive rancher of Solano, thinks that wheat will turn out, acre by acre, 25 bushels; some falling short and some largely exceeding that yield. Barley is practically an experimental crop at this end of the county, although it has been cultivated so long. The present harvest promises about 30 bushels to the acre. Some of this grain has been shrunken on account of dry weather, but the above is about the average.

SONOMA.

Crops.—Sonoma *Democrat*, July 18: The wheat crop in this county will be uncommonly late, but will come up to the average of ordinary seasons. Unusually late and heavy rains in this latitude are not very favorable for wheat growing. The heads are, however, filling well, and the grain is very superior in quality. From facts gathered we think the crop will be fair, but not up to the full yield in our most favorable seasons. The fruit and wine crop will, on the contrary, be larger than ever before known in this county. The corn crop also looks well.

Grasshoppers.—Petaluma *Argus*, July 17: Grasshoppers in great numbers have made their appearance in the vicinity of Valley Ford, in this county, and fears are entertained that they will do great damage to vegetation.

SUTTER.

Deep Plowing.—Sutter *Banner*, July 18: Last week we made mention of the fact of one of our farmers, Mr. V. E. Bangs, having increased the grain yield over a portion of his farm, by the means of deep plowing, eight bushels to the acre. The experiment there made was a fair and practical test, resulting most favorably to a thorough cultivation of the soil. As a further proof of the benefits of deep plowing and thorough cultivation, we have another experiment made by Mr. C. C. Baker, on his farm a few miles below town. The land on which the trial was made is of the best of our paradise plain lands. His field is a large one, and the land that was deeply plowed is an average in character of the whole. Twenty-four acres of it were measured off, a heavy sulky plow was secured, five large American horses hitched to it, and the ground thoroughly plowed to a depth of eight or nine inches, thoroughly harrowed and sown to barley. The remainder of the field was plowed, sown and treated in the usual manner, according to the custom of farmers in this vicinity—all of whom plow with small plows ganged together. From the twenty-four acres Mr. Baker harvested 1,070 bushels of barley, or, in other words, 44½ bushels to the acre. From the remainder of the field his average was a little less than 15 bushels to the acre.

Suksville.—The crops in this vicinity are very heavy, but the labor of harvesting has been very much augmented by the condition of the grain, which was badly broken down. Many fields are cut with the mower, and even the progress of curing and stacking was retarded by the rank growth of weeds. The root crop will be late, but promises to be up to the average. Although a few farms were injured by high water, so that little was raised upon them, yet it is the opinion of the best judges that this year's crop is over an average.

VENTURA.

Prospects.—Ventura *Signal*, July 11: The corn throughout the county is looking fine. The prospect is good for the largest crop of corn ever harvested in the valley.

VISALIA.

Bermudas Grass.—Visalia *Delta*, July 16: We have heretofore called attention to a grass introduced in Visalia as a curiosity, but which no one seems as yet to have utilized. It seems to be full as hardy as our salt grass, and is free from the taint of any saline property. It remains green the whole year, withstands the drouth, and seems adapted to any kind of soil. In a climate like ours it is certainly of great value. It is said that it may be transplanted and propagated at any time of the year, by simply removing a sod. Dairymen will find it to their advantage to secure such a grass, because milch cows, in seeking green feed in the fall of the year, take to salt grass, and this gives the milk a salty or alkaline taste. We would suggest to farmers that some one give it a trial.

YUBA.

Fruit Drying.—Marysville *Appeal*, July 18: There is considerable drying and canning of fruit among the growers in this vicinity. Fruit of all kinds is so abundant and cheap that there is only this recourse left. The orchardists, though shipping extensively to San Francisco and over the mountains, are putting up large quantities in cans, or drying in the old-fashioned way by exposing cut fruit to the sun. A large drying establishment, under the Alden process, would prove of general advantage to our fruit men, and the quicker they organize and erect one the better. Very little wheat and barley are arriving in this market, the farmers being too busy with their harvesting to bring their crops in. They also probably anticipate higher rates, and therefore are in no hurry to sell. The mills, however, are supplied, and are turning out large quantities of flour and ground feed. Peach trees in this vicinity are getting so overloaded with the increasing weight of fruit that the limbs must be relieved by whipping or trimming. Where this precaution is not exercised the trees break down and are nearly ruined.

YOLO.

Harvest.—Yolo *Democrat*, July 18: Harvest has been in progress some time, and is now at the highest point of activity. Although the yield continues to promise larger than for some years past, still it will not meet the expectations of many—as I learn that some of it is shrunken.

Potato Rot.—Lovers of potatoes must be careful when they purchase the Early Rose potato this summer. They have a black rot in the center, which is undoubtedly very poisonous. But few of them are free from this rot.

John Sites, of Antelope valley, left at the office of the Colusa *Sun*, last week, a bunch of wheat which, he says, came from a single grain. There were 64 stalks in the bunch, and an average head gave 64 grains, making the enormous yield of 2,816 grains from one.

A. C. Shelton informs the Sonoma *Democrat* that the crops around Two Rocks are promising. The grain is filling well and will yield up to the average of past seasons. The hay crop is unusually large.

H. H. Cummings & Co., of Sacramento, shipped on Saturday the first car-load of Bartlett pears of the season to Chicago. Sunday they forwarded a car-load to New York.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington. D. C., July 21st, 1874.

For Week Ending July 7th, 1874.*

Mechanism for Moving Grain in the Sack.—Elisha P. Kenyon, James J. M. Clebben and John H. Ollrich, Milton, Cal.

Box for Propagating Plants.—Obed D. Milla, Watsonville, Cal.

Hay and Grain Elevator.—David Morey, Watsonville, Cal.

Stencil Plate.—Geo. M. Wood, S. F., Cal.

Medical Compound or Salve.—John P. Dyer, Pueblo, Colorado Ter.

Medical Compound or Liniment.—Hiram F. Slone and Launcelot Gilroy, Kingston, Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

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Is a Large and Handsomely Illustrated Agricultural Home Journal; Original, Instructive and Attractive; its varied contents, ably written and condensed, render it popular with its readers. We endeavor to make it a credit to the field it occupies, and to every intelligent circle it enters. Entirely free from politics, its columns are filled with cheerful words of encouragement for our Pacific Industries and instruction for the people. It extends information of the growing wants and necessities of our rapidly increasing and progressing agriculture. You can read it with pleasure, for present and future profit; you can send it with satisfaction to your friends anywhere. Its editorials are earnest and its contents reliable. No questionable advertisements darken its pages. It is a journal for rural homes throughout the Coast. It is a handsome home print, without a rival on this half of the Continent. Subscription, in advance, $4 a year.

DEWEY & CO., Publishers,

No. 224 Sansome St., S. F. 3p-tf

Hints to be Remembered.

A note dated on Sunday is void.
A note obtained by fraud, or even from one intoxicated, can not be collected.
If a note be stolen it does not release the maker—he must pay it.
An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.
A note by a minor is void.
Notes bear interest only when so stated.
Principals are responsible for their agents.
Each individual in partnership is responsible for the whole amount of the debts of the firm.
Ignorance of the law excuses no one.
It is a fraud to conceal a fraud.
The law compels no one to do impossibilities.
An agreement without consideration is void.
Signatures in lead pencil are good in law.
A receipt for money is not totally conclusive.
The acts of one partner bind all the others.
Contracts made on Sunday can not be enforced.
A contract made with a minor is void.
A contract made with a lunatic is void.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

[By our own Reporter.]

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, July 22d, 1874.

There has been no movement of note in the Produca market for the week. Thus far, it must be acknowledged, the market has been rather a dull one; and the crop season opens with plenty of room for improvement, to say the least.

There is one point in which farmers have undoubtedly a great advantage this year over former ones, which does not seem to have entered into the calculations of our exchanges; and this is in the very unusual cheapness of money. Moving the crop will ho accomplished under quite different conditions from those which have heretofore generally obtained. With the ability to hold, and the comparatively low rates of tonnage, it would be strange indeed if at the close of the year it could not be chronicled as a very prosperous period. We say nothing of the increase in the bulk of the Cereals grown, for that is owing in many localities simply to a corresponding increase in the breadth of land under cultivation; and so, while beneficially affecting the State, as a whole, will not improve the position of the individual producer so much as might be expected.

Receipts of Produce for the week were as follows: Flour, 4,200 barrels; Wheat, 126,340 centals; Barley, 18,382 centals; Oats, 4,110 centals; Corn, 1,330 centals; Rye, 1,812 centals; Beans, 400 sacks; Mustard Seed, 7 sacks; Flax Seed, 420 sacks; Potatoes, 14,660 sacks; Sweet Potatoes, 85 sacks; Peas, 60 sacks; Onions, 1,200 sacks; Hides, 3,830; Wool, 815 bales; Hay, 2,120 tons; Straw, 240 tons; Wine, 24,800 gallons; Brandy, 175 gallons; Oranges, 1,200; Lemons, 7,000.

Receipts would he much larger were producers better satisfied with present rates for Grain. As it is, many are holding back for a rise.

Barley—Is dull and weaker. Sales for the week have been small at widely ranging figures. The demand for export is at present light.

Beans.—The prices has been lowered. New stocks of all kinds will soon be in.

Beeswax.—The price is 2½c lower. Demand hut

Broom Corn.—Nothing new to report. Nothing doing. The crop this fall will he a fair one.

Bran—Is moderate.

Buckwheat.—Very little is in the market, and quotations are nominal.

Corn.—Corn and Corn Meal are unchanged in price, which is high.

Daily Produce.—Butter is very firm. Strictly choice samples are always in demand, and exceptionally good Butter can be made to bring fancy prices. There is no improvement in California Cheese. We note a sale of very fine Eastern factory Cheese at 14¾c.

Feed.—Bran and Middlings are higher. Hay is in very full supply and dull. Oil Cake Meal and Corn Meal are unchanged, at their present high rates.

Flour—Is weaker than ever. Superfine has been sold as low as $4, and large lots have been taken, on not much better terms, for China and Central America.

Fresh Meat.—There has been no change in prices.

Game.—There is little on sale, and small demand.

Hides.—Quotations firm.

Honey—Is quite cheap already, and may he expected to sell low for some time, in view of the large receipts now coming in.

Hops.—No receipts, light business, and not much demand. Until the new crop arrives there will be little movement.

Nuts.—Peanuts are in request; supplies of other kinds full.

Oats—Sell at a decline. Receipts are quite sufficient for present needs.

Onions—Are down again. The range in prices is large.

Potatoes—Though not so high as last week, are still meeting with a fair inquiry. The first of the Sweet Potatoes have been received, and brought 4c. ₱ lb. This week the price will hardly hold.

Poultry.—Turkeys have again advanced. The present price is 8o. higher than that which prevailed not long since. Chickens sell at the same terms as last noted. Quotations for Ducks are weaker.

Pulu.—An advance is noted.

Rye.—Another decline. There is not much on the market, though a little came in during the week under review.

Seeds.—Till the fall demand sets in, the Seed trade will remain at a stand-still.

Tallow.—Quotations hardening, with light receipts.

Wheat.—Receipts are light for the season, and the inducement to forward at present prices is indeed small. The Liverpool market is in a semi-demoralized condition, another bad break having occurred a few days since, Wheat being 12½c. lower in that market than a week ago. Present telegraphic quotations range from $2,77 to $3 for all grades of California. Our own market is depressed. There is some inquiry for old crop, but it would be very difficult to-day to obtain the highest quotations. Exports for the week amounted to 79,266 centals, valued at $163,750. The movement is small, but will steadily increase as the fleet of vessels on the way to this port arrives. With regard to prospective rates, it is difficult to make any positive assertions. While we do not think that the present dull state of the markets of the world will continue, it does not seem likely that very high prices will be obtained at any period during the season, and holders should not be disappointed if quotations fall below those of last year.

Wool.—Business is slack. Nearly all of the State clip has been forwarded, and most of that sent East has been sold. New York rates are: Spring, 32 @ 40c; Fall, 24½o; Burry Lambs,' 17c.

DOMESTIC PRODUCE.

WEDNESDAY M., July 22, 1874.

BEANS.			
Beans, sm'l wh. ₱ lb	5	@	5¼
do, butter	6	@	7
do, large, do	6	@	7
do, bayo	2¾	@	2½
do, pink	1½	@	2
do, pea	5	@	5¼
do, Lima	5½	@	6½
BROOM CORN.			
Per ton	$80	@	200
DAIRY PRODUCE			
Butter, Cal. choice			
₱ lb	30	@	32½
do, good	27	@	30
do, inferior	22½	@	27
do, firkin	25	@	28
do, pickled	30	@	32½
Cheese. Cal. new	8	@	14
do. Eastern	13	@	16
EGGS.			
Eggs, Cal. fresh	30	@	32
do. Oregon	22	@	25
do. Eastern	15	@	17
do, Ducks'	—	@	20
FEED.			
Bran, per ton	17 00	@	18 00
Middlings	—	@	27 50
Hay	9 00	@	14 00
Straw	7 00	@	8 00
do ₱ bale	75	@	1 00
Oil cake meal	—	@	32 50
Corn Meal	42 00	@	43 00
FLOUR.—Superfine & Extra.			
Alviso Mills, bbl	4 12½	@	5 75
California	4 12½	@	5 75
City Mills	4 12½	@	5 75
Comma'l Mills	4 12½	@	5 75
Golden Gate	4 12½	@	5 75
Goldan Age	4 12½	@	5 75
National Mills	4 12½	@	5 75
Santa Clara Mills	4 12½	@	5 75
Geneseo Mills	4 12½	@	5 75
Oregon	4 12½	@	5 75
Vallejo Star	4 12½	@	5 75
Venus, Oakland	4 12½	@	5 75
Stockton City	4 12½	@	5 75
Lambard. Sac	4 12½	@	5 75
FRESH MEAT.			
Baef, fr quality	₱ 7	@	8
do, second do	5	@	7
do, third do	4	@	5
Veal	4½	@	6
Mutton	5	@	5½
Lamb	5½	@	6½
Pork, undrassad.	6½	@	6¾
do. dressed	9¼	@	9¾
GRAIN, ETC.			
Wh't Cal. c'st. cl.	1 57½	@	1 65
do new	1 57½	@	1 62
do, shipping	1 72½	@	1 77½
do, milling	1 75	@	1 80
Barlay, Faed	1 37½	@	1 50
do naw	1 00	@	1 20
do, Brewing	1 55	@	1 70
Oats, good to ch ice	1 50	@	1 65
do common	1 40	@	1 50
Corn, White	—	@	2 00
do, Yellow	—	@	2 05
Buckwheat	—	@	3 25
Rya	1 25	@	1 30
HOPS.			
California, 1873	35	@	37½
East'rn, '73, ch'ice	3½	@	45
MISCELLANEOUS.			
Beaswax, par lb	25	@	27½
Honey, choice	20	@	25
do Dark	8	@	10
do Strainad	8	@	12½
Pulu	9	@	10½
Onions	60	@	1 00
NUTS—JOBBING.			
Cal. Walnuts	13	@	14
Peanuts par lb	6	@	7
Chila Walnuts	10	@	11
Pecan nuts	13	@	15
Brazil do	12½	@	14
Coc'anuts, ₱ 100	9 00	@	10—
Alm'ds h'rd shell	10	@	12½
do, soft	18	@	24
Filbarts	18	@	—
POTATOES.			
Sweet, per 100 lbs	—	@	4 00
Cuffee Cove	—	@	—
H. M. Bay	1 05	@	1 25
Pigeon Pt	—	@	—
Humboldt	—	@	—
Petaluma	—	@	—
Mission	90	@	1 25
Salinas	—	@	—
Bodega	—	@	—
Ssc. River	60	@	90
S'ta Barbaral	10	@	1 15
Old Potatoes	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per ₱	20	@	22
do gobblers	18	@	20
Hens, per dz	6 50	@	8 00
Roosters, young, large	6 50	@	8 50
Broilars	3 00	@	6 00
Ducks, tame, doz	4 50	@	6 00
Geese, per pair	1 50	@	2 00
Hare, per doz	2 50	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	—	@	—
Mallard Ducks	—	@	—
do small	—	@	—
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	1 00	@	1 25
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 00	@	1 50
do tame	4 00	@	5 00
Venison, per lb	—	@	—
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medium	—	@	13
do Heavy	—	@	12½
Eastern do	13½	@	14
Hams, Cal	13	@	13½
do Whittakers	—	@	16
do Duffield, ch	—	@	15
do Flankton & Armour	—	@	14
do Boyd's	—	@	14¾
do Stewart's	—	@	14¾
Eastern Sbould's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard, Cal	13	@	14
do Eastern	13	@	14
SEEDS.			
Alfalfa	13	@	15
Canary	5	@	6
Flaxsaed	5	@	6
Ky. Blue Grass	40	@	50
Millat	12	@	15
Mnstard, white	2	@	3
do. Brown	3	@	4
Italian Rye	25	@	30
Parennial do	30	@	35
Timothy	13	@	15
Sweat V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Clovar Red	—	@	20
do White	60	@	75
Alsika	—	@	—
Esparto Grasain	—	@	1 00
Packets	—	@	—
WOOL, ETC.			
Spring, short, lb	22½	@	25
do cnoice Nort	24	@	28
Madinm grades	18	@	22
Fall clip	—	@	—
Burry	14	@	18
Hides, dry	17½	@	20
do wet salted	8½	@	9½
Tallow, Crude	6½	@	7
do Rafined	7½	@	9

FRUITS AND VEGETABLES.

WEDNESDAY M., July 22, 1874.

A few California Oranges were received tha other day by steamer. Blackberries have declined to 6@8c. Raspberries are scarcer and the price is a shade higher. The first Crab Apples have come in and are selling from first hands at 5@6c. Melons are more plentiful and lower. Figs have also declined. Swaetwater Grapes are coming forward more fraely.

In Driad Fruits the most important change has been the markad advanca in German Prunes. Dates are also higher; while prices for naarly all kinds of Dried Fruit have hardaned noticeably.

Asparagus is very scarce. Lima Baans are in market. Graen Okra is 5c ₱ lb cheaper. Egg Plant is becoming very plenty, and rates have fallen to 4@6c ₱ lb.

FRUIT MARKET.			
Tahati, Or. ₱ M	35 00	@	40 00
Lorita, do	—	@	—
Cal. do	30 00	@	50 00
Limes, ₱ M	—	@	15 00
Cal. Lamons, ₱ M	—	@	40 00
Australian do	50 00	@	—
do per box	7 00	@	8 00
do Sicily ₱ h'x	15 00	@	16 00
Bananaa, ₱ bnch	3 50	@	5 00
Cocoanuts, ₱ 100	9 00	@	10 00
Pinaapplas, ₱ dz	7 00	@	9 00
Apples	2½	@	5
Charries	5	@	10
do choicc	10	@	25
Blackberries	6	@	8
do wild	—	@	—
Strawbarrias ₱ lb	8	@	12
Gooseharries	—	@	—
Raspharrias	11	@	12½
Currants	3	@	3
do black	20	@	22½
Apricots	1½	@	2
Plums	2	@	15
Peachas, ₱ lb	3	@	10
Paars, Eating	1 00	@	2 50
do Cooking	—	@	—
do, Bartlett	—	@	—
Crah Applas	5	@	6
Nectarinas	—	@	—
Wat'rmel's ₱ 100	20 00	@	30 00
Cantelo's ₱ 100	20 00	@	30 00
Pomagran's, ₱ dz	—	@	—
Figs	8	@	12½
Grapes, Bl'k H'g	—	@	—
do Muscat	—	@	—
do Malavo'e	—	@	—
do Sweetw'r	8	@	10
do Misston	—	@	—
do Rose of Peru	—	@	—
do Tokay	—	@	—
do Morocco	—	@	—
do St. Peter	37½	@	50

DRIED FRUIT.			
Apples, ₱ lb	6½	@	8½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	11	@	12½
Apricots, ₱ lb	—	@	—
Plums, ₱ lb	8	@	10
Pitted, do ₱ lb	15	@	20
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	8	@	10
Whlte, do	10	@	15
Prunas	6	@	8
do German	16	@	20
Citron	20	@	35
Zante Currants	8½	@	8½
Dates	12½	@	14
VEGETABLES.			
Asparagus	8	@	10
Baets	—	@	1
Cabbage, ₱ 100 lbs	—	@	2 00
do new, doz	50	@	60
Carrots, ₱ 100 lbs	1 00	@	1 25
Cauhflowar, doz	50	@	60
Calery, doz	50	@	65
Garlic, ₱ lb	6	@	8
Grean Paas	2½	@	3
Green Corn ₱ doz	18	@	22
Sum'rSquash, lb	4	@	5
Marro'tat Sq'sh, tn 60 00		@	—
Artichokas, ₱ doz	15	@	25
String Beans, ₱ lb	—	@	5
Lima Beans	10	@	12½
Parsnips	12½	@	15
Shell Baans	2	@	6
Pappers, ₱ lb	12½	@	20
Okra ₱ lb	25	@	40
Okra, Green	12½	@	15
Cucumbars, doz	10	@	15
Tomatoas	3	@	5
Egg Plant ₱ lb	4	@	6
Rhubarb	2½	@	3
Lettuce	12½	@	20

LUMBER.

WEDNESDAY M., July 22, 1874

There are no changes to report in the Lumber Trade Business is good.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced rafuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, rafuse, ₱ M	20 00
Beadad flooring, ₱ M	32 50
Beadad floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch sidiug, raf, M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	16 00
Pickats, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

PUGET SOUND PINE —Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fancing, ₱ lineal foot	1c
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾
REDWOOD—Retail.	
Rough, ₱ M	20 00
Rough refusc, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickats, ₱ M	30 00
Siding, ₱ M	27 50
Tongnad and Grooved, surfaced, ₱ M	32 50
Do do rafusc, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

GENERAL MERCHANDISE.

WEDNESDAY M., July 22, 1874.

There were received during tha week 3,400,000 Bags, nearly all sold in advance. The total nnmher of Wheat, Oat and Barley Bags needed this sesson for this State and Oregon is put at 23,500,000. Stock carried over and fresh receipts leave the nnmber yet to be shipped from England 7,241,000; or, on a higher crop estimate, considerably more. Prices are firm. Coffee is dull. Coal is steady. Spices are huoyant. Sugar is firm at advanced rates. Quite a movement in salt has been made. Tobacco is likely to rise materially, owing to failures in the crop in Kentucky, Missouri, etc. Turpentine is slow of sale, and 10c lower.

BAGS.			
Eng. Stand Wht	—14¼	@	14½
Detrick's Machine Sewed, 22x36, do E W	—	@	14
do 20x40, do A	—	@	14¼
Flour Sacks ½s	10½	@	12½
" " ¼s	6½	@	7¼
Stand. Gunnies			
double seam	—15	@	16
single seam	—13	@	13
" Wool Sacks	6¾	@	—
Barley Bags 24x36	—	@	15½
do 22x40	—	@	15½
do 24x40	—	@	16¼
do 28x36	—	@	17
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 10-in. gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ ₱ caus	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl	—	@	3 50
Sardines, qr box	1 75	@	—
do hf boxes	3 00	@	—
COAL—Jobbing.			
Anstralian, ₱ ton	10 00	@	—
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11—
Cumbarl'd, cks	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lahigh	—	@	19 00
Livarpool	11 00	@	12—
West Hartlay	12 50	@	—
Scotch	9 50	@	10 00
Scranton	15 00	@	17 50
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Amaric'n	22	@	23
Costa Rica per ₱	23½	@	24
Guatemala	21	@	22
Java	28½	@	30
Manilla	22	@	—
Ground in cs	—	@	30
Chicory	10	@	—
FISH.			
Pac. Dry Cod, naw	5	@	6
casas	6	@	7
do bonaless	11	@	12
Eastarn Cod	7	@	8
Salmon in bbls	8 00	@	—
do ½ bbls	4 50	@	—
do 2½ ₱ cans	—	@	3 00
do 2 ₱ cans	2 65	@	2 75
do 1 ₱ cans	1 75	@	—
Do Col. R. ½ ₱ b	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mass	3 00	@	3 50
" Ex mess. ½ hs	—	@	12 00
Sm'k Herr'g, bx	50	@	55
NAILS.			
Assortad size, lb	4¾	@	7
OILS.			
Pacifie Glue Co. Naat F't No. 1	—	@	1 00
Pure	1 25	@	—
Castor Oil, No. 1	—	@	1 75
do do No. 2	—	@	1 60
Cocoannt	45	@	50
Oliva Plagniol	5 00	@	—
do Possel	4 75	@	—
Palm	9	@	—
do Bagicalupi	—	@	—
Linsead, raw	—	@	1 02
do boiled	—	@	1 07
China nut in cs	—	@	82½
do bulk	70	@	72
Sperm, crnda	—	@	1 40
do bleachad	—	@	2 20
Coast Whales	35	@	40
Polar, refined	50	@	55
Sparm	1 40	@	1 50
Lard	95	@	1 05
Coal, refinad Pet	37½	@	40
Olaopbine	—	@	34
Davoa's Bril't	28	@	29
Long Island	—	@	34
Eureka	37½	@	40
Davoa's Petro'm	26	@	29
Barral kerosena	—	@	26
Olive	4 00	@	9 50
Downar Kerose'e	—	@	42½
Gas Light Oil	—	@	34
PAINTS.			
Atlan. W. Lead.	7½	@	12½
Whiting	—	@	2
Putty	4½	@	5
Chalk	—	@	2½
Paris White	2¾	@	—
Ochre	—	@	3½
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	1 00	@	1 25
RICE.			
China No. 1, ₱ lb	6½	@	6¾
do 2, do.	5½	@	5¾
Japan	5½	@	6
Siam Cleaned	7	@	—
Patna	—	@	6¾
Hawaiian	7	@	7¾
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fina	20 00	@	23 00
do coarse	15 00	@	20 00
SOAP.			
Castile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Allspica, per lb	15	@	16
Cloves	44	@	47½
Cassia	22½	@	25
Citron	—	@	30
Nutmeg	—	@	07½
Whole Peppar	17	@	17½
Pimanto	—	@	15½
Gr'nd Allsp'r dz	—	@	1 00
do Cassia do	—	@	1 50
do Cloves do	—	@	1 50
do Mustard do	—	@	1 25
do Ginger do	—	@	1 00
do Papper do	—	@	1 00
do Maca do	—	@	1 60
SUGAR, ETC.			
Cal. Cuba per lb	10½	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	10¾
do in 50 lb bxs	—	@	11
do in 25 lb bxs	—	@	11¼
Circla A crushed	—	@	10½
Powdarad	—	@	10¾
Granulated	—	@	10
Dry granulatad	10	@	10½
Hawaiian	8	@	—
California Beat	—	@	10½
Goldan C	—	@	9½
do Rey'g grada	—	@	6½
Cal. Syrup in pls	—	@	27½
do in ½ bls	—	@	30
do in kags	—	@	35
Hawaiian Molasses	10	@	20
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imparial, Canton	25	@	40
do Pingsuay	45	@	80
do Moyune	60	@	1 00
Gunpo'dar, Cant.	30	@	42½
do Pingsuay	50	@	90
do Moyune	65	@	1 25
Yung Hy., Canton	28	@	40
do Pingsuay	40	@	70
do Moyuna	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquarad bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n hx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navya	50	@	60
Dark do	45	@	55
Dwa f Twist	57	@	62½
12 inch do	57	@	62½
Light Pressed	65	@	75
Hard do	60	@	70
Cown. Wrap'r	40	@	50
Pann. Wrapper	20	@	30
Obio do	7	@	15
Virgi'a Smok'g	60	@	95
Fina ct che'g, gr	8 50	@	9 25
Fina cut chawing, bno'ta, ₱ lb	75	@	90
Banner fine cut	—	@	9 00
Eureka Cala	8 75	@	9 00
TURPENTINE.			
Eastorn	60	@	65

LEATHER.

WEDNESDAY M., July 22, 1874.

Leather remains dull. There is little movement except in standard Sole Leather and imported Calfs. From an article recently published in tha *Shoe and Leather Reporter*, we taka the following extract: Tue forasts of hamlock ara a fortune to America, and bound to be utilized in tha commerce of tha world. Europe says, your bark is good anough, now give us your workmanship; and the tanners are answering with a will. Whila coarse, illy-fleshed, badly rolled Laathar drags along, the bright, well filled, honest stock finds an immadiata customer. And tha damand does not slacken, but grows from city to city, till American Leather is a stapla in all Europe. Tho *Reporter's* head is level on the quastion of the advantaga of making a good article. One great difficulty met with in this Stata is the carelessness with which Hides are slashed up and rendered in many cases almost worthless for tanning. If in the very first staga of tha process so much is taken off their value, it is hardly worth while to attempt to make up tha deficiancy afterwards. Wa hava been shown heavy Leather of fine grain and great solidity which exhibits too plainly the reckless handling of t a knife, and whose markat value was groatly depreciated, from appearanca almost as much as from real injury:

Olty Tanned Leather, ₱ lb			25@29
Santa Cruz Leatber, ₱ lb			25@29
Conntry Leather, ₱ lb			24@28
Stockton Leathar, ₱ lb			25@29
Jodot, 8 Kil., par doz			$50 00@ 54 00
Jodot, 11 to 19 Kil., par doz			66 00@ 90 00
Jodot, sacond choica, 11 to 16 Kil. ₱ doz			55 00@ 72 00
Cornallian, 12 to 16 Ko			57 00@ 67 00
Cornallian Females, 12 to 13			60 00@ 64 00
Cornellian Females, 14 to 16 Kil			66 00@ 74 00
Beaumervilla, 15 Kil			60 00@ —
Simon, 18 Kil., ₱ doz			61 00@ 63 00
Simon, 20 Kil. ₱ doz			65 00@ 67 00
Simon, 24 Kil. ₱ doz			72 00@ 74 00
Rohart Calf, 7 and 9 Kil			35 00@ 40 00
Franoh Kips, ₱ lb			1 00@ 1 15
California Kip, ₱ doz			40 00@, 60
French Shcep, all colors, ₱ doz			8 00@ 15 00
Eastern Calf for Backs, ₱ lb			1 00@ 1 25
Shaap Roans for Topping, all colors, ₱ doz			9 00@ 13 00
Shaep Roans for Linings, ₱ doz			5 50@ 10 50
California Russatt Shaep Linings			1 75@ 4 50
Bast Jodot Calf Boot Lags, ₱ pair			5 00@ 5 25
Good Freuch Calf Boot Lags, ₱ pair			4 00@ 4 75
French Calf Boot Lags, ₱ pair			4 00@ —
Harnass Laatbar, ₱ lb			30@ 37½
Fair Bridla Leather, ₱ doz			48 00@ 72 00
Skirting Laathar, ₱ lb			34@ 37½
Wait Laathar, ₱ doz			30 00@ 50 00
Bnff Leathar, ₱ foot			18@ 21
Wax Side Leather, ₱ foot			17@ 19
Eastern Wax Leather			—@—

S. F. RETAIL MARKET RATES.

WEDNESDAY M., July 22, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

The Center Market, corner of Sutter and Dupont streets, was formally opened on the evening of the 16th. This market is well constructed, and has been planned with a view to convenience. Owing to its position, it should command a fair patronage.

Eggs and Turkeys are scarce and high. No changes in Meats. Very little Game in market. Fresh Salmon are selling at an advance, on account of a falling off in the catch.

Spring Chickens	50	@	75
Hens	75	@	1 00
Eggs	—	@	35
do Ducks'	—	@	25
do Farallonas	—	@	25
Turkeys, ₱ lb	—	@	30
Ducks, Can Bk, pr	—	@	—
do Mallard, pr	—	@	—
Tame, do	1 50	@	2 00
Teal, ₱ doz	—	@	—
Geesa, wild, pair	—	@	—
Tame, ₱ pair	3 00	@	4 00
Snipe, ₱ doz	—	@	—
Quail, per dozen	—	@	—
Prairie Ch'k's, ea	—	@	—
Pigeons, dom. dz	—	@	4 00
Wild, do	—	@	2 00
Squabs	—	@	4 50
Hares, each	37½	@	50
Rabbits, tame, pr	75	@	1 00
Wild, do, ₱ dz	2 00	@	—
Squirrels do	15	@	20
Beef, tend, ₱ lb	—	@	20
Corned, ₱ lb	8	@	10
Smoked, ₱ lb	—	@	15
Porter House St'k	—	@	20
Sirloin do	12	@	15
Round do	8	@	10
Pork, rib, atc., ₱ lb	15	@	—
Chops, do, ₱ lb	15	@	—
Veal, ₱ lb	10	@	15
Outlet, do	12½	@	15
Mutton—chops,	12	@	15
Leg Mutton, ₱ lb	10	@	12
Lamb, ₱ lb	10	@	15
Venison	—	@	—
Tongues, beef	75	@	—
do, do, smoked	—	@	1 00
Tonguas, pig, ₱ lb	10	@	—
Bacon, Cal., ₱ lb	8	@	18
Hams, Cal, ₱ lb	16	@	—
Hams, Cross' s c	—	@	—
Choice D'field	18	@	—
Whittakar's	18	@	20
Flonnder, ₱ lb	—	@

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Ramhouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m



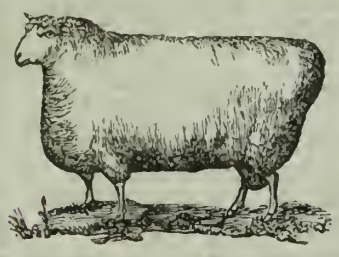
A. G. STONESIFER,

BREEDER OF

Pure Blooded French Merino Sheep,

Has for sale a choice lot of Rams and Ewes, on the Oristimba Ranch, six miles west of Hill's Ferry, Stanislaus County, Cal. 22v7-3m

B. W. Owens, San Francisco. | E. Moore, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

N. GILMORE,

Importer and Breeder of

Angora or Cashmere GOATS

—OF—

PURE BLOOD

—AND—

ALL GRADES.

For sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address

N. GILMORE,
El Dorado, El Dorado county,
11v6-eow California.

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

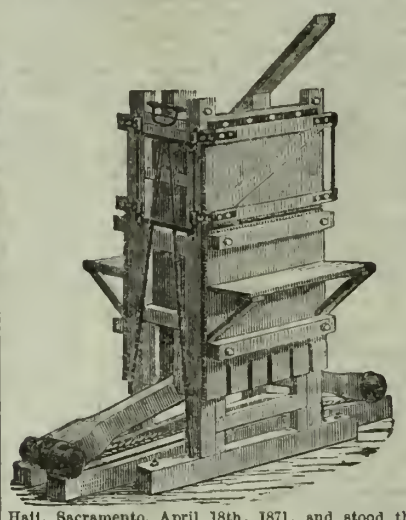
P. S.—*Special rates to members of the Grange.*

1873. THE IMPROVED EAGLE HAY PRESS. 1873.

THE KIMBALL MANUFACTURING COMPANY,

OWNERS OF THE PATENT AND SOLE MANUFACTURERS ON THE PACIFIC COAST,

COR. FOURTH AND BRYANT STS., - - - SAN FRANCISCO, CAL



Several years were devoted by the patentee to the perfection of this powerful press.

Its unprecedented sale at the East induced the Kimball Manufacturing Company to introduce them in California and the Pacific States.

During the past season a number of important improvements have been made, in order to gain all the power desired in condensing the weight and size of the bales. The wood and iron of the frame have been increased and strengthened, and it is now the most perfect and powerful press in use.

It Possesses Other Advantages:

Being cheap, simple to manage, with no intricate machinery to get out of gear, thus losing time waiting for a new piece.

All who have used these presses pronounce them superior to anything used heretofore.

The power applied by means of two levers increases in ratio to the resistance; and as the levers approach a perpendicular position, the power can be scarcely estimated.

Three men, with one horse, can bale from ten to fifteen tons per day; each bale weighing from 300 to 350 lbs., using less rope than any other press.

When a bale is pressed and fastened, the follower runs down of its own weight and the bales can be taken out on either side.

On account of its great power, it is well adapted to pressing hides, rags, cotton or moss.

The particular attention of wool growers is called to our improved Wool Press, constructed on the same principle, which was tested at the State Agricultural Hall, Sacramento, April 18th, 1871, and stood the test of a bale of wool weighing 550 pounds. Reference, Major Robert Beck.

These presses are manufactured in San Francisco by the Kimball Car and Carriage Manufacturing Co., who have a stock constantly on hand. Prices $250.00 for Hay Presses; $350.00 for Wool Presses. Weight of Hay Press, 2,500 lbs.; Wool Press, 3,500 lbs. Can be shipped in pieces or set up. 13v7-2am-3m



L. U. SHIPPEE, Importer and Breeder of Thoroughbred Spanish Merino Sheep and Short-Horned Durham Stock, Stockton, Cal.

I wish to call your attention to my flock of Spanish Merino Sheep, both Ewes and Bucks, imported during the last two years, and selected from the best flocks in Vermont. Unequaled on the Pacific Coast for quality and size, many of them having taken first premiums both in Vermont and California. Should you or any of your friends require sheep of this quality, you will do well to call and examine this flock before purchasing elsewhere, as I intend to sell them at greatly reduced prices from what they have formerly been sold.

My Flock Consists of 1,500 Sheep, 1,200 Imported and 300 of my own Breeding.

P. S.—This flock is not only the finest but the largest flock of imported Spanish Merino Sheep on the Pacific Coast. They have been selected from the flocks of the best breeders in Vermont, such as Rockwell, Sanford, Rich, Hammond, Saxton, Dean, Ellsworth, Remley, Stickney, and others who are acknowledged to be among the best breeders of Spanish Merinos in America. 24v7-eow-4m



The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept upon the MERINO RANCH



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and O. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. **City Office—315 California Street, San Francisco.**

SEVERANCE & PEET,
10v7-eow Importers and Breeders of Spanish Merino Sheep.

JERSEY CATTLE.

A few head of very choice Jersey Cows—Heifers and and Bull Calves—for sale. Apply to
15v7-3m R. G. SNEATH, Menlo Park.

TIPTON & BURTT'S

MEDICINAL

SHEEP PREPARATION,

WARRANTED FREE FROM ALL POISON.

A sure and positive cure for **Scab, Ticks and Lice**, and a sure promotive of the growth of the wool. It has been used in Tehama County for the past two years, with most gratifying results, and we have the pleasure of referring to the following gentlemen as to its merits, viz.: H. A. Rawson, Jas. Gooch & Bro., J. W. Montgomery, J. Ehy, Curtiss & Brown, H. Bosauka, Jos. Cone, J. W. Gate & Sons.

It is a liquid and put up ready for use in 2½ gallon tins, four tins in a case.

WHITTIER, FULLER & CO., Sole Agt's,
21 Front street.....SAN FRANCISCO.
28 K street.....SACRAMENTO.
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LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 44 Cal. Market, S. F.

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m **304 California Street.**

THE ALDEN Fruit Preserving Company OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.
11v7-6m

Agricultural Articles.

C. CREGO. S. C. BOWLEY

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—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Heifield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
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IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware.

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

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ALSO AGENTS FOR

Woolsey's Patent Wheels,

The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has the metallic-shouldered hand; and it can be repaired as easily as the common wood wheel.

☞ Send for illustrated circular. Address

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122 and 124 Market street, and 19 and 21 California street, } SAN FRANCISCO.
17, 19 and 21 Seventh street, 21v7-3m - - SACRAMENTO.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

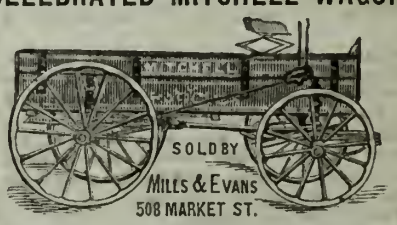
Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

THE

CELEBRATED MITCHELL WAGON



15v7-3m

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

H. C. SHAW,

STOCKTON, CAL.

Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
14v7-3m Box 95, Stockton, Cal.

LANDS & HOMES FOR SALE

RANCHOS
FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STREET,
sp25-tf N. E. Cor. Montgomery.

DAIRY RANCH FOR SALE,

Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Obispo.
20v7-3m

FARMING LAND,
TO LEASE ON SHARES.
1,000 ACRES,

Or any part of same, being levied and of similar character to that of SHERMAN ISLAND. Apply to

W. T. S. RYER,
No. 330 Pine street.....SAN FRANCISCO, CAL.

POISON! POISON!
WAKELEE'S PATENTED
Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more nnmerous every year.

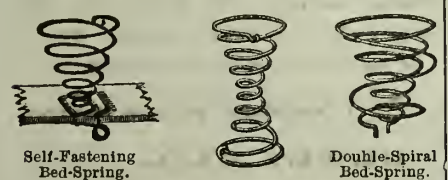
Wakelee's Granulated Squirrel Exterminator Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.
H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.
J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.
H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,
J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.
MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.



Self-Fastening Bed-Spring. Double-Spiral Bed-Spring.

We manufacture all sizes of BED and FURNITURE SPRINGS, from No. 7 to the smallest Pillow Spring; also, the Double Spiral Spring, which is the most durable Bed Spring in use. It is adapted to upholstered or skeleton beds. We have the sole right in this State to make the celebrated Ohermann Self-Fastening Bed Spring. Any man can make his own spring bed with them. They are particularly adapted to Farmers' and Miners' use. Send for Circulars and Price List to

WARNER & SILSBY,
14v28-eow-hn-3m 147 New Montgomery St., S. F

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.
25v7-3m C. G. FISK, Proprietor.

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

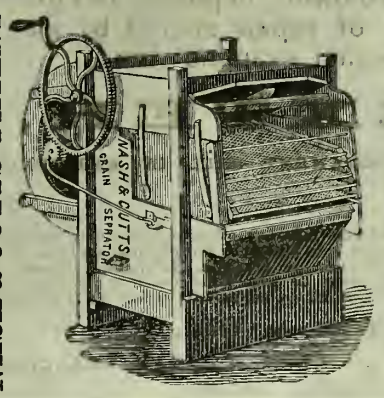
Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.
Office, 3 and 5 Front street.
Works, King street, bet. Second and Third. fe15-eow

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT GRAIN SEPARATOR AND FAN MILL.



THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars addr ess

NASH, MILLER & CO.,
No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

The Sewing Machine
—FOR THE—
GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

SAMUEL HILL, General Agent.
18v7-3m

LEA & PERRINS'
—CELEBRATED—
Worcestershire Sauce.

316 California Street, - - - SAN FRANCISCO.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

Ask for LEA & PERRINS' Sauce, and see name on wrapper, label, bottle and stopper.

Wholesale and for export by the Proprietors, Worcester; Crosse & Blackwell, London, &c., &c., and by Grocers and Oilmen universally.
Iv8-Iy

H. K. CUMMINGS. 1858. H. H. BALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the producer.
4v23-1y

Davis & Sutton, Commission Merchants,

For California Fruits; also for the sale of Butter, Eggs, Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.
3v8-1y

J. WAGNER,
MANUFACTURER OF
FRENCH BURR MILL STONES AND PORTABLE MILLS.



General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. 13v7-3m-2am

GEO. H. TAY & CO.,

614, 616 and 618 Battery St., S. F.,

OFFER FOR SALE

IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

RUBBER HOSE, ETC.

STOVES and RANGES,

THE RICHMOND RANGE,
THE HENRY CLAY,
THE EMPIRE CITY,
THE ALVARADO.

THE MONITOR, wrought iron body, cast iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

MILK PAILS, PANS, CHEESE HOOPS, ETC.

BABBIT METAL.

Wire for Fencing and Baling.

ALSO, METALS, HOUSE FURNISHING HARDWARE, JAPANNED GOODS, ETC., ETC.
22v7-3m

THE CELEBRATED NEW DRAW-FEED
WHEELER & WILSON
SEWING MACHINES

Are without exception the most desirable for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in public favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.

E. W. HARRAL, Agent,
20v7-4m-15p 427 Montgomery street, S. F.

SEEDS. PLANTS.
OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINIS INSIGNIS, Etc.

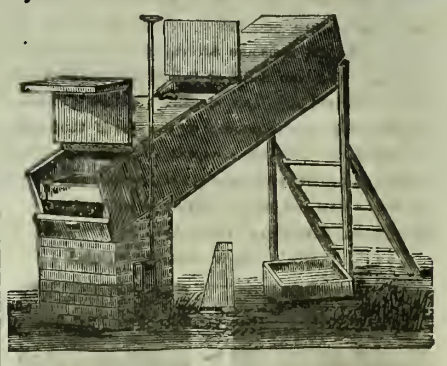
For Sale, wholesale or retail, by

B. F. WELLINGTON,
(Successor to E. E. Moore).
425 Washington St., San Francisco. 22v7-1y

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.
PIERCE & CO., 627 Sacramento St.,
14v7-3m bet. Montgomery and Kearny Sts., S. F.

Ryder's American Fruit Drier.

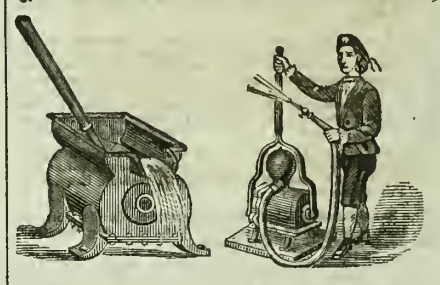


This DRIER is a perfect success in the East, and will be on this Coast when its merits are known. Its cheapness brings it within the means of every Fruit Grower The uniformity and perfection of its work challenge comparison. The principle claimed for this Drier (and violated in all other Driers in use), is, that no moisture shall come in contact with the fruit after the cut surfaces are once sealed by the heat, to open the cells and allow the aroma and fine qualities of the fruit to escape, which makes it undeniably the most perfect, as it is the most simple mechanical method for cureing Fruits, Vegetables, Meats and Grains ever invented. This Drier can make Raisins and the most beautiful crystalized fruit confection, equal to any imported. Can any other Drier do this? The fruit cured on this Drier last season, in this State, took the premium at the State Fair. Our Factory Drier will cure 60 bushels of peaches in a day. Send for Circulars. Farm, County and State Rights, and Driers with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

THE CELEBRATED

GLUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

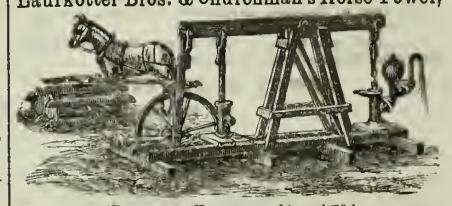
J. M. KEELER & CO.,
Commission and Forwarding Merchants.

Agents for Eastern Manufacturers, 306 California street, San Francisco.

VINE AND FRUIT GROWERS,
TO RAISE LARGE CROPS
YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



(PATENTED FEBRUARY 13TH, 1872.)

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
v7-2m-3m Cor. J and 10th Sts., Sacramento.

DAIRY PRODUCE
DEPARTMENT
OF THE
CALIFORNIA STATE GRANGE,
P. OF H.,
414 & 416 Sansome St., Cor. Commercial,
SAN FRANCISCO, CALIFORNIA.

J. H. HEGLER, Manager.

We are now prepared to handle and dispose of all Dairy Produce, Eggs and Poultry.

This house is under the immediate control of the California State Grange; the Business Manager a thoroughly practical farmer and dairyman, Master of Bodega Grange and General Deputy for California for the organization of Granges in any part of California. Special rates to members of the Order; though any one may sell through our house and avail himself of our mode of doing business.

In shipments give plainly the name and P. O. address. Any persons wishing legitimate information concerning our business should write to the house, and are cautioned against accepting for facts many rumors now current. All sales guaranteed. ja31-tf

Removal.

July 13th, 1874, the business office of this Journal was removed just one block east of our former location, to No. 224 Sansome Street, southeast corner of California, over the Bank of British Columbia, where we have secured large and elegant quarters. This removal is made in consequence of the sale of the building which we formerly occupied, to parties who will proceed immediately to demolish the present structure and erect a new and magnificent block in its place.

[Diagram Showing Location of Dewey & Co.'s New Offices.]



Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th. R. S. Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhibition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers, Mechanics' Institute, No. 27 Post street, San Francisco, California. In order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Willis-ton, Secretary; J. B. Frisbie, Treasurer.

Our Agents.

Our Friends can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

L. P. McCarty—General Agent.
W. H. Rattenberry—California.
Chas. W. Otis—Solano County.
C. M. Daly—Colusa County.
Chas. T. Bell—Alameda, Santa Clara and Santa Cruz Counties.
J. D. Carey—Sonoma County.
J. W. Anderson—Orauge and Santa Ana, in Los Angeles County, Cal.
Hood Alston—San Luis Obispo, San Bernardino and SanDiego Counties.

Mining and Scientific Press,

(Established in 1860.)

The oldest, largest and best Mining Journal. Devoted, also, to Science, Invention, Mechanic Arts and Industry on the Pacific Coast.

Subscription to the above, $4 a year; Sample Copies, post paid, 10 cts.—four for 25 cts. Address,

DEWEY & CO., Publishers,
No. 224 Sansome st., S. F.

A COMPLIMENT.

Plainsburg, Merced Co., Cal., June 22, 1874.

Dewey & Co.—*Gentlemen:* I herewith tender my grateful acknowledgements for the energy, promptness and efficiency which you have displayed in procuring my patent.

Although you were entire strangers to me when I first communicated with you, I soon felt satisfied you were gentlemen of integrity, and shall always be happy to represent you as such. Very truly yours,

H. W. RUCKER, M. D.

Campo, San Diego Co., Cal., July 3d, 1874.

Messrs. Dewey & Co.—*Gentlemen:* To-day I received the patent and other papers of my animal trap, that you so successefully worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long. I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into your hands.

I remain yours truly, A. M. GASS.

Truckee, Cal., July 10, 1874.

Messrs. Dewey & Co.—*Gentlemen:* My patent is just received, and is entirely satisfactory. Permit me to tender you my sincerest thanks for the care and attention, the promptness and interest you have displayed in managing my affairs. Gratefully yours,

C. F. McGlashan.

Plainfield, July 4th, 1874.

Messrs. Dewey & Co.—*Dear Sirs:* I acknowledge receipt of yours of 2d inst., inclosing my Letters Patent. I thank you for the interest you have taken in obtaining the same. Yours truly, M. W. COON.

One of our most valued exchanges is the Pacific Rural Press, published by Dewey & Co., San Francisco, California. Every number contains a vast amount of general news from the far west, besides much valuable information in the way of Grange news.—*The Farmer's Friend, Mechanicsburg, Pa.*

Dr. E. J. Fraser, Homœpathic Physician and Surgeon, has removed his office and residence from 102 Stockton street to No 305 Kearny street, northwest corner of Bush. 6v7-3m



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the Plains of Kansas, Nebraska, Missouri, Iowa and Illinois, where no other mills have been known to stand any length of time. All we ask is a full investigation of the DEXTER.

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO.
4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.

DEWEY & CO.,
American & Foreign Patent Agents,

OFFICE, 224 SANSOME STREET, S. F.

The best, speediest, and surest method for you to obtain patents, file caveats, or transact any other important business with the Patent Office at Washington, or with foreign countries, is through the agency of DEWEY & CO., PUBLISHERS OF THE MINING AND SCIENTIFIC PRESS, SAN FRANCISCO, an able, responsible, and long-established firm, and the principal agents on this side of the continent. They refer to the thousands of inventors who have patronized them, and to all prominent business men of the Pacific Coast, who are more or less familiar with their reputation as straightforward journalists and patent solicitors and counsellors. We not only more readily apprehend the points and secure much more fully and quickly the patents for our home inventors, but with the influence of our carefully read and extensively circulated journals, we are enabled to illustrate the intrinsic merits of good patents, and secure a due reward to the inventor, besides serving the public who are more ready to give a fair trial, and adopt a good thing, upon the recommendation of honest and intelligent publishers.

To Obtain a Patent,

A well-constructed model is generally first needed, if the invention can well be thus illustrated. It must not exceed 12 inches in length or hight. When practicable, a smaller model is even more desirable. Paint or engrave the name of the article, and the name of the inventor, and his address upon it.

Send the model (by express or other reliable conveyance), plainly addressed, to "Dewey & Co., Mining and Scientific Press Office, San Francisco." At the same time, send a full description, embodying all the ideas and claims of the inventor respecting the improvement describing the various parts and their operations.

Also send $15 currency, amount of first fee of the Government. The case will be placed on our regular file, the drawings executed, and the documents made up, and soon sent to the inventor for signing.

As soon as signed and returned to us with the fees then due us, it will be sent straightway to the Patent Office at Washington.

For designs no models are necessary. Duplicate drawings are required, and the specifications and other papers should be made up with care and accuracy. In some instances for design patents two photographs, with the negative, answer well instead of drawings.

For further information, send a stamp for our illustrated circular, containing a digest of Patent Laws, 112 illustrated mechanical movements, and Hints and Instructions regarding the rights and privileges of inventors and patentees, which will be furnished post paid. Also a copy of NEW PATENT LAW of 1870.

When the invention consists of a new article of manufacture, a medicine, or a new composition, samples of the separated ingredients, sufficient to make the experiment (unless they are of a common and well-known character), and also of the manufactured article itself, must be furnished, with full description of the entire preparation.

For Processes, frequently no model or drawings are necessary. In such case, the applicant has only to send us an exact description, and what is desirable to claim.

Address DEWEY & CO.,
Publishers, Patent Agents and Engravers,
No. 224 Sansome street, S. F.

PACIFIC RURAL PRESS,

A first-class 16-page Agricultural Home Journal, filled with fresh, valuable and interesting reading. Every farmer and ruralist should take it. It is immensely popular. Subscription, $4 a year.

DEWEY & CO., Publishers,
No. 224 Sansome street, - - SAN FRANCISCO.

New Inventions!

Of real merit, if brought plainly before the public when fresh, are most likely to become profitable to the patentee. For this reason, patentees (of worthy devices) should have the best of Engravings Made, and published in the Press. Superior Engravings Made, at reasonable rates, by artists in this office. hp-tf

IMPROVE YOUR POULTRY.

IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.



Oakland Poultry Yards,

Cor. 16th & Castro Streets, Oakland, Cal.

Young Fowls now for sale at reduced prices. Also a few of my Imported Fowls in pairs or trios. Send stamp for illustrated circular, containing a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,
4v8-tf P. O. Box 659, San Francisco.

GEO F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

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Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

San Francisco, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo. F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R.R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements.

Yours respectfully, JOHN JENNINGS.

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Rates of Storage on Grain, July 1st, 1874.—First month, 50 cents per ton; each month thereafter, 37½ cents per ton. At regular monthly rates not to exceed $2.75 per ton for the season. Season rates, $2.00 per ton. Second weighing, 10 cents per ton.

Grain received on dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

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Spicily written and beautifully printed, with new body type, on a new press of a style never before used in this city.

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In showy type will be one of our Specialties. Rates will be reasonable.

Our Columns will afford the best, first-class advertising in the Fair.

As a reliable firm in an established business, we will guarantee Satisfaction to all patrons. ☞ No objectionable advertising will be admitted.

Advertisements should be sent in soon to secure a good position and an early insertion in our

Prospectus Edition,

To be issued before the opening of the Fair. The

The "Fair" Daily Printing Office

Will open in the pavilion for printing business, address and visiting cards, labels, circulars, notices, etc., for Exhibitors and Visitors. The Nonpariel (new style) job press will be used, with new and unique type.

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L. P. McCARTY, Business Manager

DEWEY & CO.,

Publishers and Patent Agents.

Office of the Mining and Scientific Press and Pacific Rural Press, No. 224 Sansome, Cor. of California Street. July 16, 1874.
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DEWEY & CO.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, AUGUST 1, 1874. [Number 5.

A Ring in Grapes.

The grape-growers complain that in certain localities the wine-makers have made a pretext of the local option influence on wine drinking for reducing the price to be paid for grapes. In some cases they have refused to purchase native grapes at any price, and will only pay for foreign varieties the prices that were formerly paid for native grapes.

This has "the ring" of the true monopoly-ring; for it is well known that the home demand for California wine is as nothing in relation to that from abroad; and as to the effect of local option on the wine market justifying them in this reduction of prices, it will hardly be sanctioned by the facts in the case.

This issue between the grape-growers and the wine-makers indicates at present the development of two novel points in the business. First, the growers propose to make their own grapes into wine; and we shall probably see a repetition of the common occurrence on the road of trade, where monopoly "balks," and the public hitches on anti-monopoly and hauls the load to its destination. The sulkiness of monopoly is not reverenced in the least by the American people.

The other point, which is an extremely important one is the increased stimulus which it will undoubtedly give to raisin-curing. There is no subject in connection with California fruit growing which is discussed with more interest than this. The prevailing inquiry is, how can grapes be converted into raisins in the most ready and economical manner? We have received several inquiries of this character; but we frankly confess that we are among those who are anxiously seeking this information. If any satisfactory method has yet been instituted, we are as ignorant of the fact as the public generally. We do not believe it has been done as yet, but doubt not that it will be accomplished at no distant day. It is known that the California grapes, dried in the California sun, make a fair quality of raisins; but this method is not adapted to our scale of grape-culture, and necessitates exposure to insects that deposit their eggs on the grapes when drying, the development of the succeeding stages of insect life spoiling the raisins.

We can hardly hope for the inauguration of a successful raisin-curing process in time to be of much avail in this season's grape product; but if another year does not develop it we shall be greatly disappointed. And if the present disagreement between the grape-growers and the wine-makers will end in establishing a system by which our surplus grapes shall be turned to useful purposes, and even prevent the possibility of a surplus, which successful raisin-making would do, it will prove one of the luckiest "strikes" of the day.

An Explanation.—If the Sacramento *Record* had chosen a milder term than "dishonest" journalism, in alluding to the article in last week's Rural Press, it would not have been to the expense of either justice or good taste. The article in question expressed the writer's careful but independent views of the subject, and as originally written contained a tabular report taken from a San Francisco paper, which was duly credited with the same; but upon consulting other parties this estimate was considered too low; and the report of the *Record* was accepted as the most correct. In substituting this table for that first chosen, credit was inadvertently omitted. This is a plain and candid statement of the case, and we think that any but excessively honest journalism will accept it as satisfactory.

Short-horn Bull "Sixth Lord Oxford."

According to the promise in the Rural Press of last week, we give to-day the portrait of another member of the Gabilan herd, the property of Chapman & Carr, Gabilan, Monterey county. This is another of the stock pictures executed for the Rural Press by our own artist.

The original of the accompanying engraving is of red and white color. He is now 17 months old, and is described as a remarkably beautiful animal. He was calved February 15th, 1873. Sire, 2d Duke of Oneida, 9926. The pedigree of Sixth Lord Oxford is as follows, and in this he is declared to be without a peer on the Pacific coast:

Dam, Third Maid of Oxford, by Grand Duke of Oxford (16184).



SHORT-HORN BULL "SIXTH LORD OXFORD."

2d dam, Oxford, 20th, by the Marquis of Carribas (11789).

3d dam, Oxford, 5th, by Duke of Northumberland (1940).

4th dam, Oxford, 2d, by Short Tail (2621).

5th dam, Matchem Cow, by Matchem (2281).

6th dam, ——, by Young Wynyard (2859).

Sixth Lord Oxford, bred by Mr. Campbell, New York Mills, and bought at his sale, held Sept. 10th, 1873, by Simon Beattie (for Hon. M. H. Cochrane), is the beau ideal of a Bates bull, having all the characteristics for which the Bates short-horns are remarkable, strongly developed, more particularly in his noble carriage and style of moving. His sire, 2d Duke of Oneida, was purchased at Mr. Campbell's sale for $12,000, and since then has been resold for $20,000.

2d Duke of Oneida is got by 4th Duke of Geneva 7931; dam, 13th Duchess of Thorndale, by 11th Duke of Thorndale, 5610 (28458); 10th Duchess of Thorndale by 2d Grand Duke (12061); 3d Duchess of Thorndale, Duke of Gloster (11382); —— Duchess, 66th, etc.

The matter of protecting the Yuba river from overflow is now being discussed by the farmers on both sides of the river. The residents of Linda township, affected by the overflow from the Yuba river, are about calling a public meeting in their township to take into consideration the question of preventing further damage to their farms. They propose to appoint a committee to consult with the best legal talent in the State and obtain their opinion as to their rights in the matter.

The wharf and warehouse facilities of South Vallejo are to be increased.

Under the Willows.

The recent army-worm scare at Sacramento should teach a lesson of prudence to those who tolerate willow trees about their premises. The worms are supposed to have been propagated in the willows which abound in that vicinity. The willow is a dangerous tree in this respect. There is scarcely a tree to which worms of the caterpillar class resort so much as to this. They, however, do but little injury to it; using it as a rendezvous for their armies, if they do not actually originate there. It being also remarkable for its uselessness, it should meet with little favor at the hands of property holders. We have known cases where one willow tree would harbor caterpillars sufficient in numbers to become a nuisance to a moderate-sized village.

We are not going to criticize the taste which favors this tree, but the same taste can be gratified by the presence of trees of similar appearance, but less objectionable in other respects. Although it is very tenacious of life in spots favoring its growth, it is very exacting in its requirements, and will only grow in such soil as with drainage would produce almost anything in profusion. It is extremely uncongenial, unneighborly and "clannish" in its habits; other trees and all kinds of vegetation seeming to shun its presence. There are reasons for suspecting that its influence on animal life is deleterious; for there is scarcely a tree to which men and animals resort less for pleasure or comfort than to the willow.

The basket-willow is grown with considerable profit where the manufacture of willow ware creates a market for it; and we can see no obstacles to the development of this business in California. But the growth of the basket-willow would not necessarily favor the army-worm or any other vermin of the caterpillar kind, the growth being of one season only, and the attention and cultivation which they demand being of a character that allows of no approach of such worms.

Melancholy Suicide.—A melancholy suicide occurred in this city on Saturday last. Mr. Wm. B. Bourne, an old and well-known citizen and large capitalist, shot himself dead in his house on Taylor street. The act was supposed to have been done in a fit of temporary insanity. Mr. B. left property to the amount of over one million dollars.

Another Rothschild Gone.—The telegraph reports the death of Anselm Rothschild at Vienna, on Monday last.

Oranges, Lemons and Limes near at Home.

Have these fruits had a fair chance at growing in the vicinity of San Francisco? It will hardly do to leave the question of our ability to grow oranges and other semi-tropical fruits to be decided by the popular impression, for that is over-exacting as to the degree of heat supposed to be required. There is a mistaken notion generally prevailing on this point. People evidently suppose that an almost perpetual warmth and evenness of temperature is essential to orange culture; but oranges, lemons and limes will bear more cold than people generally suppose. In Italy the orange trees are sometimes covered with snow, but their fruit is known as the best in the market; and in Los Angeles there are sometimes frosts, with thick ice in winter, and it is well known that the orange tree will grow and bear fruit in San José, San Lorenzo and many other places. The temperature of San Francisco and its vicinity is not too low at any season to admit of the growth of these splendid semi-tropicals; but whether the climatic variableness would be a hindrance is a question which yet remains to be decided. Until this question is thoroughly settled, we should not desist from the attempt. Those at least who wish to surround their homes with beautiful trees, bearing gorgeous and fragrant blossoms, may safely rely on accomplishing this purpose by planting a few orange trees. Should the fruit mature, they will have the additional luxury of this glorious fruit thoroughly ripened on their own trees; and then fruit grown on one's own trees does taste a little better than that of the same quality procured in any other way. Even though the orange may not be able to withstand the ups and downs of our somewhat fickle climate, the lemon and lime may succeed, for they are hardier than the orange.

The limits of orange culture are far less restricted than are the popular impressions on this subject. The tree has grown thriftily and matured its fruit even at Coloma. It is not much inferior to the peach in hardiness. Its cultivation in California has apparently been satisfactory in every respect to those engaged in the business; and those who have had most experience in orange growing are the most liberal in extending the latitude in which the growth of it may be safely undertaken.

The Beecher-Tilton scandal still "drags its slow length along." Notwithstanding all that has been published up to the present time, public opinion is quite as much divided as ever. A contemporary sums up the whole matter as follows: Tilton says Beecher did; Beecher denies, and says he didn't; Mrs. Tilton says that Beecher didn't. There is an awful lie out, and who has told the lie remains to be seen. It seems to us that Mr. Frank Moulton, who was the mutual friend of the Tiltons and of Beecher, during the whole of the scandal talk, can settle the question and saddle that lie on the back on which it belongs.

What Next?—And now South Carolina has its plague—caterpillars. Fears are entertained that they will sweep the State of its cotton crop. Hydrophobia, grasshoppers, Plymouth church scandal, Indians, lightning, floods, marine disasters without number, disastrous fires, etc.—the list is growing lengthy, and the question naturally arises, what next?

The amount of sweet corn grown in Solano county this year is very great. It is a drug in the markets of the interior towns, and at Suisun can be bought at almost any price.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Sacramento County Items.

EDITORS PRESS:—Farmers who have orchards often make it a practice when gathering fruit to put up movable fences and turn their hogs in to eat the fallen apples and manure the land; it is also a good idea to keep chickens to pick up worms, etc.

Farmers are now busy gathering their blackberry crop. The flush will soon be over. The yield is not so large where the hot north winds came in contact with them. The early variety is gone. It is the intention of many to set out more of them next season, as there is always a demand for them to ship and can.

The grape crop is claimed to be a heavy one, the vines hanging in full clusters. The Early Golden Chaples are ripe for market. The wine manufacturers have already commenced pressing from Cache Creek cañon, of the Madeleine variety.

Some of our neighbors are putting in their time in making strawberry beds, and placing sets. They thoroughly soak the ground previous to setting, so as to have them in season for the next crop. Water for irrigation is easily obtained. As you take a survey over the plain, hundreds of mills are in motion sending up the pure water from mother Earth, and running in various directions as it is wanted. Wind power is the cheapest power for lifting pumps. Horse and steam power is used at times when there is no wind. The nature of our soil is such, that when level you can take water a mile distant if needed. Once these plains were barren; now they are dotted with cottages, evergreens, flowers, shrubbery, orchards and vineyards.

The worms that troubled the vines have disappeared. I find the yellow jackets and bees are doing more damage than the birds. I am willing to share with the birds, but don't like the yellow jackets.

I believe cotton and tobacco have not been experimented on here. I learn by a party that he intends to make a trial.

Grain is grown, but its yield is light. Hay is raised in large quantities, although not heavy; its quality is such that it brings a high price—above any other. Wheat is cut often for hay. Summer fallow is the only guarantee for a good crop. The manner of our farmers is not to rely on any one crop; they each have a quarter section or more; they divide the land—put in some hay or grain, have a small vineyard or orchard, blackberries and strawberries, keep cows, hogs and chickens; so that each week something comes in to supply the wants of the family. To make a living from any one thing, the product would be too small.

As the supply of fruit is abundant, and prices low, growers will pay more attention to fruit-drying than heretofore.

We have been having cool weather for this time of the year. It is generally conceded that as the country begins to fill up, land cultivated, trees and shrubbery set out, a change of climate generally follows. This is the season for excursions, ruralizing; pilgrims flock to the beautiful falls, silver lakes, healing springs, or a trip to the "old folks at home."

Shipping of pears has commenced. Now, as fruit is plenty and cheap, the lovers of it are canning and making jelly. Nothing is healthier than plenty of good fruit the year round. In the warm summer days but little beef is wanted. Plenty of fruit and vegetables, which all farmers should have, is all that is needed.

G. R.

Sacramento Co., July 16th, 1874.

Information Wanted.

EDITORS PRESS:—I can't get along without the PRESS; it is indeed "truly rural." Can you give me any information regarding the "Thomeny" system of fruit growing? It is very popular in France, and it is said that a single acre of grape vines, cultivated thus, has considerable advantage over our mode, both as regards time and product. Though an old "Faher-ite" I am a young orchardist, and would be glad of information. The Sweetwater valley is doing well for young folks. Have marketed peaches and had tomatoes all the winter, indeed without intermission from the same vines since they were planted last year. I had no frost; the lowest on any ranch was 42°. My limes are bearing well. Indeed, any and everything will grow well on the "mesa," *i. e.* if you have plenty of water.

JNO. C. MOORE.

Riverdale, Sweetwater valley, San Diego Co.

[Our correspondent has our thanks for his appreciative compliment, and we regret that we are not able to give him the desired information. We have certainly seen something in regard to the method alluded to, but cannot at present produce any available information on the subject. Will some of the readers of the PRESS give us a little light on the subject? —EDS. PRESS.]

Petaluma Cheese Factory.

[From our Special Correspondent.]

EDITORS PRESS:—The establishment of a cheese factory at this place—the first in the State—has caused much inquiry and comment, and various speculations concerning its practicability. Although dozens of factories may be found in a single county in the Eastern States, it was an innovation against our customs on this coast, and, like everything new, must stand the test of practical results.

The most important question to your readers, is, will it pay the dairymen? So far as this experiment goes, it has paid them much more than to make their own cheese, and this is especially true of small dairies of 20 cows and less. The price paid at the ranch has been one cent per pound for milk, which is equal to 30 cents per pound for butter, without the trouble of making it, which is more than is generally realized, and all risk and trouble of marketing is saved.

Messrs. Payne, Killam & Co. deserve much credit for proving the experiment a success and overcoming many obstacles. First, the dairymen were not only uncertain as to the profits to them, but feared the company might fail, and they lose; but, after getting their coin regularly, and comparing gains, distrust vanished. The next difficulty was a few dishonest parties, who, too greedy for slow gains, watered their milk. A lactometer soon exposed their deceit, and they were made to refund money paid for water. In shipping the usual way in sacks, the railroad company damaged a large amount, as the rich cheese required more careful handling than the hard skim milk cheese so often sent to market. Payne, Killam & Co. now have round boxes made to avoid further trouble. They had at the time of our visit 15 tons of cheese on hand, weighing from eight to 80 pounds each. They have orders from China, and the cheese has gained an enviable reputation on this coast. This experiment is a success and a benefit to all concerned, and, with equal skill and energy, will prove profitable in other localities. Payne, Killam & Co. have been obliged to keep teams to collect the milk from the ranches, thus adding heavily to their expenses for teams, which are used but a few hours daily. The price paid for milk is sufficient to secure its delivery at the factory, and as all dairymen have their teams, and its delivery could be arranged among themselves along the line of dairies, this would be more consistent, and a part of the work not properly belonging to the factory.

The proprietors are pleasant and courteous, ready to give any information to those interested, and we were well pleased with our visit.

C. W. O.

Petaluma, July 22d, 1874.

CATTLE BREEDERS.

Some of our Recent Importations of Short-horns.

EDITORS PRESS:—On a recent trip to San José, I took the opportunity of seeing some of our recently imported short-horns; and, should you think my notes on the same worthy a place in your columns, I give you the benefit of them; *i. e.*, if there is any benefit about them.

My first call was on Mr. S. B. Emerson, Mountain View, who has now about 20 head of short-horns, in all. In 1857 Mr. E. purchased three bulls and three cows, at Mr. Stone's sale, Guelph, Canada; of the three bulls, Grand Turk, (1626), was the only one he used to any extent; he was by the pure Booth bull, King Arthur, (13110), and out of a cow by the famous Booth and Bates bull, Grand Turk, (12969), one of the finest bulls of his day. The cows were of three distinct families, viz.: Lady Bolton, by Mr. Bolden's 2d Duke of Bolton, (12793), a bull with two pure Duchess crosses, on a Booth foundation—from her he has three female descendants: Lady Farnham, by John O'Gaunt, 2d, (13089), and out of a cow descended in direct line from Mr. Mason's No. 6, by Dr. Syntax, (220); of this family he has six females. And, from the third cow, Rose of Summer, by John O'Gaunt, 2d, (13089), and descending in direct line on the female side from Aurora, by the celebrated bull Comet, (155)—he has four female descendants. These, and one cow that I did not see, making all that Mr. E. has left from his first importation. They were all bred by him, eight of the thirteen that I saw being by Grand Turk, (1626), and the other five by Lord Farnham, a bull got by Grand Turk, and out of Lady Farnham.

I am not going to dwell on the merits of each animal, but will just give the general *character* of the whole as being good, square, large, *roomy* cows—pretty much of the good, old-fashioned stamp of short-horns—some of them a little wide in the horns, perhaps, but not to a fault. Two or three of them are inclined to coarseness, but with these exceptions, they have good clean heads, with pleasant countenances, handle well, and are almost without exception good milkers, and are sensibly used as such.

Now for the recent importation, purchased at Mr. Stone's sale in Oct., 1873. Here, in the pasture, is Isabella 23d, two years old last Feb., and a direct descendant, on the female side, of Booth's own sister to Isabella by Pilot (496). She is rather low in condition—*i.e.* for a fancy short-horn—but handles well, with plenty of good hair, has fine long hind quarters, and, notwithstanding a slight deformity caused by an injured back when a calf, she looks like the making of a fine cow. Mr. E. has a five months old red bull calf from her, Airdrie Duke 4th, by Airdrie Duke 3d, a bull bred by C. L. Vaumeter, Ky., got by Airdrie Duke (5306) and descended on the female side from imported Gem by Broker (9993.) The calf has an exceedingly sweet head, but is at present a little hollow behind the shoulders, and somewhat plain about the rumps; but for all that he may come out a good bull, as it is next to impossible to tell what a calf of his age will make. Next comes Cambridge 12th., got by Grand Duke of Oxford (5733); her great great grandam was Webb's Celia by 3d Duke of Northumberland (3647), a family that brought a high average at the Babraham sales in 1863. She is a nice-looking, short-legged cow, of the fashionable red color, with fine eye, good brisket and neck vein, well up in the chine, being a little narrow there, but widens out well towards the hips; has tolerably good hind quarters, and stands well on her legs; she is a shade low in the loin, and her handling is not so good as it ought to be, being too patchy in her flesh. She also has a red bull calf by her side, Airdrie Duke 5th, by Airdrie Duke 3d, not quite so sweet about the head as his half brother, but excelling him in evenness all over, at present.

We now come to the head of the herd, the imported bull Sheriff (29964) bred by A. J. Roberts, England, and of the Seraphina tribe, on the dam's side; his sire being Cherry Duke (25752), a bull of noble lineage, being by Mr. Hegan's 11th Grand Duke (21849), dam by Marmaduke (14897), a Gwynne bull, followed by three pure Duchess bulls, and running back to Col. Craddock's Old Cherry by Pirate (2430). Sheriff's color is a bright red; upon the whole he is a neat bull, being very level on top, and straight underneath, with prominent brisket; but not so full in the neck vein as he ought to be; good flanks, fore and aft; very good through the heart, has a square, broad back, but does not carry enough flesh on the loins; nor is he so well filled in between the hip and rump for a bull, being a little too much like a cow there, as well as about the head, which is too long, and too narrow; but a good clean head withal, with good, well set horns, and an eye that shows a pleasant, docile disposition. His handling is pretty good, but carrying so much flesh as he does about his rumps shows an inclination to patchiness. In the use of such a bull, I may safely say, Mr. Emerson's short-horns will not loose the straight backs, broad hips and fine hind quarters that characterize the older portion of his herd. Yet the new is not better than the old.

My next visit was to see the herd of Cyrus Jones & Co. at the Avenue ranch, some five or six miles east of San Jose. The intelligent herdsman took every pains in explaining the particular breeding and quality of each animal, therefore it would be quite superfluous for me to dwell on their individual merits, only I may go so far as to say that they are all well bred animals—some of them very well bred. This herd is for sale, and as printed catalogues containing the full pedigree of every animal in the herd are given to any one wishing to examine their pedigrees for themselves, we will, for the present at least, leave intending purchasers to use their own discretion in regard to both the breeding and the quality.

The female portion of the herd—about 20 head—are a good lot of cattle. Among those that took my attention most was Gem of Oakwood, a good heifer, with plenty of hair and substance; and Fairy Queen 3d, a heifer with good back, loins and hind quarters, with hardly a hill or a hollow about her.

At the head of the herd is a Mazurka bull, Mazurka Star, bred by A. J. Alexander, Ky., got by the pure Booth bull, Star of the Realm, (11021,) with an Oxford and a Duchess cross beyond. He has an exceedingly good head, fine muzzle, good broad forehead well covered with soft curly hair, has a good brisket, but is somewhat deficient in girth, with hide a little too fine for a bull—the last, the only feminine trait about him; he has a good full twist, but would look better if he was a little better fleshed about the tail-head—this is as I saw him in the stall; not seeing him out, I did not view him to the best advantage. We were given to understand that Mr. Jones is now in the east, intending to bring back with him another carload of Short-horns. With the hope that the latter—not the end—will be even better than the first,

ROBT. AGHBURNER.

Baden Station, San Mateo Co., July 20th.

A CORNSTALK crusher is the last agricultural idea, and the editor of the *Rural New Yorker* says that running the stalks through a crushing machine prepares them better for cattle than to cut them, as it bruises and pulps them to some extent, removes the sharp corners which cause sore mouths in cattle and makes them more palatable, etc.

USE pure-blooded males. Keep no more stock than you can keep well—and the young should always be improved. Never sell to the butcher, or anybody else, your best and thriftiest young females. Calves should be dropped from the first of March to the first of may.

POULTRY YARD.

Why Hens Lay so Much.

The *Poultry World* has lately published several articles on "Selection in Breeding," from one of which we condense the following on the above subject:

In their natural state all birds lay a limited number of eggs, usually just as many as the hen can entirely cover during incubation. Those birds that rear more than one brood during the year, being no more liable to accidents than single brooded birds, rear the most young, consequently this variety would predominate. Now, when the jungle fowl was brought into domestication, in addition to its wild habits of laying fifteen eggs and then sitting, it is made to increase the number of eggs beyond fifteen, by taking advantage of its natural powers of provision for accidents, by removing the eggs as fast as laid, leaving enough in the nest to prevent its abandonment. The hen naturally is forced to lay a few additional eggs to suppy the apparent deficiency in the number usual when incubation is commenced. Under domestication, the robbery of hens' nests is carried on regularly and constantly, and the production of eggs is stimulated at a great rate. This is assisted by the abundant supply of food at all seasons. Food is plenty with wild fowls only during the breeding season; but man, by supplying plenty during winter, makes spring and summer extend through the whole year. This induces a habit of continuous laying that becomes hereditary. This work of breeding strains of fowls to be great layers by gathering their eggs daily was not performed with any conscious purpose. The keepers took the eggs because they were wanted, and carried on this practice without knowing or caring that the habits of the birds would become permanently changed thereby. This habit is perpetuated unconsciously by most people who keep fowls for use. The "gude-wife," when setting a hen, always selects the eggs from hens that are good layers. "Old Brownie is such a good layer, I like the breed." So old Brownie's eggs are saved for setting. The keeper, by thus unconsciously selecting the eggs for setting, goes on improving his stock in this quality from year to year.

All these causes have been in operation for thousands of years, for the change from 30 or 50 eggs per annum to five times that amount was not accomplished in a single 100 years.

The writer thinks that the reason why geese and ducks do not lay so continuously or so abundantly as hens, is because they were migratory fowls, and their breeding season is more limited than that of the jungle fowl, which is a constant resident. In the northern regions where they rested the season is short, and what was done was done quickly.

Poultry on the Farm.

It is not to be expected that farmers generally will become poultry fanciers, in the usual meaning of that term, nor do we think it desirable that they should. But there is no place where poultry can be kept more cheaply or with more profit than on farms, if a reasonable amount of care be exercised. There is little difficulty in having a return of say, $100 per year, from the poultry kept on the farm, with comparatively little cost—these returns being partly in the amount received for produce sold, and partly, perhaps chiefly, in the value of the product used on the farm.

Fowls eat as much on the farm as elsewhere, but much they consume would be lost did they not get it, and a large part of their food is made up of that which is of no value and perhaps positively injurious to the farmer. As a rule, they are more healthful on farms than where more closely confined. These and other reasons can readily be named why farmers should find their poultry yielding a larger net profit than those who live in villages or cities. Yet, as a rule, this result does not follow; and this largely from a lack of care on the part of the farmers. To allow chickens to be hatched at such times as suits the convenience of the hens; to kill for eating the earliest hatched and the best; to allow the weeding-out process, aside from this killing, to be carried on by death from natural causes or disease, to give no attention whatever to breeding—these are not the best means of securing success; and yet they are often adopted by farmers.

That some of the improved breeds are superior to the average common fowl is evident, and we see no reason why farmers should not avail themselves of the advantage—selecting one breed, and gradually working into this, until the whole stock is of this kind.

CONDIMENTS IN POULTRY DIET. — Cayenne pepper, mustard or ginger, can, with great benefit, be added to the food of fowls, to increase their vigor and stimulate egg production. This apparently artificial diet will be seen to be natural, if we remember that wild birds of the gallinaceous species get access to very many highly spiced berries and buds; articles that give the "game flavor" to their flesh. The ordinary food of the domestic fowl is not, indeed, entirely without some such addition, since there is more or less of an aromatic principle in wheat, Indian corn, and all other grains. Nevertheless, it is not sufficient in quantity to supply the place of the stronger spices, a taste for which is a part of a fowl's inherited constitution. A moderate quantity of cayenne, etc., added to the ground grain, is always productive of health and thrift in poultry.—*Poultry World.*

The Swine Yard.

A New Yorker's Views on Pigs.

During the recent New York State Fair, according to custom, several evenings were devoted to agricultural discussions. On one of these occasions, the subject was "pigs." It was introduced by Vice-President Curtis, who, in opening the first division of the discussion, alluded to the vastness of the capital engaged in pig raising, it being estimated that there were 32,632,050 swine in the United States last January, valued at $133,729,615; and in this State alone there were 651,700, worth $5,681,827; the business is also fast increasing. Yet pork making east of Ohio is not really profitable, unless to a limited extent in the hands of skillful farmers. It could be made more profitable by paying closer attention to breeding, and exercising more care and economy in feeding. As to breeds, the wants of the western farmer are quite different from ours. He wants as large a hog as possible, without reference to the quantity of food consumed, it being cheaper to ship pork than corn. A breed has been established to meet these requirements—the Poland-China, which are heavy, spotted in color, and have been developed from crosses, last with the Berkshire, which was a decided improvement. The Poland-Chinas have been bred so carefully that they may be called nearly or quite thoroughbred. Another new breed has been started in Jefferson county, New York,—the Cheshire, white in color. These two will suit the western farmer; and the large Yorkshires are also good, but there are very few of them. In the East, we want something quite different—a hog that produces not so much masses of pork, as fine, heavy hams, shoulders and fat. There are several breeds of this kind—the Suffolk, which is white; the Berkshire, black and white, and the Essex, black. These make up the list of thoroughbred swine in America, though there are several valuable families which may become breeds in careful hands—the Chester Whites, for instance. We want especially a *white* hog, with desirable characteristics in other respects, the Suffolks being considered too small (though the speaker thinks none more profitable in proportion to the food consumed), while the Chester Whites are only bred to a very limited extent; they have had some popularity at the west, but have been bred so carelessly as to get mixed up with other kinds, and become unpopular. This has also occurred to some extent with the Cheshires, so that different specimens are exceedingly unlike. Pig breeders are remarkably careless, though attention to the breeding will pay as soon and as well as with any other class of domesticated animals. The *color* is matter of fancy, for if black pigs be well fatted and well dressed, their pork will not be black. A breed which will fatten readily and early, make a large quantity of flesh in proportion to the food consumed, and grow to a reasonable though not enormous size, is best suited to the wants of the East. As to breeding pigs, it must be borne in mind that no breed of any kind of animals can be kept uniform without a well defined standard of characteristics as the breeder's aim. Swine breeders have for the most part neglected this law altogether, and hence we have no distinctively American breed, as we might and should have. An excellent guide is given by the scale of points adopted by the National Breeders' Association, at Indianapolis. As to feeding, there is often a great waste. Food, to be economical, should generally be cooked. In conclusion, Mr. Curtis remarked that it will not pay the Eastern farmers to keep *a great many* pigs, but to have a few *of the best kinds*, and feed them well.

Pork Prospects.—Pork raisers have every reason to be gratified with the condition of the pork trade. With all the rise in pork and the scarcity of money since last October, the price remains stiff and the supply on hand is very light in comparison with that of a year ago. The prospect is, that prices will go even higher, and that pork producers will be remunerated. Even if there should be, as appears probable now, a large crop of corn, the stock of pork, and perhaps of hogs, will be so reduced before the new crop of corn comes, the market will require all that can be produced at good prices. The demand for our pork in Europe, is continually increasing, and will materially assist in reducing our surplus. This rise in pork and the outlook for it ahead, only serves to illustrate the folly of changing from one branch of farming to another so often, as a large class of farmers are wont to do. When dairy products decline they will go into sheep and when wool declines they will change back to cows. But all experience has shown that the steady pursuit of any branch of agriculture adapted to the farmer's circumstances, is the true way to succeed. In order to determine the profit of any branch of farming, the average of ten years must be taken as the criterion. The average price of pork for ten years is always remunerative, and the man who pursues it steadily will have no cause to complain. Hogs will pay, sheep and cows will pay all those who steadily pursue the one or the other. It is change that entails the loss.—*Live Stock Journal.*

Hog Cholera.—When once the hog cholera is in your herd, give at the rate of one ounce of carbolic acid to 25 hogs, well dissolved and mixed with swill, and repeat every two days. Be sure and remove every affected hog at once.

Making Pigs Work.

A correspondent of the Massachusetts *Ploughman* asks this question:

"Can pigs be carried on through summer on green stuff, like clover, lucerne, fodder, corn, etc., after they get advanced enough to cut, or is there something or anything better?"

To which the editor very wisely replies:

We once heard a close calculating, practical farmer say that he did not believe it paid to work swine; and we know that old Col. Jaques, of Ten Hills farm, in Summerville, a genius in his way, always maintained that it was the best economy to "put pigs on to their belly" at nine months old, that is, to fat and kill them young. We incline to think he was right. Nevertheless there can be no doubt that manure under the barn is greatly improved by the mixing and working which a few swine will effect. This can be done to some extent, as an incident, but to keep swine for this special purpose is another matter altogether. We should want to count the cost of it carefully before we undertook it. Pigs can be summered at pasture very well and cheaply. We have known instances of this where they have lived almost wholly on clover and the roots of other plants which infest old pastures. There is nothing more healthful, but you could hardly expect to get a very rapid growth on them without some extra feed. Kept at pasture till October,, and then put to fat, they ought to gain rapidly.

Pigs ought to have access to plenty of good water. To promote a disposition to root extensively, probably corn in the kernel and scattered about promiscuously, is as good as anything. Potatoes and raw roots are always useful, especially beets.

Rising of the Lights is a common term for inflammation of the lungs, a disease to which pigs are subject, and one that is too often fatal. It is palpably an error to deem this disease hereditary, for it evidently arises from atmospheric influence, or some mismanagement in feeding, cleaning or ventilation; and generally, when it does make its appearance, runs through the whole piggery. The grand remedy is bleeding. The hog is most readily bled from the palate. To this must follow purgatives, promptly administered, and consisting, according to the size of the patient, of from two to four drachms of Epsom salts, and the same quantity of flowers of sulphur. If the animal feeds tolerably, he will take the Epsom salts in his wash and the sulphur may be omitted. The principal symptoms of inflammation of the lungs are, heaving at the flanks, a cough more or less painful, and loss of appetite. Attention and promptitude are requisite, as this disease runs its course very rapidly.

Dressing Black Hogs.—A correspondent of the Michigan *Farmer* says: The principal objection to the Essex and Berkshire breed of hogs I find to be their color. Now, as Youatt justly observes, this is not skin deep. The coloring matter will be found to be secreted between the true skin and the epidermis or outer skin. If care is taken in scalding black hogs they can be dressed as white as any white hog. It is a well known principle that all black substances absorb heat. Hence in dressing black hogs the water should not be so hot as in scalding white ones. If this simple rule be observed there will be no difficulty in dressing black hogs. Instead of this color being an objection, I regard it as an advantage, for the skin of a black hog will always be found to be smooth and glossy, free from cutaneous eruptions, and always clean.

Care of Hogs.—The *Colonial Farmer* says: "A practical breeder gives the following advice which, in the main, we think sound, for those whose herds are not too large and who are engaged in mixed husbandry. To handle hogs to the best advantage, a pasture is needed of green grasses—clover, blue grass and timothy—and it is best if there is no running water or stock ponds in the lot. Hogs do better where there are no branches or stock ponds to wallow in. In place thereof, have good well water pumped for them. Have troughs made, and nail strips across eight inches apart, to keep the hogs from lying down in the water, and let these hogs be put on floors, to keep them from digging up wallowing holes. If any feed be given, it should be soaked in swill barrels for 12 hours before feeding—no longer—and fed to them as drink.

The *Stock Journal* after giving a number of experiments in feeding corn to hogs, remarks that these statements show that there is within a fraction of twenty-four pounds of pork in a bushel of corn; and the effort of every farmer should be to endeavor to get out as much as he can of it. And to do this, he must have the right kind of hogs, they must be placed in the right condition, and fed in the right manner, with a view to profit.

Hog Cholera.—A Sangamon, Ill., correspondent recommends the following as having been successful in his neighborhood: "Take poke root and boil it and mix with slops or other food and give it to the hogs in pretty liberal quantities. It is well to boil some of it and have it handy to use at any time."

Dry leaves make better bedding for pigs than straw.

Bees.

Size of Entrance Holes to Hives.

The honey bee has, on each hind leg, a spoon-shaped cavity, studded around by stiff hairs, in which it packs the pollen and propolis—the hairs holding the pellets in place when clasped down on them. The leaf-cutter bee gathers and carries pollen also, but has no such baskets on its legs. It has a mass of stiff hairs on the underside of its tail, among which it fastens the load. Here we see the same end accomplished by different means, and it requires but little observation to see why. The leaf-cutter bee has to pass through a round hole to enter its nest or hive, and then through a round tunnel or gallery but little larger than its body. If it should attempt to do so with the pollen mass on its thighs, as the honey bee carries it, it could not do it without pulling off its load. Consequently it is packed under the tail, where it does not impede the passage.

The honey bee ordinarily in its wild state inhabits hollow trees, the entrances to which are either through long slits or large holes, through which it has ample room to pass, without brushing off the pellets that stick out from its sides. A worker bee can pass through a hole three-sixteenths of an inch high, but in passing through a round hole of that diameter the pollen would be dislodged. A drone requires a hole nearly one-fourth of an inch in diameter to pass through, so that in making entrance holes to hives it is evident they should be at least one-fourth of an inch high to allow drones, as well as the queen and workers, to pass; but they should not be any higher, if we expect to exclude mice, humble bees, hornets and other enemies of the bee larger than they are.

Now, did the bee carry its load behind it as the leaf-cutter does, a round hole of one-fourth of an inch in diameter would be large enough, but the load on each side sticks out from its sides, so that more room must be given laterally, even for the passage of a single bee at a time—but, as during active working there is a constant flow of passing bees, it must be much wider. I find the width should be at least three inches.

But a single hole is not sufficient, even of that width, on account of their peculiar manner of ventilation, by which they are enabled to keep up a constant circulation of fresh air through the hive and regulate the temperature. There should be two such holes at least four or five inches apart, but on the same side of the hive. All other openings should be closed tight. If thus arranged, the left hand hole will be used for ventilation, and the other for the passage of most of the bees.

Query: Why do bees always use the left hand hole for ventilation?—*Cor. South. Far.*

Experiments in Bee-Keeping.—Mr. F. A. Snell, Milledgeville, Ills., in the *Beekeeper's Magazine*, thus relates the results of some experiments made by himself during last autumn and early winter: In reference to feed we could detect no difference between those fed on syrup (Coffee A sugar) and those fed upon natural stores. The results were about the same with those on summer stands. The three prepared for winter by filling caps with straw, and covering the whole with straw about four feet deep, we found all dead. The combs were dry, straw dry, and no sign of dysentery. This is the second failure to our knowledge, where bees have been buried in straw. We now have seven stocks left, out of twenty-four, thirteen of which were supplied with the syrup. We have carefully examined the combs left in the hives, and have found *but one frame of comb containing pollen*. The early spring here was cold, but during fruit-tree bloom the weather was fine, and bees did well—better than in the same time for several seasons past. They are now breeding finely. We are not discouraged, although the last season was our third in losses.

Bees express not more love to their keepers than strangers, but they, (their keepers), being used to them, with greater confidence venture among them, which some—more fearful—beholding, fancy that the bees respect and love them more than strangers.—*Purchase.*

It is commonly the practice to rub the inside of the hive with aromatic herbs, of solution of salt, or other substance. But the most experienced bee-master deems this altogether unnecessary, as it can be attended with no advantage whatever.

Workers alone have the property of secreting wax. Scales of it ranged in pairs are contained in minute receptacles under the lower segments of the abdomen. * * * This substance is produced by a particular organ, after the manner of other secretions.—*Huber.*

Those who have fears of any part of our country being overstocked with honey, not only have a contracted idea of the plants which afford honey, but also fail to consider the manner in which it is secreted by the industrious bees.

The word honey is undoubtedly derived from the Hebrew word *ghoney*, which means delight; an appropriate title.

Horticulture.

Sub-Rosa.—The origin of this custom seems to date as far back as the 16th century, where it is mentioned by Newton in his "Herball to the Bible in 1587," as follows: "I will heere adde a common country custom that is used to be done with the rose. When pleasant and merry companions doe friendly meete together to make goode cheere, as soone as their feast or banket is ended, they give faithfull promise mutually one to another, that whatsoever hath been merrily spoken by any in that assembly, should be wrapped up in silence and not carried out of the deores. For the assurance and performance whereof, the tearme which they use is, that all things there said must be taken as spoken *under the rose*. Whereupon they use in their parlors and dining roomes to hang roses over their tables, to put the companie in memorie of secresie, and not rashly or indiscreetly to clatter and blab out what they heare. Likewise if they chaunce to shew any tricks, wanton, unshamefast, immodest, or irreverent behaviour, either by word or deed, they, protesting that all was spoken under the rose, do give a strait charge and pass a covenant of silence and secrecy with the hearers, that the same shall not be blowne abroad, nor tattled on the streets among any others."

Effects of Sulphate of Iron on Vegetation.—Experiments with this substance diluted have been made within the circle of our own knowledge, and uniformly resulted favorably. We observe that a French scientist, M. Eusebe Gris, has been making detailed experiments, and finds the following definite conclusions: That the salt is a stimulating manure; that it presents no danger when intelligently applied; that its action is seen on the coloring principle of leaves; that from its cheapness, a few cents' worth is sufficient to treat hundreds of plants; that it might be applied to cultivation on a large scale, and especially to the cultivation of fruit. His manner of applying the sulphate is as follows: A solution of two drachms to one quart of water is made, and with this the plants, previously placed in the shade, are watered. It is presumed that the earth surrounding the plant is moist; if this is not the case, a more dilute solution must be used. The solution may be applied daily for five or six days; about two and a-half ounces are sufficient for each watering of an ordinary sized plant, as a calceolaria. Plants which have become sickly, colorless and etiolated will, under this treatment, quickly recover a full green color, give finer flowers, send forth more vigorous shoots, and generally show the good effects of the tonic.—*Horticulturist.*

How Flowers Become Naturally Double.—At the May meeting of the Philadelphia Academy of Natural Sciences, Mr. Thomas Meehan observed, that on several occasions during the past few years it had been noticed, among the variations in nature, that the tendency to produce double flowers was by no means the special prerogative of the florist to originate. Many of our commonest wild flowers, which no one would think of cultivating, had double forms in cultivation which were, no doubt, originally found wild. Thus we had a double *Ranunculus acris*, *R. Bulbosus*, *R. Ficaria*, *R. repens*, and some others. There were in plants two methods by which a double flower was produced. The axis of a flower was simply a branch very much retarded in its development, and generally there were, on this arrested branch, many nodes between the series forming the calyx or corolla and the regular stamens and carpels, which were entirely suppressed. But when a double flower was produced, sometimes these usually suppressed nodes would become developed, in which case there was a great increase in the number of petals, without any disturbance in the staminal characters. But at other times there was no disturbance in the normal character of the axis. The stamens themselves merely become petaloid. This was the case in the *Epigæa* recently found by Dr. Darrach.—*The Garden.*

Green Gage Plum—Origin of Name.—The origin of this name is said by *Notes and Queries* to be as follows: The plum was brought into England in the middle of the last century, by Rev. John Gage, a Roman Catholic priest, connected with a monastery near Fontainebleau, France. The laws of that time against Roman Catholic priests were so severe, that Mr. Gage lived abroad, but frequently visited his brother, Sir Thomas Gage, of Hengrave Hall, near Coldham, in the county of Suffolk, 5th baronet. In one of these visits he brought over from the garden of the monastery, grafts of the fruit which were cultivated in the garden at Hengrave Hall, and soon were spread throughout England. This story is vouched for to absolute accuracy.—*Horticulturist*

Tropical Vegetation.—A Panama paper gives a striking illustration of the vigor and rapidity of vegetation in the tropics, by referring to the bushes and trees growing in the ruins of the burnt Aspinwall Hotel, at Panama. It is scarcely more than two years since this conflagration occurred, and yet there are now growing within the walls trees at least 30 feet in hight. They belong to what are called trumpot trees, (*Cecropia*), and the branches are said to be crowding out of the highest doors and windows.

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well as Treasurer's reports.

J. M. Hamilton.

The Granger's Cardinal Confession of Faith.

Acrostically Defined.

[For the Rural Press, by T. Hart Hyatt.]

Faith in the First Great Cause of all,
As our true polar-star and guide,
Is the Patron's first duty's call,
That in him must always abide,
Hallowing each act and thought withal.

Hope, he nurtures as a life-spring,
Opening to the pilgrims of life
Paths that will joy and sunshine bring,
Escaping time's besetting strife.

Charity, virtue's sweet employ,
He dispenseth with cheerful hand
And seeks, ere his own, his brother's joy;
Rarest of virtues though it be,
In every Patron's heart we see
The power of its charm benign,
Yet inviting all to its shrine.

Fidelity! The crowning glory
In the Patron's faith and life;
Deem not our life's fitful story,
E'en though with incidents most rife,
Ishor lost to humanity,
If pure Faith, Hope, sweet Charity,
True Fidelity's charm as well,—
Ye let these virtues with ye dwell.

The Great Movement.

The Great Movement is assuming grand proportions all through the land. The Grange has become the great question of the day among statesmen, petty politicians, tradesmen and people ont of the Order everywhere. The question how it can be captured is being carefully considered; plans are being laid, and we shall soon see heavy work. It is already evident that the conntry is full of men who think that all that is needed to make themselves good and great is opportunity and development—the Patron's vote is all they want. Remember, Patrons, that men who will try to draw farmers, who are members of the Order, into political entanglements are not your true friends. If you heed their advice they will sooner or later involve the Order in a partizan strife which can end only in onr utter destruction. Such men are supremely selfish. They aim, by thus getting yon off from your sound and beaten track, to involve yon in intricacies where they will have yon entirely in their power. Avoid such men as you would yonr hitterest enemy.

You have wisely adopted a constitution which forbids your entering into politics as an Order. Let no man without the gates tamper with you in regard to your fealty to our great organic act. A wise member of our Order has given this sensible advice:

"When it is necessary for the Organization to go into politics, let it he done only after you have as deliberately repealed the constitutional prohibition, as you adopted it in good faith and sound principles. There is never any hurry about going away from the grounds that are safe and pleasant. There is always great danger in tampering with what is sound in principle, and much more danger in letting others, even thongh they have got within the secret gates, tamper with and trample npon the plain, fair and protective clauses in our constitntion. Keep aloof from all such persons, or only come in contact with them to upbraid and rebuff them."

Our Grange Directory, for August, which should have appeared to-day, has been unavoidably laid over until next week. It has been thoroughly revised, and an unnsually large number of corrections, changes and additions have been made, which, we trust, will render it more serviceable and reliable than it has ever hitherto been found to he.

Crowded Out.— Several articles communicated for this department, the present week, are crowded out for want of room.

The Grangers and their Shipping Agent.

The Colusa *Sun* of July 25th appears to be very mnch astonished at the commnnication of J. W. A. Wright, which appeared in the last issne of the Rural Press, in relation to the Grangers and their shipping agent in this city. The *Sun* of that date contains an article in which an attempt is made to show that E. E. Morgan's Sons, by the course they have pnrsned in relation to chartering ships the present season, are placing the farmers of California under the necessity of paying higher freights on their wheat shipments than they would have done if the freight market had been left, as heretofore, under the manipulation of Mr. Friedlander.

As the article in question was published originally in the *Chronicle*, of this city, the publishers of that journal despatched a reporter to look into the matter, and the resnlt of his investigation was given in that paper on Wednesday last, from which article we briefly compile as follows:

The grain shipping interest of the State has herctofore beeu controlled by Isaac Friedlander, who has employed agents to make his purchases in various parts of the State, and to advance money at exorbitant interest to the fsrmers as they needed. Being the only considerable buyer and shipper, Mr. Friedlander has taken advantage of his position to secure low freights for himself; charge high freights to the farmers; buy wheat at a low figure, whenever he had advices of advances in Liverpool, and before the farmers were informed of such advances; and to generally so manipulate the wheat market as to secnre the greatest possible gains to himself and the least practicable profit to the farmer.

Abont a year ago a competitor appeared in the market nnder the firm name of E. E. Morgan's Sons, of New York, represented in this city by A. F. Walcott. Abont this time the farmers of the State, having very generally organized under the banner of the Patrons of Husbandry, and becoming thoronghly convinced that this new firm were disposed to act more in the interest of the producers than Mr. Friedlander had done, formally invited them, through their Executive Committee to act as their special agents in the shipment of grain.

Our readers are already aware of the advantages which were obtained by this alliance last season—of the many thousands if not millions of dollars which were therehy saved to the farmers of this State, which would otherwise have been taken from them and divided by Mr. Friedlander with his ship owners and his various other agents and confederates. Of conrse such an interferance in what Mr. Friedlander considered his own special field of operations, could do nothing less than precipitate a relentless war between the rival houses, which has culminated in a desperste effort on the part of Mr. F. to break np his rival by a system of tactics similar to that usually employed by monopolists to kill off opposition. In the present instance, however, the monopoly bids fair to destroy itself. Mr. Friedlander has discovered that his rival has secured an extensive control of shipping—larger, in all prohability, than his own.

The writer of the article in the *Chronicle*, who called npon Mr. Walcott, reports the following as the concluding words of the interview:

Reporter—Is your business affected in any way by what has beeu said in the country papers of your contract with the Grangers?

Mr. Walcott—Not in the least. We are going on just as usual. Our first ship to sail will he the "Star of Hope," now loading at Vallejo. The "W. R. Grace" is taking in her cargo at Oakland. The "Seaton" has been charteredhy us for the Stockton Grange, and I have just received a letter from the Merced Grange asking for a ship of 1,000 tons.

Rep.—Do you purchase the grain of the Grangers?

Mr. W.—No; we advance them a small amount of money on the cargo, and act simply as their agent to see that it is safely transferred to market. The money to pay for it comes back, of course, to the Grangers through us. The cargoes are insured for their full value, so that the farmer is perfectly secured against all danger of loss.

Rep.—I see that Friedlander offers in some cases rather extraordinary inducements to the farmers in the way of low freights, while it is said that your contract is for £4 10s. Shall you adhere to those figures if he underbids you?

Mr. W.—We have not chartered a single ship for £4 10s. The rates at which we have chartered range from £3 10s. to £4 2s. 6d., and we shall adhere to these figures, except in contracts that have been formally drawn. We shall not allow ourselves to he underbid by Friedlander, nor the farmer to suffer because Friedlander, in a wild effort to drive us from the path of reasonable competition, brings freights down to a figure that may seem ruinous. We can take freights at 2s. 6d. lower than he can any day. These ships are chartered at the request of the farmers, and their interests will he consulted. We don't care about the business of one year. We intend to build up a good, sound, slow, sensible, permanent business, which can only be done by consulting the interests of the people and winning their hearty good will.

Rep.—What would you consider a rational theory of Friedlander's action?

Mr. W.—I believe that he hopes by driving freights down, to prevent ships from coming here, and they certainly will not come, if too low a figure is reached. The only thing that will bring vessels to the Pacific coast is the expectatiou of a resonable profit. Having accomplished his object and caused us a great loss of money, he hopes to make a good thing out of it and recover his prestige by-and-by. But the result will show that he has mistaken his opponents, and the character and wishes of the people of the State.

Temescal Grange.—Members are reminded that the regular meeting occurs at 2 o'clock P. M., on Saturday of this week.

Official Appointments.

Having been assigned to special duty in the counties hereafter mentioned, to confer about our business matters with as many Grange members as can possibly meet me in each county, I beg leave to make the following appointments:

For Shasta Co. at Redding, Thursday 7 P.M. Aug. 6th.

For Tehama Co. at Red Bluffs, Friday 11 A.M. Aug. 7th.

For Butte Co. at Chico, Saturday 7 P.M. Aug. 8th.

For Yuba and Sutter Co. at Marysville, Monday 10 A.M. Aug. 10th.

For Colusa Co. at Colusa or Yuba City, Wednesday 4 P.M. Aug. 12th.

For Yolo Co. at Woodland, Thursday 4 P.M. Aug. 13th.

For Sacramento Co. at Sacramento, Friday 4 P.M. Aug. 14th.

For Napa Co. at Napa City, Saturday Aug. 15th.

For Sonoma Co. at Petaluma, Monday 7 P.M. Aug. 17th; Santa Rosa, Tuesday 7 P.M. Aug. 18th; at Healdsburg, Wednesday 11 1A.M. Aug. 19th.

For Marin Co. at Tomales, Thursday 2 P.M. Aug. 20th.

For Contra Costa Co. at Antioch, Saturday 7 P.M. Aug. 22d; Danville, Monday 7 P.M. Aug. 24th.

It would afford me much pleasure to spend more time in each county, and to visit each Grange separately, but considering the small amount of time at my disposal, and the large number of Granges in the counties mentioned, this is impossible, at present.

I trust as many of my fellow Patrons as can, will make it convenient to meet me at the times appointed, especially those interested in the success of our various business enterprises, such as the Grangers' Bank, Fire Insurance and Life Insurance Companies.

Come prepared to take stock, if possible. Matters of vital importance will be presented. Now is the time to push our enterprises to success. Deputies are especially requested to be present.

If Granges wish to communicate with me about any change of hours which may be deemed necessary, write me to care of Marysville Grange before Aug. 10th. *Local papers please copy.* J. W. A. Wright,
Lecturer, California State Grange.
Borden, July 28th, 1874.

Personal and Otherwise.

We clip the following from the initial number of *The Patron's Helper and Grange Instructor*, a paper just established at Des Moines, Iowa, by Bro. Garretson, from which it will be seen that our good brother still keeps in fresh remembrance his late visit to this State:

A few evenings since, at the depot in this city, we had the please of meeting with Bro. W. H. Baxter, Worthy Secretary of the California State Grange. Bro. B. was on his way to New Jersey, where he will visit, briefly, an aged mother, then take to his home again worthy sister Baxter, who has been visiting friends at the east for two months past. He found the tribulation of being alone too much for him, and seeks again the companionship of as noble a woman as lives. Less than twelve months since it was our good fortune to organize the State Grange of California, which comprised within its limits, then, less than 35 sub-Granges.

Impressed by the impatient earnestness of this people, we were deeply concerned, lest by undertaking too much, they should succeed in doing but little. Our fears on that subject are gone, for they have demonstrated that they accomplish all they undertake, and there is no work so great they dare not attempt it.

In addition to centralizing their business relations, so that great savings have been made in their purchases, they have so far controlled the sales and shipments (to Europe) of their wheat, that more money has been saved already, than the Order will cost them for a decade of years. They have organized a Patrons' bank in San Francisco, that will commence business on the 15th inst., with a capital stock of $5,000,000.

The Farmers' Mutual Fire Insurance Co. (a Grange enterprise), with our good brother, J. D. Blanchar, as President, will enter upon its work in a few days.

With this people, "to will, is to do," and they generally do it in less time than we of the Atlantic States require to debate the question. They have attacked the liquor traffic, the bane of their State, and we may expect to soon hear that Old Bacchus has capitulated on the Pacific coast. Noble Patrons of California, well done, go on! We shall gladly chronicle your successes in *The Helper*, and commend your example to our people of the older States.

In copying a small item from this paper in reference to the fact that Prof. Carr, Master of Temescal Grange, Oakland, has three brothers, also Masters of Granges, Bro. Garretson further says:

We clip the above from the Pacific Rural Press, and while doing so our mind goes back to that hospitible coast where it was our good fortune last summer to meet two of the gentlemen referred to. Dr. E. S. Carr does honor to his State in filling, with such marked ability, the professorship of agriculture in the State University of California. As a geologist he stands the peer of any scientist in the land. His good matron is not a whit behind her husband in enthusiastic devotion to science, and the work of human advancement.

The impression received on the evening when we stood with the Professor at the newly built altar of Temescal Grange still lingers, and we feel now, as then, that he will prove to be a tower of strength in the great reform movement of that coast. We have occasion to remember also, and with affection, brother and sister Nelson Carr, noble workers in the cause of the right. If these be specimen branches, then the Carr family is surely a God-send, that's all.

The Grangers' Bank of California will open for business to-day (Saturday, Aug. 1st), at 415 California street. The California Farmers' Mutual Fire Insurance Association will also open to-day, at 320 California Street, room 11, of the California State Agency.

A New Grange Paper.

"The Patron's Helper and Grange Instinctor" is the title of a paper just started at Des Moines, Iowa, by Bro. N. W. Garretson, Secretary of the State Grange of Iowa. The paper is an eight-page sheet and is almost exclusively devoted to the interests of the Order. Bro. Garretson is a ready and intelligent writer, and by extensive travel and connection with the Order, as a National Deputy, has become as fully posted, perhaps, with regard to the wants, workings and principles of the Granges as any other person. This publication has been established in accordance with a resolution passed at the last regular meeting of the Iowa State Grange; and hence may be accepted as the accredited organ of that body. We understand that Bro. Smedley, Master of the Iowa State Grange, and Bro. Adams, Master of the National Grange, have also promised to write for the paper and contribute their experience and advice to its columns. No doubt many other leading Patrons, of national reputation, will also lend their influence and pens to aid in giving value to the columns of the *Helper*.

Thoroughly and devotedly attached to the interests and principles of the Order, well schooled as above, and a man of clear head and sound judgment, who is known to always "go slow and step with care," we know of no one better calculated to take the chief editorial charge of such a publication than Bro. Garretson. But why confine its usefulness more especially to Iowa? Why may not Bro. Garretson extend the benefits of his publication to the Order at large, by giving it a *national*, instead of a *local* character? We have very little confidence in mere local organs; but we do greatly need a National Organ—a great central regulator, in which the combined spirit and wisdom of the entire fraternity may be centered for the benefit of the Order, everywhere, and particularly for the local papers, published in the interest thereof, now so numerously scattered throughout the Union. Give us what is so much needed—a national organ—to which all may look for instruction, advice and help. As the Order now consists of at least 20,000 Granges, with a membership of one million, which large numbers bid fair to be doubled within the next 18 months, it is but reasonable to expect that many grave questions must be constantly arising, in connection with the interests and progress of such a vast multitude of people, representing the most important industry in the world, the discussions of which should be spread broadcast throughout the land, and reach in some reliable and uniform manner, every individual Grange in the Union. Bro. Garretson, located in the very heart of the country, and at a distance from metropolitan or local influence and prejudice, and with a heart of his own large and good enough to take in the entire situation, is just the man for such an enterprise. If only a single copy of his paper, taking the character we have proposed, should be placed within the reach of every Grange in the Union, so that one or two of its leading articles, when thought advisable, could be read in the session thereof, we think it might be made the means of doing a vast amount of good in securing that uniformity of thought and action in all the great leading issues as they come up, which is so essential to the permanence and harmony of the Order and the prosperity of the great industry which we represent. We throw out this idea for the consideration of Bro. Garretson particularly, and the members of the Order in general. If Bro. G. should see fit to act upon the suggestion, unofficially, at present, we have little doubt that his action would be characterized with such good judgment, and promotive of so much benefit, that the next National Grange would be inclined to fix npon the enterprise the stamp of its official approbation.

Help Your Brother when his Outlook is Dark.—He bought the farm and paid down on it all the money he had. It seemed as if with good health and hard work he should certainly be able to make each of his payments as they came due. But misfortune came. He fell behind. He had to borrow money at a high rate of interest, and then followed the old story. He cannot make the interest demanded, meet his doctor's bills, take care of a sick wife and helpless child and attend to his business. So his creditor threaten to forclose the mortgage, and thus, as we all know, wipe ont all his property. The case is a desperate one, yet an every-day scene. If he could only sell at what the property is worth, he would still have money left to buy a comfortable little home, and to keep his family from starvation. Brother Patrons! can you help him? What can yon as fellow-laborers and brothers do for the struggling one? Ask yourselves the question, and rest not satisfied until you have answered it in action that will rejoice your sad brother's heart.—*Am. Patron.*

Sensible Advice.—Talk as little about the affairs of the Grange to outsiders as possible, and let those who are desirous of learning the mysteries of our Order do as we have done—come into the Grange upon the conditions prescribed, and satisfy themselves that we mean injustice to none, but claim only what belongs to us—the right of being recognized as honorable, upright and honest tillers of the soil, laboring to advance the interests of all.—*Ex.*

Our State University.

[Written for the PRESS.]

No Californian of culture, none interested in the canse of education, could have attended the commencement exercises of our State Uuiversity at Oakland and the alumni meeting at Berkeley, yesterday, without being gratified at the many evidences exhibited in proof of the good progress already made by our yonug institutiou towards secnring a higher education at home for our young men and women.

Beyond question, the University of Californiа is full of promise and hope—yes, promises aud hopes which we trust will some day be fully realized.

But great as was the gratificatiou and eujoyment to every lover of true scholarship, there was a cause of ever-increasing regret to many alumni of the Pacific Coast, and to all others who are iuterested in the elevation and advancement of the great agricultural aud other industrial interests of Califoruia, by the very process of that "higher education," for all classes of our people, which it is the inteution of our National and State Governments to secure by the Act of Cougress of 1862, granting us lands, aud iu the original law of California, establishing the State University. This regret is caused by the fact that in the midst of so much that was good—so much from which we would not detract oue iota of merit or praise—the great interests aud wants of the "Colleges of Agriculture aud Mechanic Arts" were too much ignored; indeed, almost completely overlooked.

What visitor from a distauce yesterday would have imagiued from anything said or done, that the Uuiversity of California was established by the munificeuce of the Governments of the United States aud of California to secure especially the wauts of agriculture and the mechauic arts, without excluding other scientific and classical studies, which ever have been and ever should be essentials in all thorough aud higher systems of education? Yet, such are unquestionably the facts shown in the orgauic laws which gave existence to our noble institution of learning—the *Peoples' Universily*—as can be seen by examining our statute books, aud the questious sent out regularly by the National Government to be answered officially by every State college or university, which has been aided by the grant of agricultural college lands.

But, if we mistake not, the words agriculture or mechauic arts did not occur once in the whole day's proceedings, except that the former was printed twice on the programme, in counection with the names of two out of some 20 graduates. True, steps are being taken to so improve the gronnds as to illustrate to some exteut the practical principles of agriculture in its branches of horticulture and arboriculture, by the plauting of trees and establishing a propagatiug house. This is all very well, aud the people of this State will rejoice to hear of eveu this much being done iu the cause of the practical part of education, which all know is not to be undervalued. But not one word was heard of these things during the exercises, while other excellent plans of improvemeut were mentioned. It is the utter ignoring of these matters which the original laws intended to be made prominent, to which the industrial classes and their uumerous friends must aud will object.

Again, in one of the off-hand addresses at the alumni meeting there was an allusion to the unfortunate interfereuce of the agriculturists and mechanics of this State to lower the standard of education iu our University. Now, this idea is a grave mistake; it does great injustice, and the industrial classes of California are unwilling to have their position iu this matter misunderstood, and so publicly misrepresented. A carefully prepared memorial was presented last winter to the California Legislature by joint committees of the State Grange aud Mechanics' Deliberative Assembly. Its object was, uot to tear down, but to build up; not to lower, but to raise our educational standard; not to make it more narrow, but more liberal. Its object was to have the law of Congress and our State Legislatnre carried out in good faith, according to the original intention of liberal douations; so as to represent not the interests of one class of citizens, and one locality, but all deserving classes of our people and all portions of our State. Is there anything illiberal or lowering in that?

We mnst be permitted to defend ourselves against wrong impressions and misstatements. We do not wish to be misunderstood. Surely, the liberally educated meu of our coast desire to have justice done.

To be brief, and to show the exact position of the Grangers and their associates on these educational matters, permit short quotations from our public aud sincere declarations. First, the Declaratiou of Purposes of the National Grauge says: "We shall advance the cause of edncation amoug ourselves and for our children, by all just means withiu our power. We especially advocate for our agricultural and industrial colleges, that practical agriculture, domestic science, and all the arts that adorn the home, be tanght in their courses of study."

We merely wish to include these without iujury to any other useful branches. Then of the State University especially, our memorial to the legislature says:

"We make this petition with all due deference to the Honorable Board of Regents and Faculty of our University, and with no desire to interfere improperly with any of their rights or duties. But we believe the interests of the people of the State, for whose benefit especially this noble institution was established, require that greater efficiency be given to the agricultural, mechanical, and other industrial instruction therein, without diminishing the usefulness of those departments already in successful operation."

We add concerning the plans we suggest for certain improvements:

"We by no means expect to accomplish all this at once, but we ask means to secure to the youth of our State, with proper economy and dispatch, the advan tages enjoyed by students of the best developed institutions which owe their existence to the same foundation. We desire that the grounds of our University, its museum, parks and gardens, may eventually become as instructive as those of the Garden of Plants, at Paris; and that our College of Mechanic Arts may, without needless delay, rival the Technological School in Boston. We ask that in keeping with the educational standards of the age, the principles of object teaching and practical instruction be conducted in connection with the ideal and theoretical, and occupy in the chief school of the State the position which their importance demands. We believe that nowhere will the dignity of labor be so strongly impressed upon the mind as in those higher institutions of learning, organized for the benefit of the most important class of laborers, where the acquisition of skill goes hand in hand with the acquisition of knowledge."

In closing, we said:

"In conclusion, we would repeat that it is not our object to undervalue what has been so well done in the erection of buildings, of which the State may be justly proud; in opening the doors of the University to both sexes; in making its instruction in all departments free; in organizing the military department and labor corps; and in securing a faculty of zealous and able men. But, believing that the first and highest employment of men is to feed, shelter and clothe the world, we ask that the graduates of our industrial colleges may be 'peers of scholars in mental culture,' and peers of laborers in manual skill and physical development."

Does not every thoroughly educated man on this coast know the importance of secnring these practical features if it can be done, "without diminishing the nsefulness of those departments already in successful operation?"

Has not the after-life of every college man convinced him of the defect in our "medieval" systems of education, in the absence of almost every practical featnre—that is, almost everything looking to active life and future success?

All that the industrial classes in this State desire for our State University (and they have a right to demand it) is that eventually its various departments may be made as complete, its standard as high, as all the best modern principles of edncation can make them. They ask that in the College of Agriculture and Mechanic Arts, the intention of the Act of Congress of July 2d, 1862, may be carried out for the purpose therein expressed, viz: *"to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."*

In fine, they trust that when completed in all its departments, our noble University may offer as thorough advantages as any iustitutiou of learning in the world, in all the three great divisious of "the triune arch of the higher education," so forcibly portrayed by Prof. Joseph Le Conte, in his lecture, Tuesday evening, in "the scientific, the philosophical, and the language-art" divisions.

And we appeal to every alumnus ou this coast to co-operate with us for this full development of our State University, that it may, indeed, be au honor to the State aud nation to which it owes its birth. J. W. A. W.

July 23d, 1874.

THE AGRICULTURAL INTEREST.—Let the farmers of the country suspeud operations for one year, ouly, and the whole machinery of trade, from the princely merchant and banker, to the vendor of gingerbread, in the streets, would be more or less out of joint; while absolnte failures would be the general rule. Railroads would cease to bear their ponderous trains of produce, and manufactories would be compelled to turn off their laboring millions, for lack of raw material. The farmers are the great substratum upou which all other industries are based; and they are soon to become, too, the great power in the land. Our professional politicians should remember that the producers are the persons who furnish the meaus for all other men; and that they caunot oppress or rob the agricultural iuterests without disturbing the prosperity of the whole country. But, if they take no heed to the warnings which have beeu pressed npon them so fervently of late, they may rest assured that the day of their triumph is at an end, and that those whom they have helped to oppress will ere long assert their rights to the fullest extent.

KEEP THE ORDER PURE.—Whatever may be true in organiziug amoug farmers becomes none the less trne if nnfortunately some of those whom you may trust prove unworthy. Hence, wheu charges are made against any of your leaders, implying that they have proven themselves unworthy of trust, do not fly from the cardinal principles of your organization, and desert your Order, but quietly yet persistently set abont informing yourselves relative to the probable trnthfulness of the charges preferred, and if yon find them *prima facie* true, see to it that the recreant officers are arraigued before the proper tribunals to answer to the charges. Deal cantiously, yet firmly and promptly with all offenders. Let nothing shield any one who will subvert the Order from its true mission. Your crusade against corruption and oppression imperatively requires that your own leaders as well as your owu ranks shall be kept free from all taint of corruption.—*Ex.*

Interesting Letter from Bro. Baxter.

EDITORS PRESS:—Here I am, home agaiu—"Home again from a foreign shore" (I've been to New Jersey), thus corroborating a very complimentary allusion in the *Granger* of June 26th, abont my accelerated speed being equal to that of "John Robinson, Esq." Well, as I said, here I am; and let me explain that it don't take me long to make up my mind on a subject, or execute when made up. On Saturday morning, June 20th, I made up my mind to go, and took the next train of cars eastward bound. The trip overland has been so often described, that I will not consume time aud space except to relate some incidents.

At Ogden we were joined by Messrs. Johu W. Young and G. P. Kimball, of Salt Lake City, with whom I struck up an acquaintance, and found them excellent traveling companions, thoroughly acquainted with everything pertaining to the country, and quite communicative, giving very interesting accounts of the early settlers and pioneers. All the interesting little side shows of herds of antelope, deer, sage hens, rabbits, and an occasioual wolf, entertained us, as we flew eastward until we reached the more thickly settled regions of Nebraska, where the gracefully rounded hills of the rolling prairie greeted our eyes with billows of luxuriant, green and grateful grass, and next waving fields of corn—magnificent corn. On, on we speed through corn as far as the eye could reach on either side—corn, corn, corn—everlasting corn. If yon have never seen a corn field, go to America overland, and you'll see one, and the country where the "corn-fed" come from (I mean pork).

A Cordial Meeting.

At Omaha I telegraphed our beloved brother, N. W. Garretsou, that your humble servant was bound for the "Land o' Canaan," and if he would be at the depot at Des Moines at 12 that night, I'd exchange fraternal grips with him, and pass the time o' day. Snre enough, when I jumped off the car there he was, staunch and true, and was not sleepy a bit. Well, we embraced, and then *encored* (and the fact is, my arm is lame yet), aud then says he: "Come, I've engaged rooms at the Astor house of Des Moines for you; get your Saratoga." It was too bad to see his disappointment when I told him I couldn't stop, but must go on—I had to go; but I improved the time and wouldn't have missed seeing him for a farm in Texas, for I am the bearer of dispatches from him to those he cherishes above all others—his brothers and sisters iu Califoruia. Time is np, the locomotive toots its horn, we grasp, our parting adieu is uttered, and away I fly to meet the rising sun iu the east.

The States of Nebraska and Iowa

Present a degree of prosperity and thrift I had not expected to see; towns of two, three and four years of age having fine brick churches and banks and public buildings. The farm houses and buildings were neatly painted, and all the surroundings kept with corresponding neatuess. The work of the field showed the type of "husbandmen" in charge—as well. In fact, at this season of the year it is a most beautiful country; the crops were looking fine, aud everybody seemed happy. But the never wearying iron horse, annihilating space, bears us onward, and as I pass through

The Old Empire State,

I am as much surprised at the contrast between it and the two last mentioned States as can be imagined. Farm houses and barns dilapidated and weather beaten; not having had a dressing of paint, or even whitewash, apparently, since Adam was a baby, or the capture of Holland by the Dutch; fences broken down and rotting, or patched np with brush; stone walls falling down, and slovenly repaired;—in fact the appearance of the whole country along the line of the road indicated a belief in a speedy dissolution of this sublunary sphere, aud that they didn't care a cent whether school kept or not. I was sadly disappointed with the appearance of old New York; the forests alone without cultivation or care seemed the only thing to luxuriate and thrive amid this desolation, and they were beautiful and grand. If I could only write what I thought I would like to, while these things were transpiring, you would have to enlarge, and for fear of wearying I shall curtail.

A Surprise.

Imagine my surprise and joy as I stepped from the cars at the depot in New York city to see my wife and brother standing on the platform to meet me. I intended to surprise her; bnt she turned the tables on me. These women have so many "ways that are dark, and tricks that are vain" about how to find out things, that from this, henceforth, I throw up the sponge, and am going to tell my wife everything I kuow and more too.

Well, we did New York city, Central Park, Elysian Fields, and the "New Jersey," which, from its proximity to the Uuited States, has from time immemorial rejoiced and celebrated the national birth day iu conjunction with the United States, which transpired while I was in its territory, and a jolly glorification we had, too. Four horses to an omnibusette, elaborately decked with stars and stripes, with sleigh bells to the horses, (symbolical of the meeting of extremes—in seasons as with friends,) away we went, some 15 in the load, to a brother's where a family of 40 descendants of one head, (and less than half of the number of the whole family,) had met to give us welcome from California. Ah! that's a day to remember. Some of you may have experienced something similar. But the time arrives when I must take my departure. I care not to dwell on our parting; but in returning I desired to visit

Washington City—Our National Headquarters.

Arriving there I found the worthy Secretary, O. H. Kelley, absent; and I was therefore deprived of the pleasure of seeing him; but his deputy, Miss—or, I should say, Sister—C. A. Hall, gave us a hearty welcome, and rendered our brief stay very pleasant. We also met brothers Grosh (Chaplain), Aiken and Saunders, of the Executive Committee. Brother Aiken exhibited to me somewhat of the labors he has in charge—that of obtaining reliable crop statistics from all parts of the United States, through the subordinate Granges; and, if his efforts are properly secouded and aided, a work of the most vital importance can be accomplished, with no incouvenieuce to the subordinate Granges, comparatively speaking—a work that will, at a glance, present the exact state of our natiou as regards breadstnffs and other products; and I would here bespeak the hearty co-operation of any subordinate Grange in the State to be prompt in sending forward the blanks properly filled, as requested by the officers of the National Grange. Brother Saunders, Chairman of the Executive Committee, manifested a great interest in our bank, expressing himself in the belief that it was the one thing needful to success in business matters connected with the Order, requesting me to forward everything pertaining to the bank I might have that would give information upon the subject. And here let me say that some of the officers of the National Grange have subscribed to the stock of the Grangers' Bank of California, and others are writing and advising about it, and will doubtless subscribe. They believe in it, and that this is but the beginning, and are willing to take hold of it and help develop it.

After "doing" the Capitol, President's Mansion, Smithsonian Institute, Botanical Gardens and the Department of Agriculture, we took

Our Departure for California.

After the first day out refreshing showers preceded us, and the trip was thus rendered very pleasant indeed. We passed at various places the manufacturing establishments where our supplies of agricultural machinery come from; and it occurred to me that if the proper efforts were made they could all be manufactured here in California, as there appeared to be no special advantages, excepting the supply of lumber, in their favor; and I think it can be demonstrated that there would be a great saving by shipping the lumber and manufactnring it here, over the way it is now done, as the bulk is so much greater.

On crossing the Rocky Mountains my wife and self were permitted by the gentlemanly engineer, Mr. Alex. F. Wilkins, to ride about one hundred miles on the engine, which was intensely exciting and interesting. Turning suddenly around the curves iu the road, we would come, like the wind, on droves of antelope, which would scatter and run in all directions to elude the puffing monster. Seven days' pleasant ride set us down in San Francisco, July 15th, at 8 P. M., delighted to snuff the healthful breeze of the Pacific, aud meet those with whom I have cast my lot, and who are endeared to me by a thousand ties in the great work in which I am laboring.

Yours fraternally, W. H. BAXTER,
Sec'y State Grange, P. of H.

PATRONS, work hard for papers that are advocating your cause, for it is a fact that your cause is advocated at a positive loss to the papers. Let not the loss become a permaneut one. Unless Patrous support papers that advocate their cause, the papers will be unsupported. Our experience in this line fully illustrates the truth of this statement.

THE *New Mexican* reports that from 19,000 to 20,000 ewes, serviceable for breeding, can be bought there this summer at rates raugiug from $1.12 to $1.25 per head; their age would range from 1½ to 2½ years. Every year at shearing-time the sheep are examined and separated, those over 4½ years beiug reserved for killing. "Primales," or those 1½ years old, are kept by themselves, and from 4,000 to 5,000 of these can be bought from one man at $1.18½ per head, delivered about half-way between Chihuahua and El Paso. Drivers can be had at 50 cents a day, and feed themselves; at 37 cents if fed. Payment is required in cash ou receiving sheep, either in gold or silver. The duty on the American side of the Rio Grande is 20 per cent. *ad valorem*. No exportation duty. Flock-masters will not allow their flocks to be selected from.

SAYS the Vallejo *Chronicle*: Wheu Oak Knoll, Napa, was visited in 1859 by the army worm, the young orchard of 50,000 trees was saved in this wise: It was the time of harvest, and straw was plenty. A dozen plows and fifty meu qnickly made a trench in the face of the advancing army, filled it with straw and fired it. Unflinchiugly the braves plunged iu, till the last of the army was consumed.

THE owners of vineyards in Newton county, Mo., are finding their vines breakiug down under the weight of the grapes, and have been compelled to thin them out.



The Bitter with the Sweet.

Written for the PACIFIC RURAL PRESS by C. D. McN.]

Amid the changing scenes of life
That cheer the coming view,
The fairest prospects that appear
We hasten to pursue;
But yet whatever path we tread
Obstructions we will meet,
And taste among the fruits of life
The bitter with the sweet.

The wealthy seek in pleasure's lap
The joys that few can find;
And poverty can only hope
Contentment of the mind.
Whatever cast our destiny
May fling unto our feet,
The best and kindest will but turn
The bitter with the sweet.

The young look forth with fervent hope
For all the joys of wealth;
The old look back upon the past
And only ask for health.
Youth will delight in sunny skies
And all the heart would greet;
But age has seen it all and drank
The bitter with the sweet.

When fortune smiles upon our lot
How smoothly flows the stream!
There's not a ripple to disturb
The sweet and happy dream;
But when misfortune sends his blast
Our blessings to defeat,
Oh! then we drink in every cup
The bitter with the sweet.

The weary heart may yet grow light
Intruding cares succumb,
Though time's capricious hand should fail
To strike their terrors dumb.
There is a heaven above us all
And love without deceit;
But, while on earth, we all must taste
The bitter with the sweet.

WHEN Governor Marcy was Secretary of State, a person whose duty it was to receive callers on the Secretary and introduce them, in the discharge of his duties one day he could not find the Secretary in his office. After looking looking in vain for him, he rushed frantically up to an individual who he supposed would be able to inform him, and striking an attitude, exclaimed, "That mercy I to others show, that Marcy show to me!" A happy application of a similar quotation was once made by Mrs. Harriet Stowe. Some years ago, while passing up the Mersey to Liverpool, looking overboard, she observed the muddy character of the river, and remarked to a friend standing at her side, "The quality of Mersey is not strained."

Two youngsters were trudging home from market; one had a basket on his arm with meat in it. He said, "My ma's got a fidgelator what'll keep everything so cold as ice to put it in. Your mamma got one?" "No, she ain't," answered Bob, "but she's got a steel egg-beater!" "Ho! an egg-beater," shonted the smaller boy, turning square rouud to look at the other; "what's that for?" "Why, to beat eggs with, you goosey." "Ho!" screeched the little chap, in great scorn, "she'd better look out. If she goes to beatin' eggs she'll break in. Eggs is brittler than anything. Guess yon most don't know what you're talkiu' about!"

THERE is a clever lad in Aberdeen who will get his living in this world. For playing truant maternal authority cut off his supper. Castiug one fond look at the authoress of his existence, he pansed at the door to say, "Mother, I am going to die, and when I am no more I wish the doctor to cut me open and look at my stomach." The maternal mind was filled with awful forebodings, and the maternal heart asked what he meant. "I wish it to be known," he answered, "that I died from starvation." This was enough. The small boy was triumphant, and retired to his little bed gorged to replotion.

A PATENT medicine advertisement says: "This article will cure the rheumatism of niueteen years' standing." As far as it goes this is perfectly satisfactery; but we want light upon auother view of the matter. Suppose a mau's rheumatism is only of three years' standing, must he let it stand sixteen years more before the medicine will cure it? Or if it has stood twenty years is there no hope of a remedy? We want to know about this. It is going to be very unpleasant for a man to endure rheumatism for seventeen or eighteen years before he can take medicine for it.

INFLUENCE OF WORDS.—A woman confessed to a priest that she was gnilty of scandal. He gave her a ripe thistle top, and told her to scatter the seeds, one by one, in every direction. She obeyed, and returned after her task was done. He then ordered her to go back and collect the scattered seed. She objected, saying it wonld be impossible. He replied it would be still more impossible to gather up and destroy all the evil reports which she had circulated about others.

DEEP humility is a strong bulwark, and it is only as we enter into it that we find safety and trne exaltation.—*John Woolman.*

Farm House Chat.

[Written for the PRESS by MARY MOUNTAIN.]

At last there came a RURAL well flavored with pepper and spice, from Potter valley, just as I began to fear a scarcity of those pungent condiments.

Reading now again the sweet story of that good old couple whoso broken lives and broken goblet had been so beautifully mended with "putty and patience," I am led to make special effort to recall examples where marriage has resulted in like harmony, happiness and sweet content.

Nearly all my examples are also very old. Why must they be so old? Is it that tho "warfare" being almost ended, they are willing to forget how bitter has been the early strife, how fractious and fiery, or sullen and balky have been the ill-matched pair who hated the yoke that held them together, and the secret, terrible streugth of it?

But the hard road of life—so long and so rough—will finally tire the fleetest foot, quench the highest and hanghtiest spirit. And peace comes with plentiful gray hairs.

The husband, well established iu authority, becomes a little less arbitrary, a little more tolerant. He dimly perceives that a woman—even though his wife—has of necessity an individual character, and perhaps, yes, perhaps, it onght to be cousidered and somewhat respected.

The wife has cultivated indifference as a slow but sure cure for the pain of an endless regret. And so they glide into the happiness of old age. Happiness? nay, rather the tameness of fatigue; the philosophy of submission; often the dead level of stagnation.

Not much of the bright sparkle of happiness, but no longer the sharp sting of misery; and for harmony there is finally an absence of discord; and for sweet content there is pale and faded resignation.

When the race was so nearly run, even "Betsy and I" could "make it up" and agree to jog on together to the end. And this wonld be the geueral verdict, that when man and wife have "stood it" for half a lifetime they should manage to worry through and make no obtrusive fuss. The interest of children, or of a church, or of society demand this, and very few will rebel. For what can be done with a life more than half worn out and shaped unchangeably to the burdens it has so long borne?

The tendency of popular agitation just now is to foster discontent and create in all circles a restless desire for change, and the instant gratification of each personal ambition; the dear, delightful crowuing of Number One! But in our great nation of sovereigns how few can be really crowned, aud how very few deserve it!

But if not wholly captivated by the bewildering popular clamor, we may look back as far as memory can reach into the drowsy, old-fashioned days, and while realizing how many hardships beset the old-fashioned lives it will still seem that they were happier lives than ours, because better contented.

Their religious faith was so much more simple and comforting than ours; they leaned upon the Lord and took the good and ill of life directly from his haud. Would a wife complain of her husband while she felt sure that all his gruff stinginess, all his neglect of personal neatness, and his general and particular hatefulness, were so many special trials sent by the loving Lord to discipline her sonl for heaven?

And the hnsband, whose daily life was chastened in a providential way by the grievous dispensations of a scolding wife—could he not comfort himself that he was becoming better and better fitted for the company of saints and martyrs?

A mother of twelve children was almost discouraged with much sickuess and the heavy pressure of domestic duties. Talking with the mother of but one child, sho said: "The Lord has favored you, and your life is pleasaut aud easy, becanse you have but one child."

"Oh ho!" laughed the mother of one, "do you imagine the *Lord* sent you all these children?" It is about time you should get over such old-fogy nonsense as that!"

Swift and silout in her wrath nprose the mother of twelve, and never after willingly did she hold friendly intercourse with her sceptical neighbor.

Had she not received them all as from the Lord? And how shonld she bear the weight of many sorrows and cares if the staff of her faith was struck away?

I am glad she was angry, and that she stoutly held on to her anger aud her "old-fogy nonsense." It is a pretty general rule that the old-fashioned woman has patience, fortitude and religions trust, while the modern and progressive woman has pluck, self-assertion and a wide range of ideas. Now, for the happiness of a lifetime, which of these endowments would you choso? Perhaps one cannot wholly choose, for here we are among the moderns, and our world swarms with aggressive ideas and brilliant theories. Noue can fail to feel their force; and in the strnggle aud pressure of them all we may hope is that the trne "ideal marriage," portrayed by Mrs. Nichols, may become more and more possible. I do not think I have ever seen an example of the "true ideal." But once I took a journey into a far couutry and had a glimpse of two homes that seemed unusually happy.

In the first case there was intellectnal cultnre and appreciation on the part of the husband which the wife did not share; bnt she enjoyed it in being prond of it, and her whole heart was in harmony with the sunshine of his affection and gennine goodness.

There was no mislaking her deep and real happiness as she said—"Why, my hnsband never spoke a cross word to me in his life; and he thinks there is nothing too good for me!" Even his best manners were not too good for her, and he would no more bawl out rudely to her thau he would to other ladies of his acquaintance. I should judge, too, that if he perceived words and ways of his annoying her, he wonld desist quite as readily as though she were seme lady who would cut his acquaintance in case he becamo ungeutlemauly and disagreeable. All this was worth going a great wsys to see.

In the second case the rather reticent little wife beamed with tho samo expression of happy content, and I heard again the same wonderful words as before, only so gently spoken—as if such joy must not be too freely imparted.

It was evident that the hnsbsnd esred more for his wife's comfort and happiness than the accumulatiou of dollars; and he cared for the last that he might the more generously provide for the first. His heart seemed filled and satisfied with wife, children and pleasant home; and the sympathy and harmony between the two was boautiful to see, and behold they are still quite yonng! Not many of us can be wise and happy and yonng.

COURTSHIP FAIR AND SQUARE.—One long summer afternoon there came to Mr. Davidson's the most curious specimen of an old bachelor the world ever heard of. He was old, gray, wrinkled and odd. He hated old women, especially old maids, and wasn't afraid to say so. He and aunt Patty had it hot whenever chance threw them together; yet still he came, and it was noticed that aunt Patty took unusual pains with her dress whenever he was expected.

One day the contest waged unusually strong, and aunt Patty left in disgust and went out iuto the garden.

"The bear!" she mnttered to herself, as she stooped to gather a flower which attracted her attention.

"What did yon run for?" said a gruff voice behind her.

"To get rid of you."

"You didn't do it, did yon?"

"No; you are worse than a burdock burr."

"You won't get rid of me, either."

"I wont, eh?"

"Only in one way."

"And that?"

"Marry me."

"What! us two fools get married! What wonld people say?"

"That's nothin' to us. Come, say yes or no; I'm in a hurry."

"Well, no, then."

"Very well; good bye, I shan't come again."

"Stop a bit—what a pucker yon're in."

"Yes or no!"

"I must consult—"

"All right; I thought yeu were of age. Good bye."

"Jabez Andrews, don't be a fool. Come back, I say. Why I believe the critter has taken me for earnest. Jabez Andrews, I'll consider."

"I don't waut any considering: I'm going. Becky Hastings is waiting for me. I thought I'd give you tho first chauce, Patty. All right; good bye."

"Jabez! Jabez! That stuck-up Beck Hastings shan't have him! Jabez, yes! Do you here—Y-e-s!"

WHO MADE IT.—Sir Isaac Newton, a not more wise than godly man, was examining a new and fine globe, when a gentleman came into his study who did not believe in a God, but declared that the world we live in came by chance. He was much pleased with the handsome globe, and asked, "Who made it?" "Nobody," answered Sir Isaac. "It happened here." The gentleman looked np in amazement at the answer, but he soon understood what it meant. The bible says: "The fool hath said in his heart, 'there is no God.'" Must not that man be a fool indeed who can say this beantifnl world came by chance, when he knows that there is not a house, or ship, or picture, or anything in it, but has had a maker? We might better say that this paper we are reading grew just as it is, than to say that the sun, moon and stars, and this globe on which we live, came without a creative hand.—*S. S. Visitor.*

SAN FRANCISCO Chinese vegetablo peddlers are, as a rule, very accommodating to their customers. A Celestial who had beeu serving a family with garden sass was recently stricken down with small-pox, since which time the vegetables have been procnred from another quarter. The lady of the house overcome her scruples tho other day, called in a passing peddler, and purchased from him a quantity of strawberries, potatoes and turuips. As he was dealing these out she said: "John, you no get small-pox, eh?" "No, no; me don't habe got; bringee to-morrow."

A YALE student has written a twelve verse poem entitled, "We kissed each other by tho sea." "Well, what of it?" ssks a western editor; "the seaside is no better for such practice than any other locality. In fact, we have put in some very sweet work of that kind on the towpath of a canal in our time, but did not say anything about it in print."

Our First Courtship.

[Written for the RURAL PRESS by GABRIEL BLOWHARDT.]

Oh, shades of departed ecstacies! how you throng aronnd and almost overwhelm ns, as we recall the blissfnl past; even as did the seven belligerent ours which held uncasing vigils about the dwelling of our Maud Angeline, on the evening of our first essay in the heavenly art of courtship. Never shall we forget the sublime indifference of the old man, as he stood in oue corner of the garden and pretended not to see us while his hennds were quarrelling over which should have the honor of swallowing us whole; or the enthusiastic vigor of Maud Angeliue as she charged down, poker in hand, and scattered that pack of raging cannibals to the four coruers of the —Muggins' ranch.

Her presence thrilled, filled and satisfied ns, even as popcorn balls fill tho yawning void in the gastric region of the hired girl; and to reach snch an epitome of breathing sweetness we could have cheerfully waded through a ten-acre field filled with all the warlike canines that could find standing room. True, sho was some two feet taller than we; bnt what of that? When we had toiled up to those cherry lips, we felt that we had earned our kiss, and enjoyed it *pro rata*. What if her mouth was a size or two too large and attached so that either it or the rest of her conntenance was a little awry? Nature made it so; and far be it from us to fly into the face of natnre for any of her acts. Tho same power was alse accountable for the decidedly anburn tint of her hair, but we never thought of being indignant at Maud Angeline about the matter, or of cherishing her less tenderly.

She was our first real sweet-heart. We had flirted with Cleopatra Perkins at school, and had stolen a kiss from that sly Cynthia Hopkius on the road home, but Maud Angeline had actually permitted us to walk by her side all the way from a spelling match, and to lave our thirst at the flowiug fonntain of her papa's forty-feet well, after our arrival.

So this evening we had determined to beard the liou or lioness, in her den, and with fresh tallow on our boots, fresh bear oil on our hair, and in our best suit we set out to skip over the four miles which intervened between our respective paternal mansions.

With a heart beating like a trip-hammer she led us into the maternal presence, where we maintained a most eloquent silence for the next fifteen minutes. Then it snddenly occnrred to ns that it was a fine day, and we ventnred the snggestion orally. It was kindly received, and then the conversation grew easy and cheerfnl; something like pulling a No. 5 boot on a No. 9 foot at just two and a half minntes before sermon time "on a Sunday morning."

Dinner time came on apace, or rather "supper," as our Maud Angeline persisted in calling it. Here our tribulations waxed grievous and hard to be borne. It did not matter so much that we pnt salt in our tea, sngared our pork-chop, or hopelessly buttered onr napkin; bnt when we choked, and knocked our salted tea into Maud Angeline's mother's lap, thereby nearly drowning the latest edition of the Mnggins' progeny, and upset things generally on the table, making a new and pignant variety of Worcestershire sauce out of a combination of molasses, pepper, stewed tripe and onions—then, we say, things looked depressing. The baby squalled an original opera in high C; tho old man made use of an expression exactly tho opposite of that with which deacons are wont to coumence a thirty-minnle prayer; Maud Angeline snickered, while her mother seized a tow-headed nine-year old urchin, took him out doors and soundly larruped him, ont of sheer vexation of spirit. We sincerely wished ourselves in heaven, Halifax or any other eligible place commencing with an H; but the spirit of the trne American is known by its ability to soar above the trivial vexations incident to this life, and so we resolved to "see it ont" or perish in the attempt.

The wrecked dishes were cleared away, tho table-cloth, looking like a child's pinafore who has been treated to ten cents' worth of molasses candy and a two honrs' play by tho roadside, was consigned to next week's wash, and tranquility once more spread her wings for Muggins' mansion, and after a few wary flops alighted.

Night came slowly on; and now for the first time the maternal breast of onr Maud Angeline's mother became haunted with a suspicion as to tho meaning of our lingering. She hinted darkly of the danger of traversing the tract which lay between our home and the Muggins' mansion after nightfall, and actually recalled an antiquated ghost story or two with which to excite vague alarms in onr youthful bosom. But we were encased in the invulnerable armor of our Maud Angeline's love, and if she had read Dante's Inferno to us for a solid fortnight we wonld never havo batted an eye. Things began to look desperate. The old man sat smoking a cob pipe in a corner, and Maud Angeline's mother felt that he was not to be relied upon in this crisis. It was evident that, however completely we had captnred the affections of our dulcinea, her mother did not hanker after ns. Probably that salted tea did our business. The old man now retired, and Maud Angeline's mother took her ont for a private interview in the kitchen. The conversation between them soon became so exciting that it was borne to our ears.

"Well," said the Spartan mother, "*he* may set up, if he wants to; but *you* must go to bed!"

Tare and onions! how our heart sank with a

thud in our bosom, even as does the nickel which young America of five years' invariably drops in the well! *Us*, in all the agony of tight boots sitting up alone and disconsolately punching the Muggins' fire and chewing the cud of our bitter fancies, while our Maud Angeline lay snoring in an oblivious quiet, broken only by an occasional thrash of her arms as they battled with a predatory musquito, or went on a vigorous raid after a marauding bed-bug. The thought was too horrible to be borne! We knew that our Maud Angeline was sobbing, that the briny tears from her windward eye were placidly and resignedly wending their way towards her north ear, while those from its partner in distress bid farewell to this world of woe in a final plunge into the unreliable southeast corner of her mouth; but our own griefs were too many for us, and we silently arose and gat us hence, saying like Shylock of old, "We'll stay no longer, question!"

And when Maud Angeline and her cruel ma returned from the conference, we were silently hieing us towards our home. We never ceased to love our Maud, however; and the most piteously harrowing recollections of our youthful life are conjured up when we recall the pathetic expression which beamed upon us, when next we met her, from her straight, sailing eye, while the other appealed silently and helplessly to the immensity of space. But sitting up alone was too much for even our youthful enthusiasm, and we answered the glance with a mournful shake of the head, and a timid look in the direction of the hard-hearted woman, who had thus untimely nipped in the bud our first, sweet dream of love.

Dr. John Brown, in *Good Words* tells a story of a lady suffering from what seemed likely to prove a fatal quinsy. Her husband, who was deeply attached to her, was bending over her in the utmost concern. She could swallow nothing. By some strange and scarcely voluntary whim of association, he expressed his wonder whether she could swallow a compliment. The remark so tickled her that she burst into a laugh; the laugh burst the quinsy, and she owed her recovery to what must otherwise have been pronounced the most unreasonable of jokes.

Schools for Mistresses.—*Apropos* to the training schools now establishing for servants in many of our large cities, a similar school for mistresses is advocated, where they may learn much needful for them to know in managing their domestics, as how to address them courteously, treat them kindly, and make their own house a home for them—a reform many mistresses certainly need.

A good story is being told of George William Curtis, the poet. He prides himself, it is said, on his English accent, eschewing the Yankee "drawl." Therefore, when he was over there, and went to a tailor's, he was not a little mortified at the master's exclaiming, "'Arry, show that Hsmerican gentloman the flowery weskets!"

Dr.——, entering a military hospital surgery, met Paddy Doyle, the orderly, and asked which he considered the most dangerous of the many cases then in the hospital. "That, sir," said Paddy, as with an indicative jerk of his thumb he pointed to where on the table lay a case of surgical instruments.

It is said that "the Empress of Germany is one of the most simple dressed of women," and that "she drives out in a calico dress." So much for being known to have plenty of money. It is the women who can't pay for fine clothes that are compelled to wear them. —*Courier-Journal.*

There is something very sensible in the impromptu remark of a pretty girl: "If our Maker thought it wrong for Adam to live single when there was not a woman on the earth, how criminally wrong are the old bachelors, with the world full of pretty girls."

"God's greatness flows around our incompleteness," and the preacher who lays hold of it, bringing it within reach of struggling and despairing men, shall never lack hearers or rejoicing converts.

A man will always undergo great toil and hardship for ends that must be many years distant, as wealth or fame; but none for an end that may be close at hand, as the joys of heaven.—*Hawthorne.*

Thomas Hood died composing—and that, too, a humorous poem. He is said to have remarked that he was dying out of charity to the undertaker, who wished to urn a lively Hood.

An elevated purpose is a good and ennobling thing, but we cannot begin at the top of it. We must work up to it by the often difficult path of daily duty.

The life of the Christian ought to tend by continual efforts to add new virtues to those he has already acquired.

Jean Ingelow has beautifully said of the parent and the teacher's work, "that children receive the love of one generation and pay it to another."

Were it not for the clouds that darken us there would be no rainbow in our lives.

A standing nuisance—Corner loafers.

Young Folks' Column.

I Wish I Were a Comet.

I wish I were a comet,
And sportin' through the sky,
Oh! shades of old Mahommet,
I'd make the splinters fly!

There'd be a wreck of matter,
A crash of worlds, you bet,
I'd all the planets batter,
And everything upset.

I'd butt against old Bruin,
And tease the Little Cub,
The Polar Star I'd ruin,
And give the moon a rub.

The Dog Star then I'd collar,
And if unmuzzled found,
To make my half a dollar,
I'd drag him to the pound.

I'd make things spin about,
Oh! Jupiter and Mars,
Turn the Dipper wrong side out,
And drown the little stars.

I'd give the earth a tussle
And switch it off its axis,
I'd travel on my muscle,
And equalize the taxes.

—*Pittsburg Chronicle.*

The Droll Little House.

Once upon a time a beautiful little house was built in the grass by the side of a brook. It was built so quietly that nobody noticed it till it was all done and the family were in. It was a droll little house, neither white nor brown, but a beautiful green outside.

For some time every door and window was shut, and no one could see what was going on inside. But at last, when everything was ready, and all in order from top to toe, the little house was suddenly thrown open, and all the world invited to call.

And they did call, I tell you—the whole Butterfly family, in gorgeous dresses of red and gold; the plainer dressed, but highly respectable Boe family, and I can't tell you how many of the modest Insect family.

The little house was well worth going to see, too. It was no common building, made of wood or brick, with plain, bare walls, by no means! Every room—and there were dozens of them—was hung with the most elegant gold-colored curtains. They were finer than silk and softer and daintier than anything you ever saw, and all fragrant with a delightful, fresh perfume. It was a home fit for any queen, I tell you.

Almost every room of this curious house was a nursery, and in each one sat a patient little mother. Droll little creatures they were, dressed in pale gold, and never stirring an inch away from the cradles of their babies; with funny little husbands besides, dressed in the same lovely color, and wearing brown caps on their heads.

The husbands were so tall they could stretch up and look over the golden walls into the wide world outside, and they got uneasy and longed to go out. But the little mothers would not go, and they didn't want to leave them, so they stayed in the nursery too.

Every night when the sun went down the curtains were all drawn close together, and the whole family went to sleep, and nobody could see anything but the plain little green house. But the first rays of the sun opened the whole house again.

This life went on for some time, till the little mothers grew brown with age, the gorgeous curtains faded, wore out, and at last were blown away, the tall husbands got tired of staying and went away and left the little mothers alone with their babies. They had no curtains to keep them warm, the little house was open night and day, and all the winds could blow right through it. A sad change it seems to us, but little did the mothers care. They did not mind the cold, and they were not afraid of the dark, and the babies were growing every day bigger, and would soon be able to care for themselves. And then the little mothers would be satisfied and happy.

They were the most comical babies you ever saw; each one cuddled up in an odd little cradle, shaped like an egg and carved and ornamented outside. They never cried; and if they had plenty to eat and all the time to sleep, that was all they wanted.

So the little mothers kept them fed, and watched while they grew browner and browner till they were nearly ready to go. At last, on each droll little cradle came a small pair of wings, white and fleecy, and light as air, and they stood out around the bare little house like a ball.

Then the little brown and withered-up mothers knew that they had finished their work, and the babies could take care of themselves; so they were satisfied and happy, and died. And then came along a playful breeze, gave the little house a shake, and away went every baby on its own wings, and left the droll little house deserted and bare.

And the babies—still in their cradles—flew away off over the fields, playing with the breeze, and seeing the world, till the sun went down and it grew dark. Then each one sank to the ground and settled itself; the comical cradles burst open, and each little baby came out, ready to build itself a droll little house.

Maybe you think this a fairy story, but it's every word true. And the gorgeous little house, with its patient little mothers, and dozens of babies, is, after all, nothing but a—dandelion. And if you look carefully into one you'll see the whole family.—*Christian Union.*

Good Health.

The Human Frame.

No. 8—The Muscles.

A man with the skin removed is a curious-looking object. He is then literally enveloped in a blanket of fat, of greater or less thickness according to his inclination towards corpulency, or otherwise. Remove this adipose tissue—which is deposited beneath and in the meshes of a delicate membrane, or fascia—and you then perceive a still more curious object; not a man now, but a machine. He is now a mass of ropes, so to speak, of all lengths, sizes and shapes, and attached in a bewildering manner to his bony framework. The labor of mastering the technical details of a man-of-war's rigging is nothing to that required to unravel this labyrinth of stays, halliards and clewlines, which have the wonderful power of shortening or lengthening themselves at the option of their possessors.

Anatomists compute about six hundred pairs of these muscles; some like ribbons, others like cords and still others like fans, feathers, etc. The largest are very coarse and strong, as, for instance, the glutæi muscles which help to support the body on the lower extremities. From this size they gradually pass to microscopical minuteness.

Muscle itself is what is called "flesh;" is of a deep-red color, and is composed of fibrin. It is disposed in little bundles of parallel fibers, which are bound together with a delicate areolar tissue. It is very contractile, and to this property we owe our almost unlimited power of movement. Like all other organized substances it is formed of cells so arranged end to end as to form the "ultimate fibers" which make up the larger bundles of which we have spoken. Its contraction is supposed to be owing to a change in the long axes of these almost infinitesimal cells; just as a hollow rubber ball can be flattened or elongated between the hands. Some theorists have supposed the life of these cells to last only during a few contractions of the muscular substance, and hence our every movement to involve the death of myriads of these minute prototypes of our lives. However this may be, it is certain that their existence is comparatively very short, and that the old worn-out cells are continually giving place to new and vigorous ones; so much so that we are supposed to have an entirely new body each seven years of our existence. Yet the transition is so gradual, and the new cells such faithful representatives of the old that but little hope is held out by the above fact of any great change in our personal appearance however much some of us might desire to change the old for a handsomer shell. The only positive change consists in the number of these ultimate cells, muscular and others, which produce differences in our weight and figure, according as the cell supply exceeds the demand for new material, or otherwise.

It is curious to reflect that death is thus ever present with us; that within ourselves a fierce battle is ever raging between life and death, and that our thriving or wasting bodies tell of temporary success to one or the other of these implacable foes. By-and-by the powers of life begin to grow weary of the unceasing attacks of their relentless enemy, and the wrinkled, wasted body tells us that death is slowly but surely gaining another of his inevitable victories. If the laws of nature have not been violated, and no accident hastened the fatal issue, this contest lies simply between the ultimate cells of our bodies—a warfare waged by the tiniest of combatants—until the deaths so far exceed the births that the human mechanicism runs slower—slower—stops!

A few words as to the attachment of muscles to the bony frame-work. Each muscle as it approaches its termination loses its fibers, while the fibro-areolar tissue, which bind the bundles together, becomes denser and thicker, and finally merges into a round or flat tendon, such as every one is familiar with, which then passes to the bone, and is glued, as it were, so firmly to its surface that the muscle will tear in two before this tendon will break. Usually there is a roughened spot on the bone in order to afford firmer attachment, and often prominences or "processes" by which to afford leverage; but this will be more fully spoken of when the bones are under consideration.

Phosphorus as a Cure for Cataract.—Dr. Combas gives a case of a girl, aged 24, of nervous, lymphatic temperament, suffering from capsulo-lenticular cataract, hardly able to discern light from darkness; suffered frequent headaches. Two or three drops of phosphorized oil were dropped into the eye daily, and frictions of the same used over the forehead. After four months of this treatment was used perseveringly, the eye improved, colors could be distinguished, and the opacity of the lens so far diminished that it could not be discerned at a distance of two or three paces.

An army biscuit, composed of one-third rye-flour, one-third beef dried and powdered and one-third sourkrout ground to powder, was used by the Russian army in the Khiva expedition with great benefit. It was eaten with great relish, and proved highly preservative of health.

Among the strange prescriptions for dyspepsia, black currant leaf tea is recommended.

Physical Life.

It is popularly supposed that we change our constitutions once in seven years; but practically every decade makes a turning point in life. It is not too much to say that, barring accidents, a man can at certain dates decide what manner of death and from what class of disease he shall die. The formation of the constitution in early life—say from the age of five to fifteen—devolves on the nurse, the mother, and the training in the nursery and school-room. In the nursery, at any rate, over-feeding is a cardinal vice; but the over-fed children who eat flesh meat three times a day become so gross and unwieldly as to be a burden to all concerned; while tight stays, tight boots and high heels develop every evil under the sun, from bunions downward. At this point two years of gymnastics, or a couple of years spent on board of one our training ships, does wonders for our boys, who get the use of their arms and legs to an amazing degree. The athletic work performed by schoolboys and university men is perhaps at its best in those days, though most happy is the man who is never overtrained, because he is perpetually in condition. From fifteen to twenty-five a man has to prepare for that legitimate enjoyment of life which should by rights be his. He has in all probability chosen his profession, memory is at its best, ambition at its highest, and his temptation to burn the candle at both ends—to be a brilliant boon companion, a man whose good tales are remembered, and whose witty sayings are everywhere quoted—is almost irresistible; facility does not come with age, and the best stories grow stale. Of the number of prematurely exhausted intellects and shortened lives broken down in this way there is no need to tell. Every man's memory will furnish him with a list of names more or less well known.

From 25 to 35 is the true time for all the enjoyment of a man's best powers, when physical vigor is at its highest, and human passion is at its full strength. During the last half of this decade a man should be assiduous to construct a system of philosophy by which to rule his life, and to contract a chain of habits intelligently, so that they should not sit too tightly upon him, and yet cautiously, so that he should neither be their slave nor too easily cast them aside. The exact proportion of physical and intellectual strength should be gauged, and the constitutional weakness, or, in other words, the disease toward which a tendency exists, should be ascertained. Preserve, if possible, the absolute necessity for exercise, and have your place of business two or three miles away, over which let nothing tempt you to an omnibus or carriage save rain. The day on which a medical man gives up riding to see his country patients, or the use of his own legs to see his patients in town, and takes to a close brougham, fixes the date when sedentary diseases are set up—indigestion, liver, kidney disease, and so on; while if, to utilize his leisure, he reads as he drives, his eyesight becomes seriously affected. From 35 to 45 a man should arrange with his food and square hypochondria. He cannot, it is true, change his diathesis, but he can manage it. The habitual character of food, no less than its quantity and quality, begins to tell whether it charges the system with fat, muscle, sinew, fiber or watery particles.—*Pall Mall Gazette.*

In regard to the hight which travelers are able to attain, we may state that Alexander von Humboldt, in his ascent of Chimborazo, was compelled to stop at a hight of 16,000 feet, at which point he had to give up from suffocation; but in late years the brothers Schlagintweit ascended the Himalayas, and slept all night in bivouac at a hight of 19,200 feet, and later ascended the peak Ibi Gamin, 22,200 feet high. The English astronomer, Mr. Glaisher, claims that he has ascended to a hight of 26,000 feet without feeling any discomfort, and that only when reaching 32,000 feet he experienced any very serious feeling of suffocation. No doubt, different constitutions are differently affected; some are unable to resist diminished atmospheric pressure; others, increased pressure. —*Scientific American.*

Cure for Hydrophobia.—A German forest-keeper, 82 years of age, not wishing to carry to the grave with him an important secret, has published in the *Leipsig Journal* a recipe he has used for 50 years, and which he says has saved several men and a great number of animals from a horrible death by hydrophobia. The bite must be bathed as soon as possible with warm vinegar and water, and, when this has dried, a few drops of muriatic acid poured upon the wound will destroy the poison of the saliva, and relieve the patient from all present or future danger.

Breathing in Rarefied Air.—M. Paul Bert describes in *L'Institut*, a series of experiments made on himself in a receptacle in which the diminution of pressure of air was carried to 25 centimetres—equivalent to an altitude of nearly a mile and three quarters. He found he could avoid all the ill effects of this diminished pressure by breathing a mixture of 60 per cent. oxygen with atmospheric air. This discovery has already been made trial of by aëronauts, who will, by its means, be able to attain hights hitherto impossible.

Chilblains are successfully treated by applications of sulphurous acid solution, by means of a camel's hair brush or by a spray-producer.

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SAN FRANCISCO:

Saturday, August 1, 1874.

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A Match for the Potato Bug.

The people of Ohio are rejoicing over the advent of a bug, which, it is hoped, is destined to be the exterminator of the potsto bug. It is a small, red bug, not half as large as the devaststor that hails from Colorsde, whose course it follows to destroy its eggs. This new comer is to be seen in great numbers in the potato fields of seme localities, and by an examination of eggs of the Colorado bug, they are found to be most effectnally destroyed, the embryo being eaten and nothing but the shell left. When the farmers and gsrdeners have seen a few more instsnces of pests being pestered to death by some new insect marauders, they may possibly allow their regard for animal life to extend even beyond the feathered tribes. When interest can induce men to take the skunk to their bosoms — metapherically, of course, merely entering him on their list of friends—we may hope that nothing in the animal kingdom should despair of eventuslly worming itself into man's confidenee and esteem. In the hop districts of Central New York the skunk is well known to have peformed efficient service in the hop-yards, by destroying the grubs thst harbor about and prey upon the roots. For these services the animal receives exemption from annoyanoe by hunters; and if his life is not held sacred, it is at least protected; snd this, probably, is all thst the sknnk aspires to. It really does seem as though it is about as difficult for man to discriminate appreciatively between his friends and his enemies as he meets them in the lower grades of the animal kingdom, as it is among the lords and ladies of creation.

MORE INDIAN MURDERS.—A special from Fort Union, New Mexico, says a baud of 50 Kiowas and Comanches killed five men near the month of Ute creek, twenty miles south of Fort Bascom. No particulars.

The Future of California Wheat Growing.

The above heading is, as we are well aware, an unattractive one; but as two heads are better than one, so is one heading better than no headings; and as the implied subject is one very much discussed at present, we feel called upon to contribute our mite of prophetic wisdom; being under the necessity, meanwhile, of using a heading which is recognized as having covered of late a large amount of nonsense.

Those who profess to be able to see a little farther into a grindstone or sack of wheat than their neighbors, are at present enlightening their less gifted neighbors as to what the future—a very close-grained grindstone, be it understood—contains for the California wheat grower. A fortuitous train of circumstances, having been taken at the flood by our energetic people, has produced a condition of temporary prosperity which has apparently turned the heads of some over-sanguine newspaper writers; and has been taken up as a hobby by others, who believe that predictions of future prosperity will produce future prosperity. Aceording to the utterances of both of these schools of philosophy, California is having a big day's work set before her for the future, nsmely: to furnish the whole world with breadstuffs!

According to this anticipated contract, people will be compelled to come to us from the uttermost parts of the earth to obtain their bread rations. The appreciative Chinaman will leave his rice untasted, and will only be pacified by "Melican" flour; the Cannibal will spurn his choicest cuts from the muscles that produce California wheat, to partake of the wheat itself; that portion of mankind which is not up to wheat growing will be impelled by necessity to come to us for bread victusls; while those who are above wheat growing—the Eastern and Middle Ststes, and Grest Britain, for example—will patronize us in this product, while they give their attention to less exhausting crops. This, like all other supposed impending millenuiums, is backed by figures, and it apparently only needs the labers of a few newspaper writers in preparing the way for the California wheat grower, and making his path straight, to hring about the desired resnlt within a few yesrs.

But the farmers of Csliforuia are not going to be delnded into any such visionary hopes. They look behind this paner curtain. They see that some of the Eastern States are returning to whest growing, after a temporary abandonment of it for various reasous. In western New York, where wheat growing has been almost eutirely absndoned for a period of several years on account of the chintz-bug and other pests, the farmers sre again turning their attention to this crop. Twenty years ago "Genesee wheat" ranked the highest of any in market; being quite as grest a favorite as is the Csliforuia wheat at the present time. Good crops were raised, and the farmers there probably were never more prosperous than in those times; it being taken for grsnted that farmers were doing tolerably well when flour brought five dollsrs a bsrrel in the market. But a succession of insect pests that infested their wheat fields during a term of several years, forced them to discontinue the growing of this crop. Its former enemies, however, have had their dsy and have disappesred; and the farmers have again taken to wheat growing with as sure a guarantee of success as any farming operations csn possess. Other Esstern Ststes have had similar reverses, and are slso resuming wheat growing. England, too, instead of coming to us in her supposed necessity, is, no doubt, langhing in her sleeve at our willingness to impeverish our own soil by growing wheat fer her while she is enriching hers by raising beef. She, too, is lisble at any time to turn bsek to wheat growing; and the rice-consuming or man-eating heathen, even though they *should* bestow their patronsge on us for a time, may withdraw it when we most need it, and retnrn to their former diet.

On the whole, it seems to us a rather unbusiness-like view of the case to suppose thst California is destined to supply even this world with wheat in the near future. Still, it may be; fer there is but little that is impossible with California. Possibly, some of the excursive comets may advertise us through other spheres, and thus open up a trade which shall finally render the whole universe dependent upon us for breadstuffs.

There are other and less buoyant prophets, who predict that we are geing to exhaust and impoverish our soil by wheat-growiug past all hope of recuperation. There is no cause for anxiety in this direction. What would have been the condition of California now, hsd not this demand for wheat been msde upon her? The emergency in which other countries were placed by a scarcity of wheat was the means by which we escsped ss great an emergency; snd, although we are not disposed to embark in the balloon which the sanguine prophets of our future wheat career are at present inflating, we have an unwavering faith that the energy and aptness that have ensbled us to meet this unprecedented demand for wheat, will carry us safely out of excessive wheat growing. The elements are already actively at work that will save our soil from exhaustion, and will place us in such a condition that we can stand any fluctuation in the wheat market. The profits from the wheat crop of the two seasons just past are being applied to the extension of manufacturing, and to other substantisl interests outside of agriculture; while that portion which remains in the hands of the producers is being used for lifting mortgages, improving farm stock, and introducing other departments of farming which are recuperating instead of exhausting the soil.

But these hopes do not take the form of any imsginary stste of entire independence, nor do we expect or wish to see the English, or any other system of farming, transplanted here. Our situation is peculiar; has no precedent; and admits of no imitation in the means by which the end is to be accomplished. American agriculture is partaking more and more of the character of American trade; snd the alertness and pliability essentisl to the success of the merchant or the manufacturer, is rapidly becoming an essential element in farming. The farmer, like the merchant, the manufscturer or the bsnker, must not expect to have prosperity come and linger about his premises, suiting itself to his favorite grooves; he should go forth and meet her hslf way, and not feel above studying her humors to some extent.

The Foot-prints of Pomona in San Francisco.

Apricots still linger about our fruit stands, crowded to the bsck shelves hy some of the latest favorites. Red currants are also with us yet, prices advsncing somewhat ss the supply diminishes. Blackberries are in their flush season. This fruit is gradually improving under the experimental culture of our fruit-growers, and some of the varieties now in market are exceedingly attractive and luscious; the seed of the berry being scarcely perceptible. Some of the better varieties of pears are finding their way into market, but we ean hardly say as much for the spples; still, being aware that the best and most enduring things matnre slowly, we await trustfully the approach of the more select vsrieties of this peer of all fruits. More attractive grapes are now clustering about the fruit-stands. As to the peaches now being offered for sale, it is to be hoped thst the stranger within our gates will not consider them as fsir samples of what California csn do in this line. The coming peach will undoubtedly be along before another fortnight. A few cherries are left blooming almost alone.

The black currant now appears in our market as a sort of novelty in the eyes of Californians; 25 cents per lb. being charged for the first invoices, and not very good ones at that. We have on former occasions alluded to this fruit, and urged our small fruit eultnrists to include it in their lists. It is known ss one of the most healthful of fruits, and the bush is exceedingly hardy. The strong oder which the foliage exhales not only repels from itself all destructive worms and insects, but is a protection for neighboring hushes and other vegetation. When the currant worm nearly drove the red currant out of the gardens of the East, the black currant remsiued unmolested. Its peculiar flavor, it is true, reqnires a little education on the part of the consumer to render it palatable; but when the taste is once acquired it becomes a lasting favorite; and the stroug odor from the leaves is remarkably invigorating. In England the blsck currant is a standard favorite, aud is highly esteemed—for puddings, especially. It is hardly as abundsnt a bearer as its red brother of the garden, but the hardiness of the bush, with its uniformity in hearing, place it among the most reliable of fruits.

We have plums also in market, but they are rather hard and dry. Probably we shall have better by snd by, though this is one of the fruits that Eastern people are particulsrly inclined to crow about when a comparison is drawn between their own fruit and ours. California fruit-growers should look to their laurels in this matter.

WHAT WE OFFER TO-DAY.—The readers of this week's RURAL PRESS hsve a substantial and profitable feast set before them. They will find in the "Home Circle" and "Correspondence" departments centributions from some of their favorites. Other special departments will be found to contsin their ususl fund of useful information and practical suggestions; while a glance at our "Agricultnral Notes" will afford a satisfactory view of the grand panorama of California fsrming as it is now progressing. But as we come nearer home, and spproach the editorial eolumns, modesty suggests that we simply declare that we have done all in our power for the instruction and entertainment of our readers.

ABOUT "TEST-LIME."—A subscriber wants to know "what is the test-lime which is used in maunfaetnring sugar, and for what purposes is it used?" We are not aware that there is sny substance known as "test-lime;" snd we are informed thst the only lime used in sugar-making is the ordinary lime, and this to only a very limited extent in certain complicated processes, a descriptiou of which our present space will not permit.

BISMARCK.—A dispatch ssys Bismarck is improving, but the wound nnhealed; the Prince cannot write.

A beet-sugar factory, similar to that in Sacramento, will probably be erected near Davisville, as a company is forming for that purpose.

To Amateur Gardeners Again.

A few weeks since we gave sn article on this subject, with the intimation that it was to be followed np. One of the principal reasons why gardening, smateur gardening, we mean, is less in vogue in California thsn at the East, is one that would hardly seem credible to those who have not properly considered the inconsistencies of human nature. It is becsuse vegetables are grown here so easily, and in such great abundance. In localities where garden-tools cannot be nsed before the first of May, and where September is ushered in with frosts, and in countries where the amateur gardener is driven to the top of his house for space to grow his few vegetables snd flowers, a longing which seems inherent in human uatnre aronses a determination which, with the aid of perseverance, produces the home garden, which is only second in its attractiveuess to the domestic fireside.

Here fruits and vegetables can be bought cheaper than they can be grown—so it is believed—snd it is not expected that people are going to work in their gardens as a sort of penance; and we do not hope to convince them by any show of figures that gardening will pay; or to be able to prove that all lsbor invested here will bring its retnrns in physical and mental health; but we firmly believe that if they will try gardening they will not leave it off. We find very few who have "thrown off" on gardening. Let the owners of places in villages and cities especially make a garden the coming spring.

Nothing is gained by hurrying the planting of gardens. As the seasen approsches a few warm dsys are apt to create a desire to commence digging and planting; but nothing is done to advantage until the ground becomes warm aud dry. Heavy soil, if dug over when wet, does not fall to pieces readily; but lies in heavy blocks. Raking, though it may smooth it over nicely, does not pulverize it properly; and after being exposed to the sun the surface becomes erusted; and instead of the spongy appesrance that is desirable there are gaping cracks; and where the soil is light snd friable the fertilizing properties are less tenaciously retsiued and are more readily dispersed on being turned np and exposed to the sun and air. No soil should he prepared long before planting. The condition that immediately follows digging or plowing is the condition best suited to receive the seed. Much of the failure of spring-sown seed is owing to its having been consigned to the earth before the ground was ready to receive it. And even though seed thus sown germinates, the plants do not possess the vigor of those grown from seed sown later in the season. There are some vegetables, peas, onions, lettuce, etc., for which it would be well to gain all the time possible; but even these, when planted, should have the benefit of the recent stirring of the earth.

A garden should not be all prepared at one digging, nor should all the seed be sewn at once. This gradual preparing and planting of the ground, besides being better for the vegetables, places the matter within the control of the owner; and enables him to manage his garden without the aid of hired labor, a matter well worth considering, there being few common laborers who sre fit to do anything in a garden, and as experienced and professional gardeners are unapproachable at this season.

When the proprietor has determined to commence operating in his gardeu, instead of starting off in search of a man whom he esn send up to make it, he should go into it himself, beginning with whatever is most pressing, and being careful not to overwork himself at the start. Some people think that it is absolutely necessary to apply an amount of manure to their gardeus every year; and to go to considerable expense and labor to procure it. If it is availsble it would of course be folly to neglect to use it; but gardens in cities and villages, even where there are no animals kept about the premises, receive an ample supply of manure by way of sweepiugs of the house and sheds, dirty water, ashes, old garments and leather. The garden is the most convenient receptscle for these during the winter, and in the spring they may be thus got out of sight and do much toward lightening snd euriching the soil

Pruning is about the first thing to be looked to in the spring. This work may be done even before the ground is in a condition to work There is a good deal of excessive pruning, snd mueh injudicious pruning. Conflicting theories are in vogue in regard to the limits of pruning, and each of them has slain its thousands of trees, bushes and shrubs. But the sensible owner of trees will not punish them hy over-pruning, nor allow them to suffer from neglect. By visiting them frequently, as he should, and becoming acquainted with their wants, he will soon learn what to cut away and whst to leave. We often hear people say, "Our trees have rnn out." They should hsve watched the progress of this running out, and attended to their wants. If they would at once take upon themselves this duty, it would soon cease to be a task, and become a labor of love. This interest in their welfare would create an attachment for them, and they would hardly allow snother person to take them in charge.

THE Napa *Register* says a pretty young miss of Napa city is wearing a straw hat, the product of her own skill and taste, the raw material of which is of California growth.

Bag-Making in San Francisco.

There have been bags full of items concerning bags, their manufacture and their contents, spread by the press before the people of this coast; but the public probably have had a slight conception of the extent to which bag-making is carried on in San Francisco. This city has on several recent occasions "astonished the natives" in matters of home industry; and notwithstanding we have been credited with being slightly addicted to "tooting our own horn" in some matters, we think we may consistently put in a claim for modesty in the matter of home manufactures. The rapidity with which a new want is discerned and supplied, is in strict keeping with the promptness and enterprise displayed by Californians in mining, agricultural and other undertakings. In none of the active industries in which San Francisco has been engaged has the machinery run more noiselessly than in the manufacture of bags. The business has been followed to some extent for several years; but it has only recently assumed anything like a prominent position among the industries of the city. In order to give a correct estimate of its present dimensions, we clip the following from the *Evening Bulletin* of July 20th:

The industry is carried on at present in San Francisco by four houses, that of Detrick & Co., Neville & Co., Meyer & Weintraub, and Bardwell & Co. Of these, the factory of Detrick & Co. is one really worthy of San Francisco, both from the capital invested, the number of employés, and the quantity of bags made. It extends through from Clay to Commercial street, and occupies two stories. The first is filled by bales on bales of burlaps, hundreds of thousands of yards being kept in stock at the same time. From this etory these are carried up to the second by an elevator, where they are quickly opened, and where they are measured off against cutting-hoards provided with graduated scales. There are seven of theee cutting boards, attended by as many youths and young men, who, having measured off the burlaps by a dexterous stroke of the knife, manage to cut as many as forty bags at a time. From the cutting-boards they are passed to the machine sewers. Of these there are seventy, tending ae many machines. They average ahout five hundred bags a day each. Having passed through their hands, the bags are next taken by the turners, who are principally small boys, who turn them on turning boards with great dexterity and quickness. This is for the purpose of having the seams inside. Each bag having been examined three times to see that it is free from defects, it is thrown upon a pile. When these piles are large enough they are made into bales, carried down by the elevator, and are ready for shipment to any point on the Pacific coast. The capacity of the factory, which is now running full-handed, is ahout 30,000 hags per day. The season begins in March and ends in September, so that it is capahle of making 5,000,000 bags during that time. Those really manufactured are of course much less. There are here employed altogether 130 girls and boys. The girls earn all the way from $5 to $14 per week, and the boys from $2.50 to $18 per week. They work by the piece. Nearly all the hoys are entitled to be classed under that appellation, but the girls, while some of them are extremely young, others are of quite mature aspect. The work is carried on as quietly as possible, and but for the incessant olick of the machines a pin might be heard to drop.

The character of all the other factories is similar to that which we have just noticed, save that they are of much less capacity severally. The bags intended for shipment are put up in hales of 500 each, each bale weighing 400 pounds. The Grangers have ordered, it is said, an immense quantity of these California-made bags—the house just mentioned having already sold them 1,250,000.

The manufacture of flour-hags is also growing to be a great industry, and the house of Detrick & Co., during the season, which lasts from the middle of July to January, makes about ten thousand per day. The same firm have a printing-press for printing the hags, and they are now importing a skeleton Hoe press for the same purpose. Besides the factories in the city, there is the jnte and hag factory at Oakland, which has doubled its capacity this year, and a couple more throughout the country. It is estimated that 18,000,000 hags, worth $2,500,000, will be needed in the State this year, and that of these upwards of 8,000,000, worth $1,500,000, will be made in San Francisco, Oakland, and a few interior towns. But this is only a beginning, for as the cultivation of cereals spreads, the valne of the industry will be increased year by year, in a ratio which it would be rash even to estimate.

The Humboldt *Silver State* of July 24th says: Up to the present time N. Levy & Co. of this place have shipped to Boston and Philadelphia 200,000 lbs. of wool. They still have a large quantity in their warehouse, with more coming in every day. This wool is all of this season's clip, and raised in the surrounding country.

Watermelons weighing as highas 60 pounds have appeared in the Marysville market.

Chinese Market Scene.

Our illustration represents a scene in a Chinese market place. The stalls or hooths of the sellers are of rather primitive construction, some of them consisting simply of rude umbrella-shaped roofs and no sides. A Chinese merchant can set himself up in business on a very small capital, his stock in trade heing limited to a few articles, and his warehouse portable. This may be seen by any one who takes the trouhle to walk through the Chinese quarters of San Francisco. On Sacramento street hetween Kearny and Dupont, for instance, one side of the street is completely taken up by stalls of all kinds. The butcher shops are in the stores, while on the sidewalk, on the stepe, and in every possihle corner, sit moon-eyed Celestials with small trays or baskets, offering for sale vegetables and uninviting Chinese delicacies of every description. In the scene shown in the engraving, are several cats in cages; but we have never seeu any of these animals for sale here. If the tales be true that rats are a delicacy with the heathens of the Flowery Kingdom, it may be that cats are a more necessary adjunct to the domestic conveniences of these people than they are to us; in which case they would he marketahle produce as well as anything else.



A CHINESE MARKET SCENE.

The delta formed at the confluence of Napa and Petaluma rivers has yet only partially been subjected to reclamation, some 10,000 acres above Vallejo having been ditched and leveed. The land at high tide is partially submerged, but for pastural purposes is believed to be very valuable after reclamation. The Sonoma *Democrat* has information that a company of which George S. Ladd is snperintendent, have entered 27,000 acres of this class of tnle land, at the mouth of Sonoma creek. It is said that a large portion of the sediment which has come dowu the Sacramento river during the past 20 years has been turned hy the inflowing tide around Mare Island into an eddy abont the mouth of Sonoma creek, and this rich deposit has covered the overflowed land to the depth, in some places, of two feet. It is claimed that it will not cost more than $10 per acre to reclaim this land, and $10 to cultivate it. The levee is heing huilt at the rate of three-quarters of a mile a week; six or eight miles are already comploted; it is 14 feet wide at the base, four and a half feet high, and two feet wide on top. When finished, the owners will stock it with dairy cows, and run a milk boat to the city every day. The ultimate intention is to make a grain farm when the ground is sufficiently prepared for the purpose.

In some of the State Granges the matter of inangurating a rigorous and effective campaign under the provisions of the Squirrel-nuisance Abatement law has been under consideration, and a determination is evinced to have the pests exterminated.

The vineyard of Gustave Mahe, a mile out from the town of San Mateo, contains 70,000 vines. Last year Mr. Mahe made almost 5,000 gallons of wiue, and this year he expects to make 7,000 gallons.

The Benton county *Democrat* says: "Haying is pretty much over with in this county, and a greater yield than has been known for years. The weather has been favorable and hay has been saved in good shape."

The Wheat Prospects.

The Sacramento *Union*, in noticing the wheat prospects, and the evident effort on the part of certain parties in this city to bear the market here, publishes the following:

We remark here that recent articles in the San Francisco *Post*, denouncing the farmers for engaging in the business of chartering vessels, have the appearance of being inserted in the interest of the Friedlander freight monopoly, which aims to secure the grain of the country at prices ruinous to the producer and highly remunerative and speculative to the monopoly. We also remark that the account sent by telegraph from New York, July 25th, and puhlished in the *Union* yesterday, stating that crops are better in Europe this year than last, is not true. The account was doubtless sent here to "hear" the wheat market in the interests of the monopolists. The truth is, that though the wheat crop in the Western States of America is a little above the average this year (and not much, either), the season in Europe has been unfavorable. The *World*, 10 or 11 days ago, had a paragraph on this subject, copied by us last Friday, in which it is stated that the crops in Europe have suffered from summer frosts and other ahnormal weather, and in some places from extraordinary drought.

The alarming feature of the summer has been a temperature so low that grain cannot ripen. In the north of Italy, devastating hailstorms; in Hungary, drought; in Anatolia, famine; all over England short crops from various causos; and not anywhere above an average crop. So that we have not much to fear from an unusnal competition in the Old World, "bearing" dispatches to the contrary notwithstanding. The Western States will be our great competitor. They have a fine crop, hut not such an overwhelming one as we have. Prices ought not to go below $1.60 here, and will not if farmers are in a condition to hold on for a break in the shipping rates. Here is some advice given by the Milwaukee *Journal of Commerce* to the Western farmers, which will serve for the California market:

"Our own opinion of the situation is, that however large the European crops may he, considerable imports will be required from this country. If our wheat is rushed to the market early in the fall, as generally happens, low prices muet result; but if producers are cautious and sell only when the demand is urgent, they will obtain fair prices for their grain during the coming year."

The farmers nnquestionably know that strong efforts will be made to reduce the price of wheat to as low a figure as possible, and that this will be done by fictitious publications made in the newspapers.

The flax mills of the north of Iroland, generally, have suspended manufacturing linen, and thousands of weavers and other hands are thrown out of employment. The market for Irish and Holland linen has hecome much depressed. It is stated the flax-growers of Ireland are ahont giving attention to the growth of the ramie plant, which on tho low lands and river bottom lands is supposed to be well adapted to the climate of Ireland; possihly to supercede the culture of flax altogether.

Russia and China. — Prussian journals say that a war between Russia and China is inevitahle, in consequence of the designs of the latter on Kassgar.

Recent Patents.

Among the patents recently obtained through Dewey & Co's., Mining and Scientific Press, American and Foreign Patent Agency, the following are worthy of mention:

Unloading Header Wagons.—Henry Klehn, Crow's Landing, Cal. An improvement in that class of false hottoms for header wagons, in which the load is lifted bodily, as in a sack, from the wagon. Consists in making the false bottom or netting in two parts, which are united on the under side of the load by a detaching apparatus. To deposit the load, a pull upon a cord releases the apparatus, so that the bottom opens and allows the load to fall out.

Can Opener.—A. H. and C. J. Hall, Suisun city, Cal. This patent covers a simple and cheap device for cutting open the tops of tin cans, and consiets of a cutting roller mounted upon a shank at the end of which is a prong. The prong is stabbed through the center of the can top, and serves a fulcrum ahout which the shank is operated while the cutter cuts out the top of the can in a circle.

Animal Trap.—Aug. M. Gass, Campo, Cal. This patent relates to a very simple and cheap, yet effective trap for catching gophers, squirrels nd other animals.

Brake Shoe.—Henry C. Deering, Hope Valley, Cal. Covers an arrangement for applying and securing a rubbing face on the contact side of a brake shoe. The device consists of two straps which are hinged at the opposite corners of one end of the block, so as to shut down against the oppoeite edges of the block, and clamp the face or rubbing piece to the block, leaving a sufficient space between the straps for the rim of the wheel to hear.

Tap and Faucet for Beer Casks—Jno. G. Schiffer, S. F., Cal. Relates to an arrangement for tapping beer barrels without danger of losing the contents. Consists of a faucet provided with a driving sipindle. A metabung with central opening is permanently secured in the barrel head, he faucet can be screwed into this bung. A wooden plug is secured in the opening before the beer is placed in the barrel; when the barrel is to he tapped, the faucet is screwed into the bung, and the wooden plug driven into the barrel hy striking the projecting end of the spindle.

Ticket Claep. — Hiram N. Rucker, Plainsburg, Cal. This patent covers a very neat and useful clasp for holding tickets, and is intended for the use of conductors, passengers and other persons who carry cards or tickets about their persons. It consists of a box for holding the ticket or card, which is made in two parts. These parts are so united that they can slide upon each other, in order to increase or diminish the size of the holder to accommodate any sized card or ticket.

San Joaquin Valley Agricultural Society.—A meeting of the officers of this society was held on July 17th, when, in addition to the rules governing the fair last year, the following was adopted: "Children under fourteen years of age will not be admitted to the exhibition unless accompanied either by their parents or guardians, or some person exercising control over them." It was also decided to hold an auction sale of fine stock of every description at the fair grounds, on the Saturday immediately after the fair. All persons wishing to offer their stock for sale, by furnishing the Secretary with the name, description and pedigree of the animal, two days in advance, can have the same placed on the sale catalogue.

Rain and Ruin.—Fearful storms and cloudbursts have occured in various sections of the country during the past week. The most disastrous one occurred near Pittsburg, Penn., where it is reported nearly 200 lives have been lost. Several lives were lost at a similar occasion at Eureka, in the State of Nevada. Another took place at about the same time four miles west of Carson. Heavy rains have fallen in many portions of Arizona. A water spout hurst in the Colorado desert, in Sau Diego Co., which came near sweeping to destruction the mail carrier with his team and the mails.

Newspaper Enterprise.—The London *Daily Telegraph* announces that arrangements have been concluded between the proprietors of that paper and Mr. Bennett, of the New York *Herald*, under which an expedition will at onoe he dispatched to Africa, with the object of pursuing the fulfillment of the magnificent discoveries of the great explorer, Dr. Livingstone.

The Washington Monument.—Ex-Governo Shepherd has resigned his position as Director of the Monument Association. Subscriptions tofinish the monument under the new plan are coming in with gratifying rapidity. Preparations are making, however, to renew the demand on Congress for aid at the next session, in the event that the new plan is not entirely successful in securing sufficient funds,

Miscellaneous.

Cotton-Gunpowder Blasting.—Trials of the cotton-gnnpowder manufactnred at the works of Oare, near Faversham, of considerable importance, were made last week with great success in the fine Kentish ragstone qnarries at Preston Hall, near Maidstone, from which the proprietor, Mr. Benated, is now getting out stone for the new summer palace of the King of the Belgians. Two charges of 25 pounds of uncompressed powder were fired by electricity in holes grubbed in from the vertical face of a cliff at least 50 feet high, aloug a thick band of sand parting, some thousands of tons of rock being thereby fissured in all directions, iu a way to make easy the future operations of weighiug or lifting out of the stone for building and other practical purposes. Charges of 100 pounds of ordinary black gunpowder would probably have failed to have given anything like corresponding results, if indeed they would have accomplished any worthy effect at all, under the like circumstance of a perfectly horizontal berehole. The interest which attaches to the experiments is that this brand of powder can be manufactured from beginning to end without any risk whatever of explosions. Some ten-pound charges of the same material were afterwards fired, demonstrating the power of the powder to be more than equal to that of the best gun-cotton; whilst a like charge of the company's strongest blasting powder, manufactured nnder very high preseure, gave very startling results, rivaling those of the nitro-glycerine compounds of the first order.—*Colliery Guardian.*

Skimming the Seine.—Of all the things in the world which appear utterly worthless, are soap-suds. Mr. Simmonde takes a different view. He tells ue that "soap-suds, as a stimulant of vegetable life, can not be too highly appreciated." We can not go into his arguments on the great value of soap-suds, and it is snfficient to eay that, when poured out as a manure, they are of prodigious efficacy. The French, who are np to everything in the chemical line, have taken a proper view of the value of soap-snds. Whether from private dwellings in Paris, or from the barges of the *blanchisseuses*, the Seine must have a good deal of soap floating about it in a wasteful kind of way, to say nothing of the greasy pollution from dead dogs and cats. There was a fortune, if properly looked after. An enterprising firm, fortified by the authority of the Prefect, determined to begin a eyetem of skimming the Seine. Yon would imagine it wae a nonsensical idea. Quite a mistake. By uniting the skimmings of the river with the offal from hoepitals, the firm is able, by the aid of chemistry, steam and cookery, to fatten 8,000 pigs, and to produce annually 500,000 pounds of soap. Let England touch that if it can! Can any one mention a town in Great Britain where the most valnable productions are not senselessly floating off down the gutters and eewers, never more to be of use to hnman beinge?—*Chambers' Journal.*

Moving in a Circle.—In a recent number of *Nature*, a letter appeared in which it is stated that it is believed in North America that a lost man always strays in a circle toward the left. I may mention that whilst walking in a woody and hilly part of the New Forest I found to my great astonishment that I had described a complete circle, and it wae toward the left. My father aleo tells me that he has been informed, although under what circumstances he doee not recollect, that the eame idea obtains in Australia. It has been suggested that the reason of this fact (if fact it is) is, that the right eide of the body is etronger than the left. In confirmation of the truth of this explanation, it is worthy of notice that Dr. Wm. Ogle finds that men are right-legged ae well as right-handed, although the rule has not so universal an application. One of the points adduced by him in evidence is, that bootmakere generally find the right foot larger than the left.—*Cor. Herald of Health.*

Butter and Fats.—Dr. J. Campbell Brown says that the proportions of the chemical constitnents vary so greatly (from zero upwarde) that no reliable evidence of purity or impurity can be obtained by estimating the different fats obtainable by decomposing bntter. In fact, the distinction between pure bntter and butter mixed with flesh fats ie no more a chemical one than the distinction between different animals or different plants. The physiologist distinguishes one kind of tisene from another more readily by their microscopic characters than by their chemical composition; and microscopical examination with polarised light is the most reliable means of distinguishing pure butter from that which contains an admixture of lese easily digestible and less palatable fats.

Use of Paraffine in Pharmacy.—To keep motallic surfaces from oxidizing, it is only necessary to immerse them in melted paraffine, or paint them over with it. Stripe of paper, say Manilla paper, drawn through melted paraffine, will make a very useful covering for bottles, boxes, pots, etc. Carbonate of ammonia can be kept in an original pound bottle perfectly pure and free from contact with the air, by sealing it with paraffine. Prepared paraffine paper is first laid over the mouth of the bottle, the cork is then inserted, and dipped into melted paraffine. The cork is in a great measure protected from the ammonia, and will last a long time.—*Druggists' Circular.*

Curious Origin of Fires.

Alfred Tozer, of the Chief Fire Station, Manchester, England, communicates the following paper on the origin of great fires, from a natural history point, to the *Science Gossip:* In one warehouse two instances occurred in which rats gnawed through a leaden gas main pipe a few inches above the floor. Other similar instances have occurred of rats gnawing a gas in mistake for a water pipe. It has been thought they heard the water bubbling in the gas pipe, and have not found their mistake until they have penetrated the pipe. The warehouse was on both occasions damaged by fire through some of the employés seeking for the escaping gas with a light.

I have attended and traced several instances of fires occurring through rats and mice gnawing lucifer matches. Matches are now dipped in paraffine wax instead of sulphur, as before; the rats or mice have carried them under the floor for the purpose of gnawing off the wax; in doing so, their teeth have come in contact with the phosphorus at the ends, and so fired them. In 1856 I attended a fire at the Sultan's Palace, at Scutari, Asia Minor. After the fire I gathered from under the flooring a quantity they had been gnawing. Some years ago a fire occurred in London, caused through a jackdaw getting at a box of lucifers, and pecking them until it set them on fire.

Fires have occurred through rats and mice conveying, under the flooring boards, oily and fatty rags, which have afterward spontaneously ignited. This is rather a common cause of fires in cotton mills.

The following ie an extract from the Journal of the United Service Institution for 1868: One of the presents sent to the museum for thie institution is a rat's nest and young. The nest was set on fire by a lucifer match, ignited by the old rat as ehe worked it into her nest. Lieutenant Gilmore states that a fire occurred on board H. M. S. *Revenge* from a similar cause.

Cats and dogs have caused fires in various ways, such ae upsetting explosive and inflammable things into fires and lights; also through lying inside fenders and under fireplaces. Hot coals have fallen and adhered to their backs, which caused them to beat a hasty retreat, no doubt being anxious to get rid of the annoyance as soon as possible. They have sometimes succeeded by rolling or rubbing on carpets, curtains, beds, straw, shavings, and other inflammable things. The last instance I recollect occurred at a baker's shop. A dog was lying under an oven fire, and a piece of chip fell from the fire on to his back. He immediately ran to some shavings and rolled upon them, at the same time setting them on fire before the eyes of his master. In 1863, three distinct fires were caused in one room of a gentleman's house, through a cat lying inside the fender, when some hot ashes fell out of the fire on to its back, which caused it to rush about the room, when the cinders were deposited in different places, which set fire to the carpet.

That mischievous animal, the monkey, has lent its aid to the devouring element. Fires have occurred through its agency in a similar manner to cats and dogs—also through its playing with fire in various ways. In one instance a monkey upset a charcoal brazier, and set a room on fire. Many fires have occurred through our domestics hunting bugs and other small fry by the light of a candle or lamp. In their anxiety, especially, to hunt fleas, they forget they may produce an enemy much more to be dreaded. Many fires also occur through persons fumigating apartments to get rid of bugs and various kinds of vermin.

A few instances have occurred through the concentration of the sun's rays upon glass fish globes. A residence was set on fire through the concentration of the sun's rays upon a water croft standing upon a table. Colored bottles in chemists' shops, cracks, and hull's eyes in glass have been known to focus sufficient heat from the sun to set buildings on fire.

Birds' nests under the eaves and wooden crevices of houses have been frequently set on fire through sparks from a neighboring chimney, and have contained efficient inflammable matter to set fire to the buildings.

Although I have given the dogs the credit of producing work for the firemen, still it would not be fair if I were to omit to mention that they have frequently discovered and given timely notice of fires; and many an anecdote can be told of the very great interest dogs take in and at fires.

Kalsomining Fluid.—The following is commended as a good kalsomining fluid for walls: White glue, 1 lb.; white zinc, 10 lbs.; Paris white, 5 lbs.; water, sufficient. Soak the glue over night in three quarts of water, then add as much water again, and heat on a water bath till the glue is dissolved. In another pail put the two powders and pour on hot water, stirring all the time, until the liquid appears like thick milk. Mingle the two liquids together, stir thoroughly, and apply to the wall with a whitewash brush.—*Jour. of Chem.*

Exhibiting Photographs. — The effect of photographic transparencies in the microscope, as well as on the screen, is greatly improved by placing a pale blue glass in the path of the illuminating beam. This corrects the brown or "foxy" tone which they too often present, and gives depth and richness to the shadows.—*Scientific American.*

Whether carbon exists at all as an impurity in zinc is doubtful, if we consider the mode of its extraction.

Transmission of Power by Wire Ropes.

At a meeting of the Institution of Mechanical Engineers, London, Mr. Morrison described the mode of transmission introduced by the Bros. Hirn, and now extensively used on the Upper Rhine. It appeared that they first used flat metallic bands to transmit the power; but, these being found objectionable, round wire rope was subsequently adopted, instead. The rope is usually made of fine steel wire, as it must be very tough and flexible. The wire rope, which is about one inch in diameter, and contains 72 strands, is run at a high velocity, over pulleys of large diameter. The total loss of power by friction, etc., was stated to be 2½ per cent., and it appeared that, of 120 horse power existing at the motor wheel, 100 horse power was utilized at 2,200 yards distance; but it could not be elicited in the discussion how these figures had been arrived at. It was also estimated that iron shafting, capable of transmitting the same power, would involve the use of 3,000 tons of material. Various materials were tried for facing the grooves of the pulleys, such as copper, leather, etc., as there either was excessive wear in the groove, or the facing destroyed the rope. The best arrangement was found to be a dovetail groove, filled in with gutta-percha, in which the rope soon made a channel for itself, after which the wear was not excessive. The pulleys run at the rate of 50 miles per hour, and the ropes last from one and a-half to two years.

Dr. Siemens remarked that there was no doubt that, by running ropes from 30 to 60 miles per hour over pulleys, a large amount of power could be transmitted with but little waste.

Mr. Wm. Smith said that in 1837, soon after his father had invented wire rope, it was used very similarly, and in 1839 and 1840 it wae introduced on the Regent's canal, for towing barges through the tunnel beneath the Harrow road, and it was also taken three and a-half or four miles along the bank of the canal. The bargeman simply threw a catch line over the running wire, and let go when necessary. It was tested against the screw, duck-foot propeller and others, but was not found to be economic. He had many times seen a similar application of the principle; the fly-rope of an ordinary ropery was an illustration, but that had long since been obsolete. He would like to know whether the paper claimed, as a novelty, the introduction of endless wire ropee for transmitting power to a distance; if eo, he doubted whether the claim could be eubetantiated. If the novelty merely consisted in the running of the ropee at a high velocity, which was all he could see in it, there might be eomething in the claim.

Clay Glaciers.—The gliding masses of clay, resembling glaciers in many respects, which are to be seen in the valleys of the Apennines, form the subject of a memoir communicated to the French Geological Society by M. de Mortillet. These mountains consist of sandstone, sand and clay. The clays retain water like a sponge, and becoming saturated, take the form of a sort of slippery dough. Then they slide and move like glaciers; the pressure on the clay as it glides along the sides of the valley causes the calcareous debris to rise to the surface, which gives the moving mass a further resemblance to a glacier. Lateral moraines, too, are formed, and along the sides of the valley is found a great accumulation of calcareous fragments. The pressure exerted by these masses is enormous. M. de Mortillet mentions railway embankments of solid construction being swept away by them, the gravelly stratum on which the embankments were constructed being carried off. The movement of a glacier is due solely to the pressure of the higher portions of it upon the lower, and its progress is in proportion to the weight of the mass above. Glaciers are plastic, it is true, but they can not be said to flow.

Nature of Electricity. — Attempts have been made to combine the wave theory of light and electricity by supposing that the vibrations of the ether which produce the phenomena of electricity are longitudinal, resembling those of sound, while the phenomena of light are produced by transverse vibrations of the same medium. Another theory which has been long believed, is that electricity consists of two fluids, and that a body is electrified positively or negatively, according as one or the other of these is in excess. According to Dr. Franklin's theory, there is a single fluid and the phenomena depend upon the excess or deficiency of this fluid. About three years ago, Professor Edlung read a paper before the Swedish Academy, in which he advanced the theory that this single fluid was the ether by whose vibrations light is produced; a body being charged positively when it contains an excess of ether, and negatively when the ether is deficient.

The smallest steam engine on record was made by a Scotchman, named Crawford. It is perfect in every part and so small that it can be covered by a lady's thimble. It can be worked by steam, but he usually works it by atmospheric pressure, through a flexible tube, with rubber air receiver. The pet engine was made as an amusement, and to show what could be done. It is undoubtedly the smallest working machine ever made.

Stopping Bottles.—A new invention consists in attaching india-rubber tubing to the neck of the bottle, said tube being bent over and secured in that position to close the neck of the bottle.

The Horse.

The Paces of the Horse.

The subject has been discussed by many correspondents of the London *Times*, in connection with Miss Thompson's picture of the "Roll call," in the Royal Academy's exhibition. We take the letter of Mr. Fleming on the subject as terminating the controversy:

I think there can be no dispute as to the natural paces of the horse being the "walk," "trot" and "gallop;" and that "ambling," "pacing" or "running" are artificial or acquired movements. Neither can there be any reason to doubt that walking and trotting are essentially distinct paces, and are not performed in the same manner. This any one may ascertain by riding, observing a horse moving at these paces, or to some extent by listening to the sounds of the feet on a hard road. It is certainly correct to state that in walking and trotting the movement of the limbs is diagonal, the left or near fore, and the right or off hind leg being on or off the ground at the same time at a certain period. But here the similarity ends, for at the walk a foreleg (say the left) commences or "leads," and is followed by the off hind in such a manner that when the first has attained its maximum elevation the latter is only half raised; so that the forefoot is placed on the ground and half raised again when the hind foot reaches the earth. At the trot the diagonal fore and hind limb are raised and planted together—not after each other, as in the walk; so that in the latter pace it may be said that, at a given time, three of the horse's feet are on the ground, while in the trot there are only two. The "beats" of a sound horse's feet in walking are rythmically as "one, two, three, four," and in trotting "one, two."

In the trot there is not much difficulty in observing the movement of the limbs, owing to their bipedal succession. In the walk, however, for the reason stated, it is almost as impossible for the inexperienced eye to follow them as it is to follow three or four metal balls which an expert juggler quickly throws from hand to hand.

Contagiousness of Glanders.—Regarding the contagiousness of glanders, Mr. Percival submits the following deductions as the result of facts gleaned from his own experience:

1. That farcy and glanders, which constitute the same disease, are propagated through the medium of stabling, and this we believe to be the more usual way in which disease is communicated from horse to horse.

2. That infected stabling may harbor and retain the infection for months, or even years; and although by thoroughly cleansing and making use of disinfecting means the contagion might be destroyed, yet it would not be wise to occupy such stables immediately after such supposed or alleged disinfection.

3. That the virus, or poison of glanders, may lie for months in a state of incubation in the horse's constitution before the disease breaks out. Of this we have had the most positive evidence.

4. That when a stable of horses becomes contaminated, the disease often makes fearful ravages among them before it quits; and it is only after a period of several months' exemption from all diseases of the kind that a clean bill of health can be rendered.

The Color of Normans.—To say that a black colored horse could not be a Norman would certainly be absurd, though it is true there are comparatively few found in France of any other color than gray colors, shading all the way from white even to black. There seems to be an effort among the French people to breed in darker colors at the present time, by using black stallions. Now, for the sake of argument, what does it take to constitute a dark gray color in a horse? Is it not a combined mixture of black and white colors? In every dark gray the black color must predominate. The majority color in the Norman stock is dark gray, shading lighter down to a white and darker up to a black. Here we must see how absurd it would be to say that a black colored horse could not be a Norman. I have this present season imported four Norman or Percheron horses, one of them jet black in color. He possesses every characteristic of a Norman or Percheron horse.—*Cor. Prairie Farmer.*

Vines in Nooks.—Three vines of as many different varieties, planted in some sunny nook, or by the side of some building, so as to obtain shelter, will, if properly cared for, furnish many a bushel of delicious grapes every year. Make the ground mellow and rich by the use of a spade, and by employing old manure, finely ground bones and ashes, and set out the plants. In three years the rich clusters will appear, and in four years the product will be abundant. It is well to have vines planted so that the waste liquids from the dwellings can be used in fertilization. If there is any food the vine especially loves, it is the soapy liquids which accumulate on washing days in families. Vines drenched every week with these liquids will flourish astonishingly, and extend themselves so as to cover large buildings, every branch bearing fruit. We say to our readers, plant vines.—*Science of Health.*

Mildew on Roses.—Carbolic soap and water is recommended to destroy mildew on roses, to be applied by sprinkling.

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Forming about half of a block fronting on the broad ship channel of Islais Creek; will be sold so low as to make it an inducement to the buyer. Inquire for the owner, Room ——, No. 224 Sansome st., S. F. bptf

PURCHASERS please say advertised in Rural Press.

Agricultural Notes.

ALAMEDA.

Improvement on the Header.—Livermore *Enterprise*, July 25: One of our farmers has recently made an improvement on the grain header, by which the service of one man is equal to several horses. As we are informed, it consists in a vertical shaft running on the horizontal plane in such a manner as to carry away the grain better than by the present system. We are promised a view of this invention, and then we shall be able to give a more minute description of the same.

AMADOR.

Extraordinary Yield.—Amador *Ledger*, July 25: As an evidence of the extraordinary productiveness of mountain soil, under intelligent cultivation, we state that Mr. Burwell, of Fiddletown, in this county, in the spring of 1873, planted the fifty-seventh part of an acre in his garden in onions, and gave them the same attention he did to other vegetables growing near by. From this small piece of ground Mr. B. gathered 1,540 pounds of onions, but few of them weighing less than one pound each. The crop was sold on the premises at 2¼ cents per pound, being at the rate of $2,194.50 per acre. The ground producing this extraordinary crop had nothing peculiar about it to distinguish it from any other soil in the vicinity; and, as improbable as this statement may seem, yet its truth can be vouched for by every resident of Fiddletown.

CALAVERAS.

The Grape Crop.—Calaveras *Chronicle*, July 25: So far as we can learn, from observation and inquiry, the grape crop of this county, the present season, will be unusually large. Although we had a late, cold, wet spring, we have yet to hear of the appearance of mildew in any portion of the county. There is an abundance of water for irrigating purposes, even in many localities where artificial means for obtaining a supply cannot be made use of, and the probabilities are that there will be no scarcity throughout the entire season. While it is probable that the aggregate area of lands planted in vines has increased but little, if any, since last year, the total product will be considerably larger, for the reason that the present season is more favorable, and the fact that age and cultivation add to the capacity of vineyards. Judging from present indications it is safe to say the grape crop of this year will exceed that of any prior season.

CONTRA COSTA.

Salt Marsh Wheat.—Contra Costa *Gazette*, July 25: Mr. Edmund Bent has left a number of fine stools of wheat at our office, grown from chance-scattered seed on the piece of reclaimed salt marsh land lying east of Bull's Head, which he lately purchased of Messrs. Blum, Wittenmyer & Russell. The handsome growth from chance-sown seed he reasonably thinks proves the land susceptible of producing a good wheat crop; a belief in which he is further encouraged by the fact that he has here and there found thrifty bunches of alfalfa growing upon it.

EL DORADO.

Grapes.—El Dorado *Republican*, July 23: Grape growers in various parts of the county tell us that the prospect for a large and superior grape crop was never better at this season of the year, and the same may be said of other fruits, especially where the precaution to thin out has been taken. Adequate means for drying fruit would add thousands of dollars to our resources this season.

KERN.

Tehaichipa Items.—*Southern Californian*, July 23: The farmers are all busy cutting their barley and wheat, and there is a great scarcity of hands at $2 per day to assist in the field. There will be 50,000 sacks of barley raised here, besides the wheat and a great deal of hay. We have a good market for it on the desert and at Panamint. There has never been a failure of crops here since the first settlement of the country. Irrigation is not required. There are quite a number of tracts of government land here, with plenty of timber. Lumber is worth $20 per M. here. We have good society and excellent schools. Williamsburg is improving. E. Green is buying the grain of farmers. Persons engaged in mining are doing well.

LAKE.

Harvesting.—Lake *Bee*, July 23: The farmers of Big valley are now cutting grain, and running five or six headers. They are also busy in haling hay. Lindsay Carson has cut 200 acres of clover and grain hay, which averaged a ton and a half to the acre.

MARIN.

Novato Valley.—Marin *Journal*, July 23: Harvesting in Novato valley is about over, and threshing is being dispatched. The Sweetser & DeLong steam thresher will very nearly complete the work this week.

MONTEREY.

Threshing.—Monterey *Democrat*, July 25: The heavy fogs we have every night, not lifting until quite late next morning, curtail the operations of the threshers. In this connection, we hear it suggested that it is imprudent to cut the grain while yet damp and in that condition stack it, for the reason that when it comes to be threshed the kernel envelopes will be separated with great difficulty. From such cause the outcome may be much less than the grain promised when standing.

PLACER.

Alfalfa.—Placer *Herald*, July 25: So far as farmers have sown alfalfa in this section of the country, the result has proved most satisfactory. We know of some places in and near town that two crops have already been cut from this year, which give fair promise for a third as heavy and good in quality as either of the others. Captain John Sawyer has about two acres on his place, which was sown with alfalfa seed and barley mixed, on the 24th of last March. Some time ago he observed nearly four tons of the mixed crop. This so discouraged the barley roots that they refused to send out any more shoots, but the alfalfa, seemingly infused with renewed strength, began at once to grow again, and as if it were exerting itself to make up for loss time, has already attained a second growth that would yield, were it harvested to-day, from a ton to a ton and a half to the acre. Its growth in favorable localities in these foot-hills seems to be spontaneous, and the amount of feed that can be produced from a very small piece of ground sown with alfalfa is, in a measure, astonishing. Every farmer would find a few acres of this production a valuable adjunct to his crops.

SAN BENITO.

Grain.—San Benito *Advance*, July 25: About 4,000 acres of new ground was ploughed up for cultivation in the Quien Sabe valley by renters early in the spring, and now we hear reports of immense yields of grain to the fortunate men who made terms with Signor Hernandez, the owner of the Quien Sabe grant. Messrs. Baker & Duncan, who rented 2,000 acres, have realized about 30,000 sacks of prime first-class wheat, and the yield to the other renters has been equally prolific.

Who Can Beat It?—There can be no discount on any of the samples of wheat sent in from different parts of the county. The crop is fully one-fourth more than that of last year, and the grain generally is much more plump and heavy. None has yet weighed less than 130 pounds to the sack—the sack measuring 22x36 inches—and many weigh 138 and 140 pounds. Mr. Lockwood has a crop of Sonora wheat which averages 140 pounds to the sack; and Mr. Baker has on his own ranch over 3,000 bags of white Australia wheat, averaging 138 pounds each. Both these farmers are of Santa Ana. How is this for high?

Shipments.—Flint & Bixby have commenced shipping wheat, and the first thousand bags left the Hollister depot for the bay city this week. A short time ago 20,000 sacks were forwarded to their ranch, and it is said that there will not be enough to bag the crop on the San José ranch.

SACRAMENTO.

North Fork Ditch.—Folsom *Telegraph*, July 25: We are pleased to learn that it is the purpose of the proprietor of the North Fork Ditch, to complete the dam the present season, that was commenced and nearly built last summer. It is a staunch structure, and has sustained no damage as can be ascertained from the surging floods of the past winter. The most of the district through which the ditch passes is pretty well worked out, and is almost worthless for mining, but with a plentiful supply of water, may be turned to good account for agricultural purposes. Give the barren hills over there plenty of water and the most surprising results at once manifest themselves; and as luxuriant crops grow on them of grain, vegetables and fruit, as are produced on the best bottom lands. All they need is irrigation. Give them that and their value would be increased a hundred fold; without it, they are in a manner worthless.

SAN JOAQUIN.

The Harvest.—San Joaquin Valley *Argus*, July 25: Farmers throughout this section of the valley are getting along with their harvest operations satisfactorily, many having finished heading and threshing, and now having their force of men and teams engaged in moving their crop to the railroad for storage or shipment. So far we have heard of no operations of local buyers, and on inquiry, were informed that most of the grain being delivered at this place is being stored.

SAN LUIS OBISPO.

Cheese Factory.—San Louis Obispo *Tribune*, July 25: Mr. Williams' cheese factory has suspended operations for the season. The milk business is dried up, or at least the cows are. No more cheese will be manufactured at this place till the cows come in. The factory is packed full of cheese which for quality challenges the State.

SANTA BARBARA.

The Tannery.—Santa Barbara *Press*, July 18: We saw some specimens yesterday of the work done at the tannery by a new process of tanning. Sheep-skin was made to appear like calf-skin, and other leather tanned there was far better than by the old method. The establishment is doing a good business, for the time it has been opened, and its success is assured.

TEHAMA.

Harvesting.—Tehama *Independent*, July 18: Simpson and Sultz brothers finished threshing on the Buckeye ranch, owned by John Western of this town, on Friday of last week. The total yield is seven thousand two hundred and forty-two sacks of wheat. The number of acres harvested were four hundred. The average yield to the acre is a fraction over forty bushels. This is probably as good a crop as we have in the county. The grain is well filled, and every way a superior quality. Nearly all of our farmers who have threshed find their crops fully up to their expectations, and in some cases greatly beyond.

YOLO.

The Flood.—Yolo *Democrat*, July 24: We have not been able to ascertain the extent of the damage by the overflow of the Sacramento river in this county the present season, but it is very great. Nearly all the farmers in Merritt township lost all their crops, while many others in Washington and Fremont have suffered less severely. The large fruit ranches below Sacramento also lost heavily by damage to their fruit. The losses must reach away up in the thousands. As yet we have heard of nothing being done for their relief.

Oregon Items.

At a recent meeting of the Directors, it was determined to hold the next Linn county fair on the 6th, 7th, 8th, 9th and 10th days of October, 1874. The premium list will contain several new features that will certainly meet the general approbation, while some of the objectional features will be stricken out entirely.

The farmers in Yamhill and Washington counties will this year adopt the California plan of sacking their wheat in the field, thus saving the expense of hauling it in bulk from the machine to the barn.

Wheat never looked so well as now in Linn. The impression is that the yield per acre will be the largest ever known.

In a 100 acre field of wheat near Salem, is a spot of ten acres which will produce about as much smut as wheat this year.

Thirty-eight thousand wheat sacks were sent up the river from Salem last Saturday. They are to be used for the new wheat crop.

Farming lands are in brisker demand in Polk county this year than ever before.

A field of timothy in Polk county is seven and a half feet high.

Eighteen Linn county Grangers made up a club and sent to Moline, Ill., for wagons.

Hay is worth $10 per ton at Salem.

Drying and Canning Fruit.—The Marysville *Appeal* says: "There is considerable drying and canning of fruit among the growers in this vicinity. Fruit of all kinds is so abundant and cheap that there is only this resource left. The orchardists, though shipping extensively to San Francisco, and over the mountains, are putting up large quantities in cans, or drying in the old-fashioned way, by exposing cut fruit to the sun. A large drying establishment, under the Allen process, would prove of general advantage to our fruit men, and the quicker they organize and erect one the better. There are fifteen of the Allen fruit-drying machines now in operation in this State. Five of them are at San Lorenzo, and three at Centerville, Alameda county. The others are in Sonoma, Solano and Napa counties."

The State University—Important Action of the Regents.—The Board at their meeting, July 24th, appointed Wm. Ashburner, Professor of Mining, and decided to appoint eight lecturers on topics relating to agriculture—four to be chosen from California, who are best informed upon local vegetation and culture, and four from eminent scientific men connected with the best agricultural schools in the United States.

The Carlist War—Reprisals.—It is reported that the Carlists have again been badly beaten by the Republican troops, and sustained very heavy losses. Two companies of Carlists, who refused to surrender, were cut in pieces. Forty-one Carlists, mostly members of the nobility, have been arrested at Barcelona, by way of reprisal against the inhuman conduct of the Carlists.

Farmers tell the Walla Walla *Union* that in many places only the very best portions of the fields will be harvested. They say that when they pay $1.50 per acre for heading, and then bear the expenses of hauling, stacking and threshing, it takes pretty good grain to come out even on. They, therefore, will only harvest the better portions, and let their hogs have the balance.

A drove of sheep, 1,500 in number, says the Carson *Appeal*, of July 19th, passed through Carson yesterday. The man having them in charge informs us that they were from Red Bluff, California, and were being driven to Colorado. They are driven during this hot weather about eight miles per day, and only in the morning and evening.

Phenomenon in Washoe Lake.—All the fish in Washoe lake appear to have died, and the shore is lined with their decomposing remains. It is supposed that the phenomenon has been caused by the eruption of some poisonous gas from the bottom of the lake.

Eastern capitalists purpose establishing a cheese factory in Del Norte county. The Crescent City *Courier*, of July 18th, states that nearly 1,000 cows have been promised to the proprietors, if they will establish such an enterprise.

Lovers of new cider can now procure that beverage at the Pacific Fruit Market.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., July 28th, 1874.

For Week Ending July 14th, 1874.

Bilge Water Gauge.—Wm. G. Conkling, Washington Territory.

Process and Apparatus for Manipulating the Ores of Mercury.—Henry H. Ames and Russell D. Walbridge, Oakland, Cal.

Oil Can Stopper.—Joseph F. Donkin, Grayson, Cal.

Milk Strainer.—Joseph F. Donkin, Grayson, Cal.

Process of Refining and Purifying Lead.—Alex. H. Everett, S. F., Cal.

Children's Carriage.—Adam Heim, S. F., Cal.

Gang Plow.—Wm. O. M. Berry, S. F., Cal.

Medical Compound.—Henry M. Hoyt, Knight's Landing, Cal.

———The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

About one-third of the line of the railroad from Davisville to Vallejo is lined with sacks of grain.

In Arkansas much damage has been done by drouth. Wheat turned out well; oats moderate; corn tolerable; cotton small and clean.

Sun-stroke.—About 20 cases of sun-stroke have occurred in St. Louis since Saturday, one-half proving fatal.

A new town is being laid out on the Cucamongo ranch, Los Angeles county.

A car-load of Vermont sheep arrived at Marysville on Monday.

Wild coffee trees are thriving finely on the shore of Clear lake.

Farm laborers are in demand in Elko county, Nevada.

The Pacific Rural Press

Is a Large and Handsomely Illustrated Agricultural Home Journal; Original, Instructive and Attractive; its varied contents, ably written and condensed, render it popular with its readers. We endeavor to make it a credit to the field it occupies, and to every intelligent circle it enters. Entirely free from politics, its columns are filled with cheerful words of encouragement for our Pacific Industries and instruction for the people. It extends information of the growing wants and necessities of our rapidly increasing and progressing agriculture. You can read it with pleasure, for present and future profit; you can send it with satisfaction to your friends anywhere. Its editorials are earnest and its contents reliable. No questionable advertisements darken its pages. It is a journal for rural homes throughout the Coast. It is a handsome home print, without a rival on this half of the Continent. Subscription, in advance, $4 a year.

DEWEY & CO., Publishers,

No. 224 Sansome St., S. F. 3p-tf

Removal.

July 13th, 1874, the business office of this Journal was removed just one block east of our former location, to No. 224 Sansome Street, southeast corner of California, over the Bank of British Columbia, where we have secured large and elegant quarters. This removal is made in consequence of the sale of the building which we formerly occupied, to parties who will proceed immediately to demolish the present structure and erect a new and magnificent block in its place.

The Scientific Press.—This valuable journal entered upon the seventeenth year of its publication on the 4th of July. The steady advance in character, that every reader has noticed in the paper, renders it unnecessary to make any splurge of improvement, and the publishers simply content themselves with the announcement that they will continue to make their paper as interesting as possible. That it is interesting to a large class of readers, the wide circulation and extensive influence of the Press, is sufficient evidence.—*Placer Argus.*

Farmers write for your paper.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

[By our own Reporter.]

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, July 29th, 1874.

There has been rather more movement in the Produce market during the past week. We note several advances and quite as many declines. But the general aspect of the market is undoubtedly more favorable than it was one week ago. Receipts of Produce have also been much fuller during the last few days. Wheat, however, comes forward slowly, owing, it is said, to a disinclination on the part of farmers to sell at present rates, preferring to hold for a rise, even by borrowing.

Barley.—The market for old Feed and Brewing is unchanged—at least, not weaker. New is coming forward more rapidly and is anything but strong.

Beans.—Prices are unchanged. There cannot well be any further reduction until the new crop of Beans are received.

Beeswax.—Is slow of sale at 25 @ 27½c.

Broom Corn.—We notice exports of a moderate amount, per steamer *Tartar*, to Australia.

Buckwheat.—Stocks are so low that quotations are almost nominal.

Corn.—The price for both White and Yellow has been reduced 10c ₱ cental.

Dairy Produce.—Fresh California Butter is very much firmer. Strictly choice samples freely command 35c., and extra Pt. Reyes in some cases will go even higher. Firkin and Pickled Roll are steady. There is no improvement in California Cheese.

Eggs.—Are strong at unchanged quotations for Hens' and an advance of 5c. in Ducks'.

Feed.—Is generally quite firm. Middlings have advanced $1 ₱ ton. The mill price of Oil Cake Meal, in jobbing lots, remains at $32.50 ₱ per ton. Hay is a little stronger. Straw is in better supply and cheaper.

Flour.—No improvement. Considerable lots of Superfine have been shipped during the week to China and Central America.

Fresh Meat.—The market is unchanged.

Game.—There is little in the market, and hardly any call for that. The slaughter of small birds goes on.

Hops.—Quite a number of sales were effected during the week, almost exhausting stocks. The State crop is reported favorably from all Hop-growing quarters. A New York paper states that upon the whole the outlook is favorable, and holders show a disposition to realize. The Cooperstown *Journal*, 16th inst., says: The general tone of the reports from the Hop districts and from the West leads at this time to the confident expectation of a good crop. But a fortnight may change all this, and almost certainly will change it, if we have frequent showers followed by hot weather. Lice have already made their appearance in some yards in this county, and an increase is feared.

Honey.—Receipts large, and prices low.

Nuts.—There is nothing new to report.

Oats—Are in full supply and without change in price.

Onions—Are "doing no better very fast."

Potatoes.—Quotations are shading off. There are not yet many Sweet in market, and the price is now $3.00 @ $4 ₱ cental.

Poultry.—The demand for Turkeys remains fair. Chickens are not selling very well. Geese and Ducks do not change.

Provisions.—Rates are generally very firm; Lard, especially, being in request.

Rye—Has again declined, this time to $1.15 @ $1.25 ₱ cental.

Seeds.—There is little being done in Seeds, and quotations are unchanged as yet. In a couple of months more activity may be looked for.

Wheat.—Liverpool telegrams are a little more encouraging. Boerbohm's report is 2d. higher, with wet weather in England and a good demand for spot cargoes. The local market is undecided and shaky. We give elsewhere in this issue fuller particulars concerning the Wheat trade.

Wool.—Stocks in this city are lessoning. A fair business in California Wool has been done of late in New York and Boston, as per telegraphic reports.

LEATHER.

WEDNESDAY M., July 29, 1874.

No further advance have taken place in Leather. The market continues very quiet for all kinds of domestics.

Oity Tanned Leather, ₱ lb	25@28
Santa Cruz Leather, ₱ lb	25@29
Country Leather, ₱ lb	24@28
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Kc	57 00@ 67 00
Cornellian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Beaumorville, 15 Kil	60 00@ — —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 15
California Kip, ₱ doz	40 00@ 6* 00
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Backs, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@ 5 25
Good French Calf Boot Legs, ₱ pair	4 00@ 4 75
French Calf Boot Legs, ₱ pair	4 00@ — —
Harness Leather, ₱ lb	30@ 37½
Fair Bridle Leather, ₱ doz	48 00@ 72 00
Skirting Leather, ₱ lb	34@ 37½
Welt Leather, ₱ doz	30 00@ 50 00
Buff Leather, ₱ foot	18@ 21
War Side Leather, ₱ foot	17@ 19
Eastern War Leather	—@— —

DOMESTIC PRODUCE.

WEDNESDAY M., July 29, 1874.

BEANS.			
Beans, sm'l wh. ₱ lb	5	@	5¼
do, butter	6	@	7
do, large, do	6	@	7
do, bayo	2¾	@	2½
do, pink	1½	@	2
do, pea	5	@	5¼
do, Lima	5½	@	6½
BROOM CORN.			
Per ton	$80	@	200
DAIRY PRODUCE			
Butter, Cal. choice ₱ lb	32½	@	35
do, good	30	@	32½
do, inferior	25	@	30
do, firkin	25	@	28
do, pickled	30	@	32½
Obeese, Cal. new	8	@	14
do. Eastern	13	@	16
EGGS.			
Eggs, Cal. fresh	30	@	32½
do, Oregon	22	@	25
do, Eastern	15	@	17
do, Ducks	—	@	25
FEED.			
Bran, per ton	17 00	@	18 00
Middlings	—	@	28 50
Hay	9 00	@	14 00
Straw, ₱ oale	—	@	75
Oil cake meal	—	@	32 50
Corn Meal	42 00	@	43 00
FLOUR.—Superfine & Extra.			
Alviso Mills, bbl	4	12½	@5 75
California	4	12½	@5 75
City Mills	4	12½	@5 75
Comme'l Mills	4	12½	@5 75
Golden Gate	4	12½	@5 75
Golden Age	4	12½	@5 75
National Mills	4	12½	@5 75
SantaClaraMills	4	12½	@5 75
Genesee Mills	4	12½	@5 75
Oregon	4	12½	@5 75
Vallejo Star	4	12½	@5 75
Venus, Oakland	4	12½	@5 75
Stockton City	4	12½	@5 75
Lambard. Sac	4	12½	@5 75
FRESH MEAT.			
Beef, fr quality. ₱ lb	7	@	8
oo, second do	5	@	7
do, third do	4	@	5
Veal	4½	@	6
Mutton	5	@	5½
Lamb	5½	@	6½
Pork, undressed	6½	@	6¾
do, dressed	9¼	@	9¾
GRAIN, ETC.			
Wh't Cal. c'st. c	1	57½	@1 65
do new	1	55	@1 60
do, shipping	1	72½	@1 77½
do, milling	1	75	@1 80
Barley, Feed	1	37½	@1 50
do new	1	00	@1 20
do, Brewing	1	65	@1 75
Oats, good to choice	1	50	@1 65
do common	1	40	@1 50
Corn, White	—		@1 90
do, Yellow	—		@1 85
Buckwheat	—		@3 25
Rye	1	15	@1 25
HOPS.			
California, 1873	25	@	32½
East'rn, '73. ch'ice	35	@	40
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey, choice	20	@	25
do Dark	8	@	12½
do Strained	5	@	10
Pulu	9	@	10½
Onions	60	@	1 00
NUTS—JOBBING.			
Cal. Walnuts	13	@	14
Peanuts per lb	6	@	7
Chile Walnuts	10	@	11
Pecan nuts	13	@	15
Brazil do	12½	@	14
Coc'snuts, ₱ 100	9	00	@10—
Alm'ds h'rd shell	10	@	12½
do, soft	18	@	24
Filberts	18	@	—
POTATOES.			
Sweet, per 100 lbs	3	00	@4 00
Cuffee Cove	—		@—
H. M. Bay	1	05	@1 25
Pigeon Pt	—		@—
Humboldt	—		@—
Petaluma	—		@—
Mission	90		@1 25
Salinas	—		@—
Bodega	—		@—
Ssc. River	60		@ 90
S'ta Barbara	1	0	@1 15
Old Potatoes	—		@—
POULTRY & GAME.			
Live Turkeys, hens per lb	20	@	22
do gobblers	18	@	20
Hens, per dz	6	00	@7 50
Roosters, young, large	6	00	@7 50
Broilers	3	00	@6 00
Ducks, tame, doz	4	50	@6 00
Geese, per pair	1	50	@2 00
Hare, per doz	2	50	@3 50
Snipe, Eng., doz	—		@—
Quail, per doz	—		@—
Mallard Ducks	—		@—
do small	—		@—
Wild Geese, gray	—		@—
do white	—		@—
Doves, per dozen	1	00	@1 25
Prairie Chickens	—		@—
Grouse	—		@—
Rabbits	1	00	@1 50
do tame	4	00	@5 00
Venison, per lb	—		@—
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medium	—	@	13
do Heavy	—	@	12½
Eastern do	13½	@	14
Hams, Cal	13	@	13½
do Whittakers	—	@	16
do Duffield, ch	—	@	15
do Plankton & Armour	—	@	14
do Boyd's	—	@	14¾
do Stewart's	—	@	14¾
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard, Cal	13	@	14
do Eastern	13	@	14
SEEDS.			
Alfalfa	13	@	15
Canary	5	@	6
Flaxseed	5	@	6
Ky. Blue Grass	40	@	50
Millet	12	@	15
Mustard, white	2	@	3
do. Brown	3	@	4
Italian Rye	25	@	30
Perennial do	30	@	35
Timothy	13	@	15
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	12
Lawn do	50	@	60
Clover Red	—	@	20
do White	60	@	75
Alsike	—	@	—
Esparto Grass in Packets	—	@	1 00
WOOL, ETC.			
Spring, short, lb	22½	@	25
do cnoice Nort	24	@	28
Medinm grades	18	@	22
Fall clip	—	@	—
Burry	14	@	18
Hides, dry	17½	@	20
do wet salted	8½	@	9½
Tallow, Crude	6½	@	7
do Refined	7½	@	9

FRUITS AND VEGETABLES.

WEDNESDAY M., July 29, 1874.

There are hardly any California Oranges in market at present—too few, at least, to establish quotations. Huckleberries are selling at wholesale for 18c ₱ lb. Raspberries are becoming quite scarce, comparatively, and have advanced to 12½@15c ₱ lb. Black Currants are cheaper. A few Bartlett Pears have been received, which are held at $3 ₱ box. Sweetwater Grapes are all we have in this market which are worth estimation. The little Black St. Peter Grapes being in almost unsalable condition. In a short time however, the other varieties will appear. Dried Fruits are steady. Lima Beans are coming in more freely, and have fallen in price. Green Okra is also more plenty, and has declined to 6@8c ₱ lb.

FRUIT MARKET.			
Tahati, Or. ₱ M	35 00	@	40 00
Lorita, do	—	@	—
Cal. do	—	@	—
Limes, ₱ M	—	@	15 00
Cal. Lemons, ₱ M	—	@	40 00
Australian do	50 00	@	—
do per box	7 00	@	8 00
do Sicily ₱ b'x,	15 00	@	16 00
Bananas, ₱ bnch	50	@	5 00
Cocoanuts, ₱ 100	9 00	@	10 00
Pineapples, ₱ dz	7 00	@	9 00
Apples	2½	@	5
Oberries	5	@	10
do choice	10	@	25
Blackberries	6	@	8
do wild	—	@	—
Huckleberries	—	@	18
Strawberries ₱ lb	8	@	12
Gooseberries	—	@	—
Raspberries	12½	@	15
Currants	1	@	3
do black	—	@	18
Apricots	1½	@	2
Plums	2	@	15
Peaches, ₱ lb	3	@	10
Pears, Eating	1	00	@2 50
do Cooking	—	@	—
do, Bartlett	3	00	@ —
Crab Apples	5	@	6
Nectarines	—	@	—
Wat'rmel's ₱ 100	20	00	@30 00
Cantelo's ₱ 100	15	00	@30 00
Pomegran's, ₱ dz	—	@	—
Figs	8	@	12½
Grapes, Bl'k H'g	—	@	—
do Muscat	—	@	—
do Malavo'e	—	@	—
do Sweetw'r	8	@	10
do Mission	—	@	—
do Rose of Peru	—	@	—
do Tokay	—	@	—
do Morocco	—	@	—
do St. Peter	4	@	—
DRIED FRUIT.			
Apples, ₱ lb	6	½@	8½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	11	@	12½
Apricots, ₱ lb	—	@	—
Plums, ₱ lb	8	@	10
Pitted. do ₱ lb	15	@	20
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5	½@	12½
Black Figs, ₱ lb	8	@	10
White, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	30	@	35
Zante Currants	8¼	@	8½
Dates	12½	@	14
VEGETABLES.			
Asparagus	8	@	10
Beets	—	@	1
Cabbage, ₱ 100 lbs	—	@	2 00
do new, doz	50	@	60
Carrots, ₱ 100 lbs	1	00	@1 25
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	6	@	8
Green Peas	2½	@	3
Green Corn ₱ doz	18	@	22
Sum'r Squash, lb	4	@	5
Marro'fat Sq'sh, tn	60	00	@—
Artichokes, ₱ doz	15	@	25
String Beans, ₱ lb	—	@	5
Lima Beans	8	@	—
Parsnips	12½	@	15
Shell Beans	2	@	6
Peppers, ₱ lb	12½	@	20
Okra ₱ lb	25	@	40
Okra, Green	6	@	8
Cucumbers, doz	10	@	15
Tomatoes	3	@	5
Egg Plant ₱ lb	4	@	6
Rhubarb	2½	@	3
Lettuce	12½	@	20

LUMBER.

WEDNESDAY M., July 29, 1874.

There are no changes to report in the Lumber Trade Business is good.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref. M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shinglee, ₱ M	2 25

OF PUGET SOUND PINE —Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal foot	1c
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾
REDWOOD—Retail.	
Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	27 50
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

GENERAL MERCHANDISE.

WEDNESDAY M., July 29, 1874

Bags are in good demand at noted quotations. Large arrivals have recently been made, but the market continues strong. Coal is unchanged. Coffee is firm. The great excitement of the week has been the upward tendency in the price of Sugar and Syrups; the former have been advanced 1c ₱ lb all around, and the latter about 70 per cent. The rise is not unexpected, but is rather larger than was thought would be the case.

BAGS.			
Eng. Stand Wht	—14	@	14¼
Detrick's Machioe Sewed, 22x36 E	—	—@	13½
do 22x36, do E W	—	—@	14
do 20x40, do A	—	—@	14¼
Flour Sacks ½s	10½	—@	12½
" " ¼s	6½	—@	7¼
Stand. Gunnies, double seam	—15	—@	16
single seam	—13	—@	13
" Wool Sacks	65	—@	—
Barley Bags 24x36	—	—@	15¼
do 23x40	—	—@	15½
do 24x40	—	—@	16¼
do 28x36	—	—@	17
Oat Bags, 24x40	16	@	16½
do 28x36	—	—@	17
Hessian 40-in. gds	9¼	—@	10
do 45	10½	—@	11
do 60	—	—@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ lb cans	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl	—	@	3 50
Sardines, qr box	75	@	—
do hf boxes	3 00	@	—
COAL—Jobbing.			
Australian, ₱ ton	10 00	@	—
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11—
Cumberl'd, cks	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	19 00
Liverpool	11 00	@	12—
West Hartley	12 50	@	—
Scotch	9 50	@	10 00
Scranton	15 00	@	17 50
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	22	@	23
Costa Rica per lb	23½	@	24
Gnatemala	21	@	22
Java	28½	@	30
Manilla	22	@	—
Ground in cs	—	@	30
Chicory	10	@	—
FISH.			
Pac. Dry Cod, new	5	@	6
cases	6	@	—
do boneless	11	@	12
Eastern Cod	7	@	8
Salmon in bbls	8 00	@	—
do ½ bbls	4 50	@	—
do 2½ lb cans	—	@3	00
do 2 lb cans	2 65	@2	75
do 1 lb cans	1 75	@	—
Do Col. R. ½ lb	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Box. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@2	50
" Ex mess	3 00	@3	50
" Ex mess, ½ bs	—	@12	00
Sm'k Herr'g, bx	50	@	55
NAILS.			
Assorted size, lb	4¼	@	7
OILS.			
Pacific Glue Co. Neat F't No. 1	—	@1	00
Pure	1	25	@ —
Castor Oil, No. 1	—	@1	75
do do No. 2	—	@1	60
Cocoanut	45	@	50
Olive Plagniol	5	00	@ —
do Possel	4	75	@ —
Palm	9	@	—
do Baricalnpi	—	@	—
Linseed, raw	—	@1	02
do boiled	—	@1	07
China nut in cs	—	—@	82½
do bulk	70	@	72
Sperm, crude	—	@1	40
do bleached	—	@2	20
Coast Whales	35	@	40
Polar, refined	50	@	55
Sperm	1	40	@1 50
Lard	95	@1	05
Coal, refined Pet	37½	@	40
Oleophine	—	@	34
Devoe's Bril't	26	@	29
Long Island	—	@	34
Enreka	37½	@	40
Devoe's Petro'm	26	@	29
Barrel kerosene	—	@	26
Olive	4	00	@9 50
Downer Kerose'e	—	@	42½
Gas Light Oil	—	@	34
PAINTS.			
Atlan. W. Lead	7½	@	12½
Whiting	—	@	2
Putty	4	@	4½
Chalk	—	@	1½
Paris White	2¾	@	—
Ochre	—	@	3½
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eog. Vermillion	1	00	@1 25
RICE.			
China No. 1, ₱ lb	6¾	@	6¾
do 2. do	5½	@	5¾
Japan	5¾	@	6
Siam Clesned	7	@	—
Patna	—	@	6¼
Hawaiian	7	@	7¾
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10	00	@14 00
do Common	5	00	@ 7 00
Carmen Island	11	00	@13 00
Liverpool fine	20	00	@23 00
do coarse	15	00	@20 00
SOAP.			
Castile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Allspice, per lb	15	@	16
Cloves	45	@	47½
Cassia	22½	@	25
Citron	—	@	30
Nutmeg	—	@1	07½
Whole Pepper	17	@	17½
Pimento	—	@	15½
Gr'nd Allsp pr dz	—	@1	00
do Cassia do	—	@1	50
do Cloves do	—	@1	50
do Mustard do	—	@1	25
do Ginger do	—	@1	00
do Pepper do	—	@1	00
do Mace do	—	@1	60
SUGAR, ETC.			
Cal. Cube per lb	11½	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12¼
Circle A crushed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10
California Beet	—	@	11½
Golden C	—	@	10½
do Rey'g grade	—	@	6½
Cal. Syrup in bls	—	@	5½
do in ½ bls	—	@	55
do in kegs	—	@	60
Hawaiian Molasses	10	@	20
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial. Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@1	00
Gunpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@1	25
Yng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyuen	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	45	@	55
Dwa f Twist	57	@	62½
12 inch do	57	@	62½
Light Pressed	65	@	75
Hard do	60	@	70
Conn. Wrap'r	40	@	50
Penn. Wrapper	20	@	30
Ohio do	7	@	15
Virgi'a Smok'g	60	@	95
Fine ct che'g, gr	8 50	@9	25
Fine cut chewing, buc'ts, ₱ lb	75	@	90
Banner fine cut	—	@9	00
Enreka Cala	8 75	@9	00
TURPENTINE.			
Eastern	60	@	65

METALS.

WEDNESDAY M., July 29, 1874.

Quicksilver is firm at $1.35. The Metal Market is otherwise dull.

American Pig Iron, ₱ ton	—	@	40 00
Scotch Pig Iron, ₱ ton	—	@	40 00
White Pig, ₱ ton	—	@	50 00
Refined Bar, bad assortment, ₱ lb	—	@	— 3½
Refined Bar, good assortment, ₱ lb	—	@	— 4
Boiler, No. 1 to 4	—	@	— 5½
Plate, No. 5 to 9	—	@	— 5½
Sheet, No. 10 to 13	—	@	— 5¾
Sheet, No. 14 to 20	—	@	— 5¾
Sheet, No. 24 to 27	—	08	@ — 09
Horse Shoes, per keg	7	50	@ 8 00
Nail Rod	—	9½	@— —
Norway Iron	—	8	@— —
Rolled Iron	—	6	@— —
Other Irons for Blacksmiths, Miners, etc.	—	—	@— 4½
COPPER.— Brazier's	—	31	@ — 32
Copper Tin'd	—	45	@ — —
O. Nie's Pat	—	50	@ — —
Sheathing, ₱ lb	—	—	@ — 24
Sheathing, Yellow	—	—	@ — 25
Sheathing, Old Yellow	—	—	@ — 12½
Composition Nails	—	24	@ — —
Composition Bolts	—	24	@ — —
TIN PLATES.— Plates, Charcoal, 1X ₱ box	—	—	@ 16 00
Plates, 1 C Charcoal	—	14 00	@ 14 50
Roofing Plates	—	12 50	@ 15 00
Banca Tin, Slabs, ₱ lb	—	33	@ — 37
SEEL.—English Cast, ₱ lb	—	20	@ — 25
Anderson & Woods' American Cast	—	10	@ — 17
Drill	—	18	@ — 22
Flat Bar	—	18	@ — 22
Plough Points	—	16	@ — 17
ZINC	—	—	@ — 11
Zinc, Sheet	—	—	@ — 11½
NAILS—Assorted sizes	—	5¾	@ — 8
LEAD.— Pig, ₱ lb	—	5¾	@ — 6
Bar	—	6½	@ — 7
Sheet	—	—	@ — 9
Pipe	—	—	@ — 8½
QUICKSILVER, per lb	—	—	@ 1 35

RETAIL GROCERIES, ETC.

WEDNESDAY M., July 29, 1874.

Groceries generally do not change, Butter has advanced, while most other family supplies remain as before.

Butter, Cal. ch'ice	30	@	37½
do common	25	@	30
Cheese, Cal., lb	12½	@	15
Lard, Cal., lb	12½	@	15
Flour, ex. fam, bl	5 75	@6	00
Corn Meal, lb	2½	@	3½
Sugar, wh. crsh'd	—	@	10½
do lt. brown, lb	7	@	9
Coffee, Sbarboro's family gr'nd, lb	—	@	35
Coffee, green, lb	24	@	32½
Tea, fine blk, 50, 65, 75	@1	00	
Tea, finst Jap, 55, 75, 90	@1	00	
Candles, Admant'el	7	@	25
Soap, Cal., lb	—	@	10
Can'd Oysters, dz	2	0	@2 50
Syrup, S F. Gol'n	35	@	40
Dried Apples	8	@	10
Dr'd Ger. Prunes	15	@	17
Dr'd Figs, Cal	9	@	10
Dr'd Peaches	10	@	12
Oils, Kerosene	30	@	35
Wines, Old Port	3	50	@5 00
do Fr. Claret	1	00	@1 25
do Cal. dz. bot	3	00	@4 50
Whisky, B, gal	2	50	@5 00
Fr. Brandy	4	00	@10 00
Rice, lb	—	10	@ 12¾
Yeast Powders, dz	1	50	@2 00

—* Per lb †Por dozen. ¶ Per gallon

S. F. RETAIL MARKET RATES.

WEDNESDAY M., July 29, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

The retail market is well supplied with Poultry. Eggs and Butter are scarce, at an advance in price. Fish are in abundant supply and cheap.

Spring Chickens	50	@	75
Hens	75	@1	00
Eggs	—	@	35
do Ducks'	—	@	30
do Farallones	—	@	25
Turkeys, ₱ lb	—	@	30
Ducks, Can Bk, pr	—	@	—
do Mallard, pr	—	@	—
Tame, do	1	50	@2 00
Teal, ₱ doz	—	@	—
Geese, wild, palr	—	@	—
Tame, ₱ pair	3	00	@4 00
Snipe, ₱ doz	—	@	—
Quail, per dozen	—	@	—
Prairie Ch'k's, ea	—	@	—
Pigeoos, dom. dz	—	@4	00
Wild, do	—	@2	00
Squabs	—	@4	50
Hares, each	37½	@	50
Rabbits, tame, pr	75	@1	00
Wild, do, ₱ dz.	2	00	@

Stock Notices.



SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,
eow El Dorado, El Dorado County, Cal.

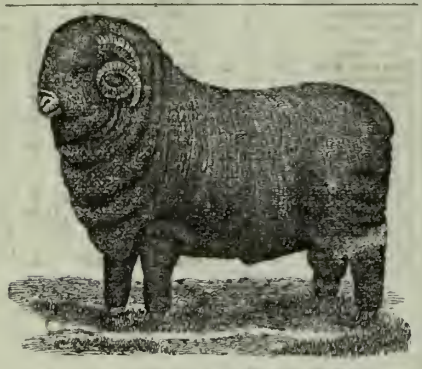


300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m



A. G. STONESIFER,

BREEDER OF

Pure Blooded French Merino Sheep,

Has for sale a choice lot of Rams and Ewes, on the Oristimba Ranch, six miles west of Hill's Ferry, Stanislaus County, Cal. 22v7-3m



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,
13v7-eow-tf Watsonville, Cal.

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

JERSEY CATTLE.

A few head of very choice Jersey Cows—Heifers and and Bull Calves—for sale. Apply to
15v7-3m R. G. SNEATH, Menlo Park.

Patent, First Premium Windmills & Horse Powers,

W. I. TUSTIN, Patentee.

Pioneer and Largest Manufacturer of Machinery (in this line) on the Pacific Coast.

FACTORY, Corner Market and Beale Streets,
SAN FRANCISCO.

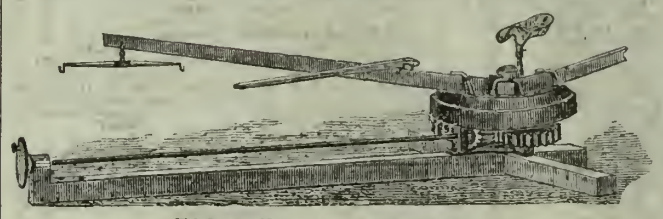
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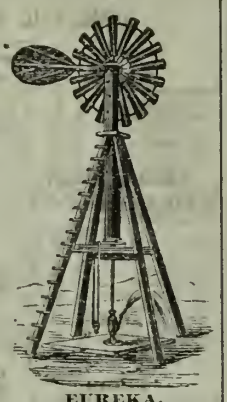
ECONOMY.



ECONOMY—For One or Two Horses.



EAGLE—For One or Two Horses.

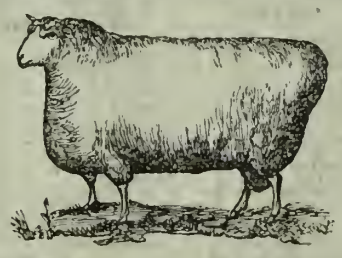


EUREKA.

We have made the manufacture of Pumping Machinery a specialty for the past twenty-four years in California. Received all the First Premiums awarded by the Mechanics' Institute for the past seven years, in our line.

Our Windmills are preferred by the great Railroad Companies of this coast, and are in general use along their line, giving perfect satisfaction, which can be proved by reference.
9v7-1ath

B. W. OWENS, San Francisco, | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

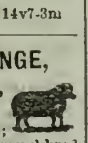
WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT

P. S.—*Special rates to members of the Grange.*

DAIRY PRODUCE

DEPARTMENT

OF THE

CALIFORNIA STATE GRANGE,

P. OF H.,

414 & 416 Sansome St., Cor. Commercial,

SAN FRANCISCO, CALIFORNIA.

J. H. HEGLER, Manager.

We are now prepared to handle and dispose of all Dairy Produce, Eggs and Poultry.

This house is under the immediate control of the California State Grange; the Business Manager a thoroughly practical farmer and dairyman, Master of Bodega Grange and General Deputy for California for the organization of Granges in any part of California. Special rates to members of the Order; though any one may sell through our house and avail himself of our mode of doing business.

In shipments give plainly the name and P. O. address. Any persons wishing legitimate information concerning our business should write to the house, and are cautioned against accepting for facts many rumors now current. All sales guaranteed. ja31-tf

TIPTON & BURTT'S

MEDICINAL

SHEEP PREPARATION,

WARRANTED FREE FROM ALL POISON.

A sure and positive cure for **Scab, Ticks and Lice**, and a sure promotive of the growth of the wool. It has been used in Tehama County for the past two years, with most gratifying results, and we have the pleasure of referring to the following gentlemen as to its merits, viz: H. A. Rawson, Jas. Gooch & Bro., J. W. Montgomery, J. Eby, Curtiss & Brown, H. Bosauka, Jos. Cone, J. W. Gate & Sons.

It is a liquid and put up ready for use in 2½ gallon tins, four tins in a case.

WHITTIER, FULLER & CO., Sole Agt's,
21 Front street.....SAN FRANCISCO.
28 K street.....SACRAMENTO.
26v7-tf



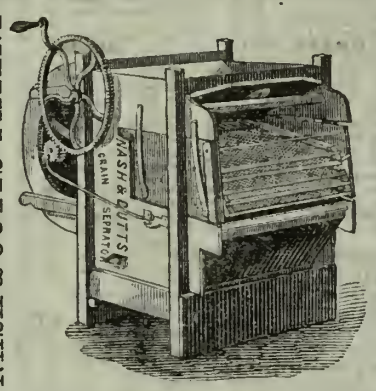
LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
Iv8-3m 43 & 44 Cal. Market, S. F.

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT



GRAIN SEPARATOR AND FAN MILL.

THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars address

NASH, MILLER & CO.,
No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Grauges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

SAMUEL HILL, General Agent.
18v7-3m

H. K. CUMMINGS. 1858.
H. H. HALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the producer.
4v23-1y

Agricultural Articles.

O. CREGO. S. C. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET..... .....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Hielfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
24v5-3m San Francisco.

WATERHOUSE & LESTER,

IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware.

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

☞ Send for price list.

ALSO AGENTS FOR

Woolsey's Patent Wheels,

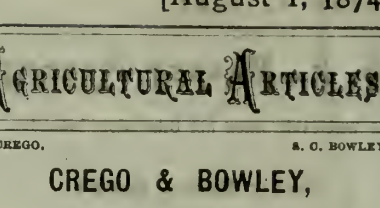
The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has the metallic-shouldered hand; and it can be repaired as easily as the common wood wheel.

☞ Send for illustrated circular. Address

WATERHOUSE & LESTER,
122 and 124 Market street, and 19 and 21 California street, SAN FRANCISCO.
17, 19 and 21 Seventh street, SACRAMENTO.
21v7-3m

MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

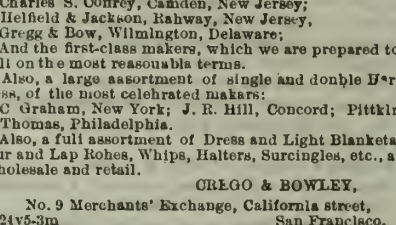
Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

THE

CELEBRATED MITCHELL WAGON



15v7-3m

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

H. C. SHAW,

STOCKTON, CAL.

Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
14v7-3m Box 95, Stockton, Cal.

Shipping---Vessels Up.

FARMERS' LINE.

FOR LONDON DIRECT.

THE MAGNIFICENT A 1 CLIPPER SHIP,



MONETA,

621 Tons,

W. SINCLAIR.....Master.

FOR LIVERPOOL DIRECT.

The magnificent A I Clipper Ship,

SEA WITCH,

1288 Tons,

BAKER.....Master

These fine vessels have nearly full cargoes engaged and will have very quick dispatch. Freights taken in lots to suit shippers.

Will be followed by the splendid A I Iron Ship

GLENGARRY,

1769 Tons,

Due here in May; or by other first-class vessels,

Liberal advances made on shipments of produce consigned to our Liverpool house, Messrs. Robert Rodgers & Co.

RODGERS, MEYER & CO.

19v7-3m

IMPORTANT TO FARMERS!

X Line to Liverpool.

DIRECT.

The New A 1 Clipper Ship

FRIEDLANDER.....1,638 tons registe

Is intended to sail with dispatch.

Freight taken in lots to suit shippers.

Apply to E. E. MORGAN'S SONS,

320 California Street,
San Francisco.

TREADWELL & CO.

We certify that the partnership of Treadwell & Co., doing business in San Francisco, California, is composed of Leonard L. Treadwell and James F. Place, who both reside in the city and county of San Francisco, and William O. M. Berry, who resides in Oakland, Almeda county, California.

San Francisco, Cal., May 26th, 1874.

LEONARD L. TREADWELL,
JAS. F. PLACE,
WM. O. M. BERRY.

STATE OF CALIFORNIA, }
CITY AND COUNTY OF SAN FRANCISCO. }

On this May 27th, 1874, before me Henry C. Blake, a Notary Public, in and for said city and county, personally appeared Leonard L. Treadwell, James F. Place and William O. M. Berry, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

HENRY C. BLAKE, *Notary Public.*

Filed May 1st, 1874.

WM. HARNEY, County Clerk,

jy4-4w By S. C. ELLIS, Deputy.

TO WINE & BRANDY MANUFACTURERS.

Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

Send for Circular. Address,

GEORGE JOHNSTON,
Sacramento.

Or, W. F. JOHNSON, Folsom, Sacramento County, California. Refer to Lachman & Co., San Francisco, and Johnston Brandy and Wine Manufacturing Co., Sacramento and Marysville. 2v8-12w

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo. F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R.R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements.

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rates Storage taken at lowest current rates. 4v8-tf

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St.,
14v7-3m bet. Montgomery and Kearny Sts., S. F

GEO. H. TAY & CO.,

614, 616 and 618 Battery St., S. F.,

OFFER FOR SALE

IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

RUBBER HOSE, ETC.

STOVES and RANGES,

THE RICHMOND RANGE,

THE HENRY CLAY,

THE EMPIRE CITY,

THE ALVARADO.

THE MONITOR, wrought iron body, cast iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

MILK PAILS, PANS, CHEESE HOOPS, ETC.

BABBIT METAL.

Wire for Fencing and Baling.

ALSO, METALS, HOUSE FURNISHING HARDWARE, JAPANNED GOODS, ETC., ETC.

22v7-3m

POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRREL, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ :—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. AROUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

NOTICE TO FARMERS.

Something Entirely New.

HOME SEWING MACHINE.

This machine is manufactured after an experience of twenty years. It contains within itself every known improvement. It is the best because the simplest, easiest to understand and by far the lightest to run, and the equitable adjustment of all its parts makes it the most durable Machine in the market. Take the INTERESTED STTEMENTAS OF NONE, but

EXAMINE for YOURSELF.

SEND FOR A CIRCULAR.

It uses a Shuttle, Straight Needle, Two Threads, and makes a stitch alike on both sides.

E. W. HAINES, Agent,

17 New Montgomery St., Grand Hotel Build'g, S. F.

We also continue to sell another machine, the

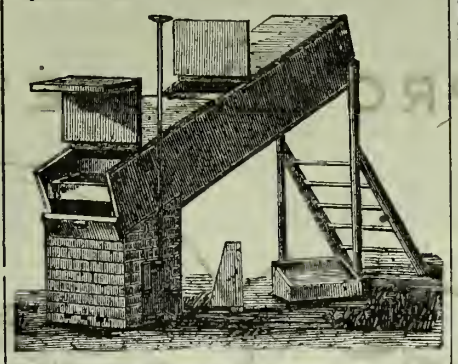
HOME SHUTTLE SEWING MACHINE.

Price, $45.

Mme. Demorest's Reliable Paper Cut Patterns. Send for a Catalogue. 15v7-eow-6m

FARMERS write for your paper.

Ryder's American Fruit Drier.



This DRIER is a perfect success in the East, and will be on this Coast when its merits are known. Its cheapness brings it within the means of every Fruit Grower The uniformity and perfection of its work challenge comparison. The principle claimed for this Drier (and violated in all other Driers in use), is, that no moisture shall come in contact with the fruit after the cut surfaces are once sealed by the heat, to open the cells and allow the aroma and fine qualities of the fruit to escape, which makes it undeniably the most perfect, as it is the most simple mechanical method for cureing Fruits, Vegetables, Meats and Grains ever invented. This Drier can make Raisins and the most beautiful crystalized fruit confection, equal to any imported. Can any other Drier do this? The fruit cured on this Drier last season, in this State, took the premium at the State Fair. Our Factory Drier will cure 60 bushels of peaches in a day. Send for Circulars. Farm, County and State Rights, and Driers with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

THE CELEBRATED

SLUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

J. M. KEELER & CO.,

Commission and Forwarding Merchants.

Agents for Eastern Manufacturers, 306 California street, San Francisco.

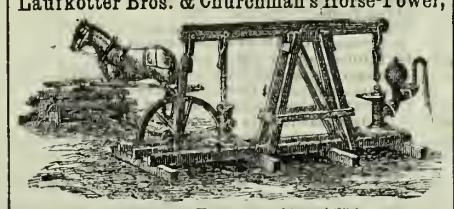
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



(PATENTED FEBRUARY 13TH, 1872.)

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

v7-2m-3m Cor. J and 10th Sts., Sacramento.

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m 304 California Street.

EUREKA WAREHOUSE,

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY 1ST, 1874.—First month, 50 cents per ton; each month thereafter, 37½ cents per ton. At regular monthly rates not to exceed $2.75 per ton for the season. Season rates, $2.00 per ton. Second weighing, 10 cents per ton.

Grain received on dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to Messrs. E. E. MORGAN'S SONS, San Francisco.

4v8-4m A. J. GOVE, Manager.

LANDS & HOMES FOR SALE

RANCHOS

FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STREET,
ap25-tf N. E. Cor. Montgomery.

DAIRY RANCH FOR SALE,

Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Obispo.

20v7-3m

FARMING LAND,

TO LEASE ON SHARES.

1,000 ACRES,

Or any part of same, being levied and of similar character to that of SHERMAN ISLAND. Apply to

W. T. S. RYER,

No. 330 Pine street.....SAN FRANCISCO, CAL.

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.

316 California Street, - - - SAN FRANCISCO.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

Ask for LEA & PERRINS' Sauce, and see name on wrapper, label, bottle and stopper.

Wholesale and for export by the Proprietors, Worcester; Crosse & Blackwell, London, &c., &c., and by Grocers and Oilmen universally.

1v8-1y

THE CELEBRATED NEW DRAW-FEED

WHEELER & WILSON

SEWING MACHINES

Are without exception the most desirable for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in public favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.

E. W. HARRAL, Agent,

20v7-4m-15p 427 Montgomery street, S. F.

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

1iv7-6m

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, ETC.

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22v7-1am-4m

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th. R. S. Cary, President, Robert Beek, Secretary.

The Ninth Industrial Exhibition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers Mechanics' Institute, No. 27 Post street, San Francisco, California. In order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Williston, Secretary; J. B. Frisbie, Treasurer.

Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

L. P. MCCARTY—General Agent.

W. H. RATTENBERRY—California.

CHAS. W. OTIS—Solano County.

C. M. DALY—Colusa County.

CHAS. T. BELL—Alameda, Santa Clara and Santa Cruz Counties.

J. D. CAREY—Sonoma County.

J. W. ANDERSON—Orange and Santa Ana, in Los Angeles County, Cal.

HOOD ALSTON—San Luis Obispo, San Bernardino and SanDiego Counties.

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DEWEY & CO., Publishers,

No. 224 Sansome st., S. F.

ONE of our most valued exchanges is the PACIFIC RURAL PRESS, published by Dewey & Co., San Francisco, California. Every number contains a vast amount of general news from the far west, besides much valuable information in the way of Grange news.—*The Farmer's Friend, Mechanicsbury, Pa.*

Hints to be Remembered.

A note dated on Sunday is void.

A note obtained by fraud, or even from one intoxicated, can not be collected.

If a note be stolen it does not release the maker—he must pay it.

An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.

A note by a minor is void.

Notes bear interest only when so stated.

Principals are responsible for their agents.

Each individual in partnership is responsible for the whole amount of the debts of the firm.

Ignorance of the law excuses no one.

It is a fraud to conceal a fraud.

The law compels no one to do impossibilities.

An agreement without consideration is void.

Signatures in lead pencil are good in law.

A receipt for money is not legally conclusive.

The acts of one partner bind all the others.

Contracts made on Sunday can not be enforced.

A contract made with a minor is void.

A contract made with a lunatic is void.

HELP FOR TOWN OR COUNTRY.

The long established and well-known Intelligence House of Crossett & Co. is now receiving numerous applications from the rural districts for supplying help of various kinds for Domestic, Farm, Mechanical work, etc., and are thus supplying a want that has long been felt in all parts of the interior of the State.

A long residence in the interior, preceded by a ten year's experience in this city, in the business of supplying help for both city and country, has given the undersigned such a general knowledge of the wants of the community in relation to help of every kind, and the sources of supply for the same, that we feel abundantly confident of our ability to give the best satisfaction to both those in search of, and those who are in need of help—whether for the chamber, the kitchen, the farm, the mine, the factory or for general work.

Send in your orders trustingly, and you can depend upon having them promptly and satisfactorily filled in accordance with the character of the labor called for—male or female, skilled or unskilled, and of any nationality that may be specified, and on the most satisfactory terms. Address, CROSSETT & CO., Agents, San Francisco, 606 Clay street. an1-tf

TRUCKEE, CAL., July 10, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* My patent is just received, and is entirely satisfactory. Permit me to tender you my sincerest thanks for the care and attention, the promptness and interest you have displayed in managing my affairs. Gratefully yours,

C. F. MCGLASHAN.

PLAINFIELD, July 4th, 1874.

MESSRS. DEWEY & CO.—*Dear Sirs:* I acknowledge receipt of yours of 2d inst., inclosing my Letters Patent. I thank you for the interest you have taken in obtaining the same. Yours truly, M. W. COON.

HON. X. A. WILLARD, the highest authority in dairy matters in the country, uses a Blanchard Churn in his own dairy. He says it is "the best."

They are made only by Porter Blanchard's Sons, Concord, N. H.

DR. E. J. FRASER, Homœpathic Physician and Surgeon, has removed his office and residence from 102 Stockton street to No 305 Kearny street, northwest corner of Bush. 6v7-3m

A COMPLIMENT.

PLAINSBURG, MERCED CO., CAL., June 22, 1874.

DEWEY & CO.—*Gentlemen:* I herewith tender my grateful acknowledgements for the energy, promptness and efficiency which you have displayed in procuring my patent.

Although you were entire strangers to me when I first communicated with you, I soon felt satisfied you were gentlemen of integrity, and shall always be happy to represent you as such. Very truly yours,

H. W. RUCKER, M. D.

CAMPO, SAN DIEGO CO., CAL., July 3d, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* To-day I received the patent and other papers of my animal trap, that you so successfully worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long. I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into your hands.

I remain yours truly, A. M. GASS.

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IMPORTER AND DEALER IN ALL KINDS OF

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Tobacco and Vegetable Land for Sale

AT A BARGAIN.—A farm of 100 acres near the thriving and rapidly growing town of Gilroy, Cal. This land lies on and along Carnedero Creek, and is distant from Gilroy six miles, by a good and level road Fully 25 acres of the tract are adapted in every respect for the cultivation of tobacco, now the most remunerative crop of that section of the country; 25 acres suitable for vegetables; good house of five rooms; young orchard and abundant supply of pure mountain water. Good market at all seasons of the year in Gilroy for vegetables and farm products. Apply to B. B. MINOR, 411½ California street. Room No. 4. ag1-tf

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Oakland Poultry Yards,

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Young Fowls now for sale at reduced prices. Also a few of my imported Fowls in pairs or trios. Send stamp for illustrated circular, containing a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,

4v8-tf P. O. Box 659, San Francisco.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

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10v7-6m Clayton, Contra Costa Co., Cal.

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FARMERS write for your paper.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, AUGUST 8, 1874. [Number 6.

Fruit Drying—A Revived Process.

There are numerous patents on fruit dryers. The usual methods are to construct chambers with shelves, or drawers, and either conduct hot air into the chambers or apply the heat of a furnace so as to heat the air in the chamber. The first patent issued in the United States for an apparatus for drying fruit in a chamber by a current of heated air, and the fruit in motion, was to Francis H. Smith, Baltimore, Md. This patent was numbered 31566, and dated February 26th, 1861. Copying from the Patent Reports the invention is thus described, viz: "This invention is designed for drying brick, fruit or other articles. The tunnel or apparatus is divided into compartments, by means of sliding gates, which may be opened and the cars pushed through successively when the drying process, in the trays upon the forward car, is completed." This was a horizontal chamber, and as the description says, the cars upon which the fruit was placed were pushed through the chamber by hand.

Smith re-issued this patent three times, as follows: On the 30th June, 1868; July 11th, 1871, and March 26th, 1872. The last re-issue is the patent now in force. The claims of this patent are as follows:

First—A chamber through which a current of air is passed, and in which the articles to be dried are subjected to a progressive temperature and dryness.

Second—The process of drying fruits and vegetables by subjecting them to a current of air artificially warmed, in combination with a gradually increasing temperature and increasing dryness, etc.

Third—A drying chamber in which the operation is continuous in combination with increasing temperature and dryness, etc.

Fourth—A drying chamber in which the drying air is admitted at one end and escapes at the other, when such air passes through and around the substance to be dried, so as gradually to reduce its temperature and dryness, etc.

Among a number of other patents granted and issued since the date of Smith's original patent, is the patent which was issued to Charles Alden, of Newburg, N. Y., No. 121569, and dated December 5th, 1871, ten years after the date of Smith's original patent. This patent was re-issued on the 11th November, 1873, with the following claim:

The within described process of maturing and preserving animal and vegetable substances in part through evaporation and in part through chemical binding of their organic moisture, by exposing the same to a current of heated and humid air, increasing in humidity and decreasing in heat, as the evaporation proceeds, said current of air moving in the same direction with the articles to be treated, etc.

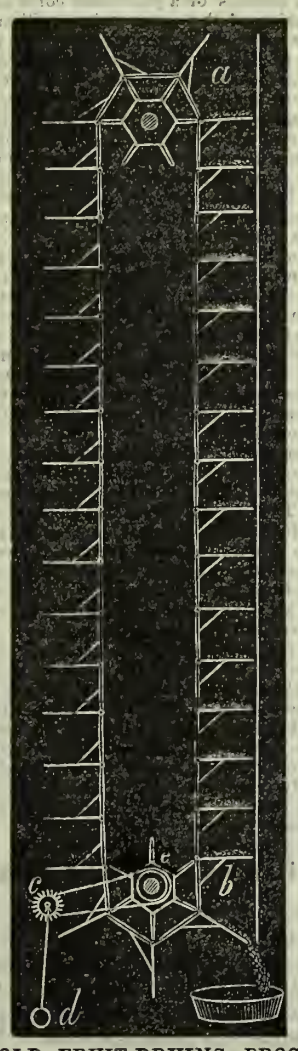
It will be seen that Smith's fourth claim covers "a drying chamber in which the heated air passes in at one end and out at the other," thus virtually preventing any subsequent improver from using such arrangement. While Smith claims that the fruit should be subjected to increasing temperature and dryness, Alden claims that it should be subjected to a decreasing temperature and increasing moisture; thus, as he claims, improving upon Smith's invention.

Now comes a party who publishes an article from the *Horticulturist*, published in Rochester, 1854, in which is described a drying apparatus which it is claimed was thrown open to the public over twenty years ago.

The accompanying cut, with the following description which we copy from the publication alluded to, will give our readers and accurate idea of the method and apparatus:

"It consists of a tall, upright shaft, *a b*, represented in the annexed section of the apparatus, through which passes an endless chain, made of a number of strong frames securely hinged together at their corners. This chain should be strong enough to bear several hundred pounds without breaking. At every point it is furnished with a braced shelf, each consisting simply of a square frame furnished with coarse twine netting—like a sieve. This endless chain, with its series of sieves, runs over an angular wheel above, another below, precisely like those of a common chain pump, but wide enough to receive the full breadth of the chain. Its motion is quite slow, descending from *a* to *b* on one side, and rising on the other, and is accurately regulated by means of the pendulum, *d*, connected to the notched wheel *e*, by means of an escapement like that of a common clock, but made very strong. A strong and broad India rubber band connects the axle of this wheel to the drum, *e*, on which the chain runs. As the chain is loaded with the drying fruit, and is therefore quite heavy, it must not, and indeed cannot be subjected to the successive vibrations of the clock work, these vibrations being broken and destroyed by the India rubber band.

The fruit is dried by heated air. The fruit



AN OLD FRUIT-DRYING PROCESS.

is spread upon the sieve at the top, and descends as it is being dried."

If this statement can be proven to be true in a court of law, Smith's patent will certainly be declared void because his claims are too broad Still he would be entitled to a claim on his *horizontal* apparatus. The description above given does not state how the heated air is applied, so that we cannot tell whether the process is the same as the Alden process or not. Our readers may rest assured that no patent now in existence can prevent them from drying fruit in the same manner that it was dried over twenty years ago, and whenever a patent now in existence encounters such a precedent it must fall. As we said, Alden's process of "subjecting the fruit to a decreasing temperature and increasing moistnre" may save it, although the apparatus which he uses is identical almost with that represented in our cut. The question which now remains to be answered is, in what way was the current of heated air applied in the old apparatns of twenty years ago?

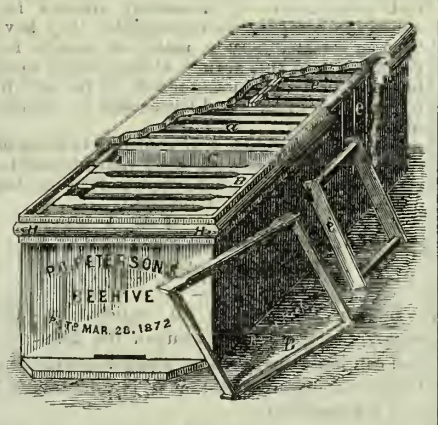
THE management of the San José Infirmary has been accused of maladministration.

Peterson's Patent Bee-Hive.

The accompanying cut represents the "Peterson Bee-Hive, invented and patented by Peter O. Peterson, of Oakland, Alameda county. A model of this hive has been on exhibition at the office of the RURAL PRESS for some weeks past, and has been examined by numerous parties, and favorably commented on. The inventor is a practical bee keeper, and has made the various improvements combined in this hive as the necessities of his bee-keeping experience required. It is therefore not a product of theory, each of his improvements being suggested by some want and thoroughly tested.

This Hive is a California invention, simple in its construction, and is cheap enough for the amateur or professional bee-keeper. Among the paramount objects secured by this Hive are the facility it affords of examining at all times the stores of the bees and the taking away of any surplus, or supplying whatever may be wanting. Also, the presence and state of health of the queen bee, and in fact of the whole hive. It enables the keeper to interfere in all sorts of emergencies; increasing the number of bees by artificially creating young swarms, and what is of especial importance to the progress of bee science, can be thoroughly examined with reference to the behavior and habits of the different bees, queens, drones, and workers, without interfering with their daily labor. An important point is, that being a low hive it gives the bees less labor and a better chance for production of honey. By the peculiar construction of the Hive, the drones are unable to get into the place where the bees keep the bulk of their honey.

The engraving of the hive shows the peculiarities of its construction. B are the breeding frames, *e* the



honey frames; C is a partition to prevent the drones from getting into the place where the bees store the bulk of their honey. The slats, *a*, are intended to cover the breeding frames, B, so as to keep the bees down in them. They are movable and can be placed over the breeding and boney frames. A sheet of glass is placed over the boney frames, E, so as to let the bee-keeper see how the bees are working, and when the frames are filled. The slats, *a*, or a piece of cloth can be laid over the glass covering the boney frames, E, so as to keep the hive dark, and can be removed when it is desired to examine the hive. H is the hollowed strip by which the hive is ventilated.

THE potato bug, which has been so destructive to crops in Colorado the past few years, has made its appearance in the Yellowstone valley, and destroyed the crops of several settlers. Should they get into the Gallatin valley this season, between them and the grasshoppers they would leave but a small share of this favorite esculent for the people.

SINGULAR CASE OF DEATH.—The Santa Cruz *Enterprise* says that Conrad Standet, the man who died so suddenly at Aptos recently, is said to have died of overjoy, brought on by the exceedingly generous gift by Claus Spreckles to the deceased of fifty acres of land.

THE TRIAL OF VASQUEZ.—The notorious outlaw, has been transferred from Monterey to Santa Clara county, for trial. The most persistent efforts will, no doubt, be made to cheat justice of her due in his case, as in many similar ones of late years.

STATE PRISON OUTBREAK FRUSTRATED.—The plans for a general outbreak from the State Prison, Nev., to have taken place several weeks since, were exposed by one of the prisoners.

INSANE FROM BEECHER-TILTON. — A man named Wm. Ramsey, near the Azusa, Los Angeles, has reasoned himself into a fit of insanity over the Beecher-Tilton scandal.

How those Fine Vegetables are Grown.

The admiring visitors to our markets would very naturally be a little curious to know how those fine vegetables are grown. The slightly visionary and credulous would like to know by what special charm Nature has done these things; the more practical will endeavor to learn the *modus operandi;* while the votaries of science will probably resort to analysis for light on the subject. It is to be hoped that those who are prompted by this curiosity in regard to the incidentals connected with our horticultural and agricultural productions, will not accept the California press generally as authority in the matter; for they would be told simply that "it is all owing to the wonderful climate and soil of the country."

A very large portion of San Francisco vegetables are grown in the Mission district; and the person who has occasion to go anywhere in that direction, will have revealed to him one of the charms of California vegetable growing. He can scarcely ride a mile in that part of the city without meeting several loads of manure, which the Italian and Portugnese gardeners are hauling from the city stables to their gardens. They bring to market in their spring wagons a load of vegetables, and on their return put on about a cord of fresh stable manure. The observer can see by the manner in which it is loaded the teamster is aware of the value of the material. There is none of it to be seen trailed along the road. We often come in contact with flings at the wastefulness of California farming; and in this sweeping term of wastefulness it is to be supposed that the waste of manure, or a failure to appreciate its value, is one of the most conspicuous points. But if a stranger reading these exaggerated statements should conclude, as he very naturally might, that he could come here and find heaps of reeking manure which he could procure for the hauling, and which he would use to the astonishment of the natives here, he would find the ground—or the manure-heap—already occupied. We do not know the price per load paid for this manure, but the indications are that its demand will prevent our stables and yards from being encumbered, even should the habit of cleanliness fail to remove it.

The Squirrel Question.

This is the question of questions just now in Alameda and Contra Costa counties. The abatement law takes effect on the first of September. One inspector in every school district is to be appointed by the Board of Supervisors. His duties are to go ahead and exterminate the pests on such land in his district as the owners thereof neglect. The county pays the inspector and collects its pay from the land owner. We all know the squirrels should be killed off. They not only ruin crops but depreciate the price of land. They are getting from bad to worse. We think there are but few individuals who will not be benefited by the act, if it is carried out. All ought to take it good-naturedly (except the squirrels), it seems to us. There are many much-needed laws, which do not affect all property owners alike, which, as a whole, are very beneficial.

A great many, in anticipation, are already poisoning squirrels on their own lands. More vermin have been cleaned out this year than in former seasons. The very approach of the law has done apparent good. The small landowners are pleased with the law. Should not those blessed with great abundance be willing to do as much in proportion as their less fortunate neighbors? You who have untilled breeding ground beside cultivated fields, just think how you would like it yourself? Don't condemn the law till it has a good trial. Kill your own squirrels, and it doesn't touch you. If it is unconstitutional, then the county pays the inspector and not the land-owner. Let all take hold together and perhaps it won't be so costly a work after all. Let the squirrels do the squirming, and not the land-owners.

Farmers, see to it, in every special district, that a good inspector is appointed, who will make no farce of this business. With energy and prudence the whole work may be accomplished peacefully. Better pay for killing squirrels than to fee lawyers for fighting and lying.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Trees in Sacramento County.

EDITORS PRESS:—Along the Sacramento and American rivers, cotton-wood trees are plentifully grown; also the Lombardy poplar—bnt neither do as well on the plains as the black walnut. Many admire the locust — both the black and honey varieties; the latter variety is used more for hedges, for which purpose it answers admirably. Some very fine locust fences are built in the vicinity. When the plains were first settled the black locust was raised extensively, as they are of quick growth and a good shade; they were found around many a homestead, casting their shade along the pathway, which was pleasant during the heat of the day. The roots of the locust run and throw out many shoots where you do not want them, and the more you cut them the worse they are. Many have rooted them up entirely, and substituted the black and some of the English walnut, elm, ash and gnm. It would be well to plant out a small grove of them by themselves, as they make good firewood; and that is quite an item on the plains. We save a good many branches of fruit and other trees for wood; but I think the timo will come when it will hohoove the farmer to grow timber for fire use.

I am much impressed with the growth of the eucalyptus, more so than with the gum. It is a very rapid grower and ornamental, making a rapid growth every year. The alanthus, or heaven tree, grows well here, but it is not considered as healthy as the eucalyptns.

Vineyard culturists, who have started in of late years, have the advantage over those who first cultivated the vine. It was new, expensive, and required time to develop those best suited to soil and climate. Some cultivated over a hundred varieties, but now the number is reduced to one-half dozen for wine and table use. White Muscat of Alexandria heads the list for table, shipping and raisin use. In the vicinity of Florin the grape is largely cultivated, and of the finest quality. The main shippers from the city have their grapes prepared on the ground during the season. They are cut and laid to sweat 24 hours before packing, then packed in small boxes, and a nnmber of these placed in a crate and marked before being placed in the car. The Black Malvasia and Reine de Nice are also good shippers. It is expected a large shipment will be made the coming season. A grower stated to me that he had picked off 100 ponnds from the Muscat of Alexandria, which is not a oommon occurrence. The second crop is often as good as the first, hut less in qnantity.

The Muscat is the raisin grape. "Allen on the Grape" states that none but the White Mnscat of Alexandria is used as the raisin grape in Malaga. Some have the idea that it is the Malaga, which is a black grape. There are a number of ways in which many dry or oonvert them into raisins—by cutting the stem half off, leaving it hang till partially dried; others cut and lay them under the vines, making a smooth place, while others placo them in full heat of the snn. Some take them half dried and pack them in a large box for 24 hours, then pack them in small boxes.

The grass or army worms which have heen on their march in fields of grain and beets are fonnd in the Northern, Middle and Western States, destroying various crops and fields of grass. The eggs are deposited at the base of grass stalks, and in a few weeks the larvæ commence their march, or crawl from one field to another in search of food—hence, called the army worm. They march at the rate of two to six rods per honr, and multiply much faster in dry seasons than wet, therefore our dried plains of grass are their hiding place; the surest way is to hurn the grass. Take it when there is no wind to fan the flames to cause any serious damage, throwing up a ditch around the place. When many are gathered, sprinkle straw over them, and so hnrn them. G. R.

Sacramento connty, Jnly 25th, 1874.

More Wild Coffee.

EDITORS PRESS:—Reading the articles in the columns of your valuable paper on the wild coffee subject set me to looking, and I find the hnsh is growing in a thriving condition in this locality, 1,250 feet above tide water.

Growing from five to say seven feet in hight, it is now full of plums, of a light green color, hut which are black when ripe. When ripe they have always been considered poisonous, with us. These plums when opened disclose two pits closely resembling the coffee of commerce.

Now, do any of your readers or correspondents know which is the best course to pursue to get the hush in a situation for cultivation? Will they transplant, or should the herries be planted? P. M.

Shingle Springs, July 31, 1874.

Wheat Yield Less Than Anticipated.

EDITORS PRESS:—The same error which has been committed hy our papers year after year, concerning the yield of the wheat crop of California, has heen repeated for 1874.

This is proved by a worker more unfailing than the "lightning calculator"—the unerring threshing machine. In parts of Stanislaus and Merced counties, where from 15 to 40 bushels per acre were expected from the appearance of grain fields, mnch less is being threshed out. In the Bear creek country, where 40 bushels were looked for, the yield is only 15 or 20. Between the Tuolumne and Stanislaus rivers from 10 to 15 bushels are heing realized —average about 12 bushels. In other localities the yield varies from 5 to 10 bushels per acre. Similar results are reported from other parts of the State.

We may safely conclude, then, that though calculations have been made, beginning with the agricultnral department at Washington, that California would produce this year 40,000,000 bushels of wheat, present indications make it almost certain that our yield will not exceed 30,000,000. It is madness, in the face of the indications of our threshing machines, to calculate on snoh an immense yield of small grain for 1874.

The advantsges of irrigation in a few favored localities are now made apparent. In the Alabama settlement, Fresno county, all the grain has not been threshed, but enongh has been done to prove the success of even the small amount of irrigation tried there this spring as a beginning.

For example, the best summer fallowed wheat there has heen threshed, and yielded some 18 bnshels per acre. Forty acres of wheat belonging to W. B. Dennett, which was irrigated in April, yielded 30 bushels of plump grain per acre. Summer fallow, put in by this gentleman on similar land, with the same kind of cultivation and same amount of seed, but nnirrigated, yielded only 14. This certainly shows a good margin in favor of irrigated grain.

It will pay the extra expense of irrigating two or three times. By the way, some of our papers are committing a serious error by representing this matter of irrigation by flooding as so expensive. One paper, at least, has recently stated this expeuse at $6 per acre.

Including the expense of making their own distributing ditches and levees by cheap hut effective means, the expense, to some who have successfully irrigated here, has been less than $3 per acre, including cost of water at $1.50 per acre for the land irrigated. But disappointment having heen caused by the imperfect construction of secondary ditches for which the company is responsible, they have heen so reasonable as to make no charge for the water used this spring. Consequently some have not been out more than $1.50 per acro in constructing ditches and levees and in distrihuting the water.

The lessons of each year continue to teach us that summer fallow with deep plowing and irrigation, are the only safe ways to farm in the great inland valleys of California.

July 28th, 1874. J. W. A. WRIGHT.

The Eucalyptus Tree.

EDITORS PRESS:—In an article on the eucalyptus tree in yonr issne of the 25th ult., you caution your patrons against purchasing California grown seed, that it is valueless and will not germinate.

Your informant mnst have had a very limited experience aud has led yon to publish an erroneons statement which I know yon will hasten to correct.

I have three blue gum trees at my residence in Oakland, now not more than twelve years old from the seed, one of which has horne only such cones as those now on exhibition in yonr office, which contain no seed, I suppose for want of impregnation—bnt the other two trees are the parents of at least 150,000 of the trees in my eucalyptus forest at Hayward's, besides ahout 50,000 more trees distributed throngh this State; and are groaning with indignation at the article referred to, and will give me no peace of mind until they at least are placed right on the record, as they believe that I can safely back their family numerically against any other two families of that age in the vegetahle world.

My experience teaches me that not only will California seed germinate, hnt that it is much suporior to the imported, and that at least three times as much of it will grow, prohably due to the fact that it is fresher, and that its vitality has not been destroyed or injured by the trying ordeal of the ocean transit through the tropios as has the imported.

I have also tested the wood of different kinds of the encalyptus, and find that the hlue gum, the most rapid growing variety will decay in the ground in two years, as will also the viminalis, a quite rapid grower also, hut they make most excellent fuel. The janah referred to in your article is a very durable variety, hnt not more so than the red gum or the iron hark. I have had a plank of the latter variety deposited in the ground for three years, and it does not yet show the slighest indications of decaying in the heart, though the sap decayed a year ago. These dnrable varieties (I have six of them in my forest) are very slow growing, and it will require about seven years from the seed to make a good fence post. The locust will, in good ground, grow quite as rapidly, but the great advantage in planting encalyptus is that it will thrive in the driest locality where the temperature does not fall below 30° Fah., where the surface can be kept pulverized and free from weeds for two years—after which they will take care of themselves. JAS. T. STRATTON.

CATTLE BREEDERS.

Hereditary Color of Domestic Animals.

The trueness to type of color and general characteristics in wild animals is constant. They look alike; and yet this sameness is only apparent, for the critical observer will see many points of difference; not glaring ones, it is trne, but amply snfficient to mark individuals, one from the other. So in domestic animals. When bred pnre they are tolerably nniform in color and general characteristics.

Thns the Chillingham, or so-called wild cattle of England, are a dingy or rather a creamy white, with either white or black nozzles, and the tips of the horns black. In the case of these cattle, their origin is lost in obscurity, and it is not known whether the white or the black nozzles are the original type. As a breed they are nndoubtedly pure. The Devons are another pure race of cattle as contradistingnished from thoroughbred cattle, such as the Short-horns, which were produced by a succession of crosses and then strongly inter-bred, to fix certain characteristics that were required to he maintained.

Among the chief characteristics thns constantly tending to be thrown out or reproduced is color—so mnch so that the popnlar idea has become prevalent that color is the result, in some mysterious way, of fanoy; as, for instance, that the sire, if strongly marked, will give color to the progeny. This is not borne out, either by experiment, or as the result of natural copulation. Experimeuts have shown that, if females of a particular color be paired with males of the same color, withont reference to the color of the ancestors, the produce will be of like color in 95 out of 100 cases. If animals of entirely different colors are paired, the resnlt is not, as a rnle, piebald color, but the progeny nsually follows in color either that of the sire or the dam; bnt the pairing of red animals with white ones is quite apt to produce roans. For instance, the prodnce of the union of 100 bulls and cows, taken at random from the Short-horn herd book, shows 90 roan calves, and ten either red or white.

Again, both sire and dam heing red, an average of not less than one will he white, while eighty-three will he red and sixteen may be indifferently colored. If both parents he white, there will be a strong disposition to white in the progeny. Indeed, the predisposition to white is so strongly marked in Short-horn cattle as to form conclusive evidence that the old white cattle of England were the originals of the Short-horns.

Nevertheless, there is little difficulty in breeding to whatever color may strike the fancy of the owner, by careful and persistent selection. The original colors will indeed be re-prodnced from time to time, hnt weaker and weaker from generation to generation. Even after the lapse of many generations, the original color will from time to time crop out; still, after five or six generations, this will not seriously interfere with the aim of the breeder.

The real point at issue is to select such animals as not only hreed to color, hut also to a particular type or standard, which the hreeder may have set up. Particular families of Short-horns have acquired a world-wide celebrity. A good departure now would he to breed these animals to a particnlar color, which would retain not only the characteristics as to stamina and purity, bnt also make them nniform in color or markings.

Pure Water for Milch Cows.

EDITORS PRESS:—The importanoe of pure water for milch cows is suggested in the experience of Mr. Frost, who lately came here from Missouri (an old Californian, by the way, who had spent several years East, hut yearning for a further expericnce as a miner.) His cows were pastured on land away from living water, and drank from stagnant pools until the supply was exhansted; after which, pure well water was pumped for his stock. Cheese was manufactured all this time, hnt that which was made while the cows subsisted on the stagnant water fermented and soon spoiled, hut the snbsequent production was very fine, and capahle of beiug kept as long as desired. H. N. H. BROWN.

Cornncopia, Nev., July 25th, 1874.

THE *National Live Stock Journal* says: Col. King is in luck again. It will be remembered that he has for years been endeavoring to secnre a calf from Rosedale Duchess, the daughter of the magnificent Rosedale. Time and time again he has snoceeded in getting her in calf, but she invariahly lost it, and aborting her calves seemed to be a confirmed habit with her. So little faith had her owner in her ever hreeding, that he did not offer her at the recent sale, although heavy in calf; hut Mr. Gibson writes us, under date of Jnne 19th, that she has this time snrprised them all hy carrying her calf the full time, and dropping an extra fine bull calf by Lord of the Lake. It is hoped, now that the habit is broken up, that she will continue a regular breeder.

Introduction of Cattle into America.

E. Sturtevant communicates the following to the *Country Gentleman:*

1493—A bull and several cows from Spain, by Colnmbus, on his second voyage.

1518—The Baron de Levy made an abortive attempt at settlement on Sable Island, where the cattle left by him increased and multiplied.

1553—The Portuguese took cattle to Newfoundland and Nova Scotia.

1604—Cattle were brought into Acadia by L'Escarlot, a French lawyer.

1608—The French extended their settlement into Canada, and soon after introduced various animals.

1609—The first cattle introduced into Virginia were previous to this year.

1610—Sir Ralph Lam brought cows to Virginia from the West Indies.

1614—The Dutch brought cattle to New York from Holland. They were black and white, and red and white, and noted as good milkers.

1624—Edward Winslow imported 3 heifers and a bull into Plymouth colony.

1624—Cattle imported into New Netherlands, from the Texel in Holland, by the Dutch West India Company.

1626—Twelve cows were sent to Cape Ann.

1627—Cattle were imported into Delaware by the Swedes.

1629—Thirty cows were sent to Cape Ann. Sixty or seventy cows and oxen were imported under the direction of Francis Higgenson, formerly of Leicestershire, for the governor and company of the Massachusetts Bay in New England.

1631 or 1632—Capt. John Mason introdnced cattle from Denmark into New Hampshire. These cattle were of a large size, and of yellowish color. This breed remained pure and unmixed near Agamenticus, in Maine, down to about the year 1820.

1670—Cattle brought into Carolina from England by Wm. Soale, to Charleston, on the south side of Ashley river.

1690—The Indians on the Red river in Louisiana possessed cattle.

1711—Sir Thomas Gates brought into Jamestown, Va., 100 head from Devonshire and Hertfordshire.

1732—Cattle were first brought to the Savannah settlement in Georgia by Oglethorpe.

1650—The French of Illinois were in possession of considerable numbers.

1783—Messrs. Goff, Reynolds & Patton, of Baltimore, sent to England for cattle, probably of the Teeswater or Holderness breed.

1785—Mr. Patton, Jr., carried a bull of the above importation to Kentucky.

1797—Mr. Heaton, of Duchess connty, N. Y., imported from England a Short-horn hull.

DOMESTIC ECONOMY.

Cake Without Eggs.

EDITORS PRESS:—We commenced farming in this State last winter, and as we have but few fowls, I have been experimenting with cakes which do not require eggs, as we think when eggs are scarce they had better he nsed for custards, or for the table. Here are some recipes that I have had good success with, which you may print if yon wish:

FEATHER CAKE.—One cnp of sugar, one-half cup of milk, one and one-half cups flour, one tablespoonful hutter, one-half teaspoonful soda, one teaspoonful cream of tartar, flavor.

MINUTE LOAF CAKE.—One and a half cups sugar, one-half cnp bntter, one cup of milk, three cups of flonr, two teaspoonfnls cream of tartar, one of soda nutmeg.

SPICE CAKE.—One cnp sugar, three-eighths cnp shortening, one cup sour milk, one-fourth cup molasses, two and a half cups flour, one rounding teaspoon soda, all kinds of spice.

CUP CAKE.—One cup of sugar, a piece of hutter the size of an egg, one cnp of sweet milk, two cups of flonr, two teaspoonfuls cream of tartar, one teaspoonful soda, lemon.

YANKEE CAKE.—Rnh two tablespoons of hutter with one cup of sugar, add one cnp of sonr milk, two and one-half cups sifted flour, one teaspoon soda, flavor; can be baked in a loaf or in layers for jelly cake, or yon can have a cream cake hy baking in two round tins; when cold, split them and fill with the following mixtnre:

CREAM FOR THE CAKES.—Tho yelk of an egg, one cnp of milk, sweeten, one heaping teaspoon cornstarch, one of lemon, set it in boiling water and stir until boiled; let it get cold hefore filling the cakes—the white of the egg will frost it nicely.

ELECTION CAKE.—One cnp of light sponge, taken out when you are making bread; if it stands until a little sour it is all the better; one cup of sugar, one teaspoon soda, two rounding tahlespoons shortening; if likod, you can add one cnp stoned raisins, or currants, and one teaspoon each of nutmeg, cloves and cinnamon; dissolve the soda in a little water and stir it in last; it makes all cakes lighter; it should stand abont half an hour to raise hefore going into the oven; it does not get very light before it is haked.

Next time I will seud you some recipes for fried cakes, cookies and ginger snaps.

M. M. C.

Petaluma, July 15th, 1874.

Horticulture.

Effects of Potash in Curing the Cracking of Pears.

The effects of lime, phosphate and potash, as indeed all mineral fertilizers, are always beneficial to trees, but it is a new idea to learn, as thus stated by a correspondent of the *Gardener's Monthly*, that potash and lime will cnre cracking of pears. Pears do not crack when the soil is sufficiently supplied with lime and potash; and they crack most where those salts are deficient. Common wood ashes contain those salts, nearly in the quantity and proportions that pear trees on snch soils require—.40 per cent. of potash and .30 per cent. of lime. Reasoning from these facts, I applied wood ashes at the rate of four hundred bushels to the acre, after the fruit had formed and cracked. Many of them healed up and *made perfect fruit the same season*, others not until the next season. A friend, at my suggestion, applied it heavily to a favorite *butter pear tree* in his own garden for several years in succession, and has had for several years perfect and delicious pears, and I will guarantee it to cure any case, where the ashes are fairly and abundantly applied.

I was told by an experienced hand that I would kill the trees; but, on the contrary, I cnred them. Therefore, do not be afraid; if one application will not suffice, give them a larger dose next year.

A moist atmosphere nndoubtedly encourages the growth of the tree and fruit, while the insufficiency of proper food prevents the perfection of either; hence, cracked fruit and "rough old bark."

Rust on Onions.

Professor Thomas Taylor, Microscopist of the Agricultural Department, Washington, writes that in a recent experiment, made for the purpose of destroying fungus on the onion, the following mode has proved very euccessful:

Some specimens were obtained in the market, covered with amber-colored fnngus. I secured one of them in an inverted glass receiver, which I placed over a beaker filled with nitrous acid. The fumes arising from the acid without the application of heat enveloped the onion and soon dissolved and destroyed the fungus covering its surface. In order to ascertain whether the life of the plant had been destroyed, I placed it in a bulb glass filled with water. It sprouted in a few days and is now in healthy growth on my desk. It has numerous leaves, which have attained a length of six to twelve inches; thus showing conclusively that, in some cases, fungoid growths may be effectually destroyed without injury to the plants on which they grow.

This principle admits of many important applicatione. In some diseases of the potato the surface alone appears to be affected, and the eame is true in regard to certain diseases affecting the tubers, roots, fruits and grains of various other plants, any of which may be readily exposed in large quantities to the fumes of nitrous acid. As nitrous acid has the power of depriving organic bodies of their oxygen, its destructive action on fungus is probably due to this property. The extent to which this treatment may be eafely applied to the smaller grains will be the subject of future experiment.

Lawn Trees. — The *Country Gentleman* (Eng), in discussing lawn trees, says that in small places of two acres or less, growers should avoid all treee that litter leavee, nuts, flowers and other cast-off garments which become scattered over lawns and flower beds, to the disgust of the owner of a well-kept garden. Of course, it depends somewhat upon the kinds of trees adjacent to the garden, as some, like the chestnut, are constantly contributing eomething in the way of litter during the entire summer. First, the long catkine, like huge yellow worms, are scattered over walks, out-buildings and lawns, followed by more or less early ripening leaves in July and Auguet; then September brings down the prickly husks, which tumble about to the discomfort of feet encased in thin shoes or the "sit-down" of the lounger in the shade. A deciduous tree that will drop its leaves all at one time, is far preferable to one that keepe up a continual scattering through the season. There are several species of oaks which belong to the latter class, and for this reason are well worthy the attention of all villa gardeners.

Wild Goose Plum.—Jamee Parker, of Southern Mississippi, speaks highly (in the *Horticulturist*) of his success with the Wild Goose Plum, which ripens about the same time as Hale's Early Peach, or at that place from the 10th to the 20th of June. In the North it would ripen in Angust. Mr. P. thinks it a better plum than the Red Magnum Bonum—which, of course, wonld not be very high praise for a variety of onr common domestic plum, but the Wild Goose being a variety of the wild or Chickasaw species, we do not expect the richness and delicions qnality of the Imperial Gage or Lawrence, bnt ite free growth and great productiveness, hardiness and handeome appearance, make it a valnable market sort.

A lemon tree at Lake Harrie, in Florida, annnally yields 7,000 lemone. The lemon grafted on the sour orange makes a splendid fruit.

The Dairy.

Milking in Silence.

At a farmers' club, in West Cornwall, Connecticut, a farmer said that no talking shonld be allowed while milking was going on. He said he discharged one of his eervants who persisted in talking during milking time, and that in three days the increase of milk was equal to the man's weekly wages. We fear an increase to such an extent must have been due to other causes besides the one assigned. If the enlarged yield followed solely from the dismissal of the man, we suspect his presence affected the supply of milk in some way apart from his loquacity. We have frequently found a change of servants to prove beneficial.

It may be that talking prevents hens from laying, also. We know we have often experienced a vast increase in the number of eggs bronght into the house after the removal of a too officious individual from our employ. Besides, our cows have sometimes improved in prodnce by the same means, but we generally attributed it to cleaner milking by fresh and more industrious hands. It is, however, well known that cows are particularly sensitive to sights and sounds during the time they are milked. Unless they are at perfect eaee they will not give their milk freely. They should be daily milked under the same conditions.

Cows that are fed at milking time require their usual meal, or they may become restless or dissatisfied, and put a stop to their bounty. Many of them will only allow some special favorite to milk them. In those parts of the country where women are solely employed to milk, we frequently find one or two tuneful lassies singing at their work, and many cows become eo pleased with the rustic harmony as to show evident eigne of their approval of the loud, sweet voice by giving their milk only by being sung to. Everything that distracte the attention of the cow, and ruffles her placidity, should be avoided when called npon to yield her milk. Her nervous system should not be excited by strange noises, unwelcome objects, or rough treatment, or the effect will be apparent in a diminished supply in the milk pail. It would no doubt be good advice, on the whole, to tell those who milk that they should keep their tongues and keep their tempers. The Connecticut farmer appears to have sufficient reasons, indeed, to say that "speech is silver, but silence is golden."—*London Milk Journal.*

Patent Artificial Cheese.

The Utica *Herald* remarks as follows upon the manufacture of a new kind of cheese, for which a patent was recently granted:

The insertion of the prepared solid fat of the body to take the place of the fat taken from the milk is not alone employed to make an imitation of butter. It is reported that, as fat and buttermilk are employed to make artificial butter, eo fat and skim-milk are used to make artificial cheese. The aims involved are similar in either case, although the methods of manipulation are, of course, varied. It is reported that a factory is in operation in Brooklyn, where the olein and margarin expressed from the intestine fat of cattle is intimately mixed with skim-milk, and the rennet then poured in, producing a curd rich in oil, which can be cured, and sold for cheese. Here we have a process for putting back into skim-milk, an animal oil in the place of the cream which has been removed. We have heard that something of this kind has been practiced nearer to Utica than Brooklyn. It is an ingenious device for adulteration, and nothing more nor less. No matter if the oil derived from the tallow be chemically pure, still the mingling of it with milk to take the place of cream is adulteratiou, and though it may not be a change of composition which producee an unhealthful material, it is a change which occasions a loss of value. Thns the schemes for artificial butter and cheese are fraudulent at the outeet, and even when we suppose that none but the purest oils and fats are used. If these compounde come into any wide consumption there will be materials nsed variously disguised which are wholly unfit for entrance into the system. Then will the evile of an enterprise which now seems only mildly objectionable be recognized and deprecated.

Holsteins for Milk.—It has been found by accurate trial of different dairiee, that it takes from 27 to 28 ponnds of milk to make one pound of butter, and a gentleman in a late agricultural meeting stated that it would take 27 to 28 ponnds of hay. W. W. Chenery, of Belmont, has cows that have given 76 pounds of milk a day. Simpson, of Cambridgeport, has a crosebred Holstein cow that gave 6,390 quarts of milk in a year; the half-bloods, it is said, being nearly as good for milk ae the thoroughbrede.—*Live Stock Journal.*

When milk is selling for six cents a quart, cheese should bring 30 cents a pound. It would be as profitable to sell milk at 3½ or 4 cents a quart, as to make it into cheese at present pricee, and this reduction in price would double the consumption and supply a better article of diet than any form of cheese, which is little used by the people at large. It is too indigestible and expensive. As an article of diet milk is nsed too little. Less meat, lard, butter and pastry, and more milk would be better for almost every one.—*Lillie Falls Journal.*

Remedy for Choked Cattle.

A Quaker Street, New York, subscriber, hands us a remedy for choked cattle, which has never failed when tried. The remedy is a teacup full of soft soap dissolved in a pint, or a little more, of warm water, and poured down the throat of the choked animal. As soon as administered, the apple or potato is instantly thowu up on passing the hand upon and along the throat. He allows his cattle to eat apples or potatoes without cntting, being positive that if one should choke he can relieve the animal instantly. A correspondent says that cattle can be relieved when choked by being made to jump over bars left as high as the animal can be made to jump. J. B. Jones says that a good way is to make a ball of tobacco, and put in the animal'e mouth as far fack as possible, which will cause vomiting and give speedy relief. Now as the first is a dangerous method, and the second, tobacco, may not be handy, the best thing I ever saw (and I never knew it to fail) is to take a round stick, 18 inches long, and put it in the animal's month, the same as you would a bit into a hor-e's mouth, having the etick as large as can be put into the mouth. It can be fastened by strings tied to the horns. Tnrn the animal loose, and it will soon throw the article out, and it will not make it sick like tobacco. I have seen it tried a great many times in this section.—*Country Gentleman.*

Whole dairies, says the New York *Tribune*, are now reported as yielding large quantities of butter. Generally the profit on each cow is $100 a year, considerably more than the profit on a hired man. This is becanse farmers are raising cows for their own use, and more care is taken in the selection of dairy stock.

The Apiary.

Co-Relation of Bees and Flowers.

The bees, Mr. Darwin says, have solved a difficult problem. They have made their cells of a proper shape to hold the greatest possible amount of honey, with the least possible consumption of precions wax in their construction. No human workman is skilful enough to do what a crowd of bees can do—working in a dark hive—make cells of wax of the true form.

The number of humble bees in the conntry will depend upon the number of cats. How can that be? Because the number of beee is dependent upon the nnmber of field mice, which eat the bees. Hence the more cats, the fewer mice, and the fewer mice, the more bees.

If the whole genus of humble bees became extinct, or very rare, the heart'e ease and red clover would become rare or wholly disappear. How is that? Becanse bees promote the growth of those flowers. The visite of bees are necessary to the fertilization of some kinds of clover, and almost indispeneable to the fertilization of the heart's-ease. Hnmble bees alone visit red clover, as other bees cannot reach the nectar.

In a word—no bees, no seed; no seed, no increase of the flower. The more visits from bees, the more seeds from the flower; the more flowers from the seeds.

Nearly all our orchidaceous plants absolutely require the visits of insects to remove their pollen masses and thns to fertilize them.

Twenty heads of unprotected Dutch clover yield 2,990 seeds. The same number protected from beee produced not one eeed; 100 heads of unprotected red clover yielded 2,700, and the same number protected from bees not a seed.

Murray says that, connected with the transmigration of bees, is the question of the extent of their flight. He believes that two miles may be considered as the radius of the circle of their ordinary range, though circumstances will occasionally drive them at least a mile more. Judging from the sweep that the beee take by the side of a railroad train in motion, he should set down their pace at about 30 miles an hour.

An experienced aparian says the most complete check upon robbing bees is to place a bunch of grass or wet hay over the entrance to the hive. The beee will find their way to the entrance to their own hives, the robbere will be caught by the eentinels in passing through the grass, and soon cease their pilfering.

The Glasgow, Ky., *Times* mentions the fact that Dr. N. P. Allen, one of the most progressive and succeesful farmere in Warren county, has 50 or 70 hives of Italian beee, from which he hae taken, this year, over 2,000 ponnds of honey. Two of the hives yielded over 300 pounds each.

H. E. Norton says in the agricultural report that the large podded milk weed almost invariably causes the death of every bee alighting upon it. The bee either adheres to the plant, or else bears away a small scale eticking to ite feet, and cripples itself fatally in attempting to remove the annoyance.

The Alsike clover ie snperior to bnckwheat as a honey plant, while the honey produced from it is about equal to that made from white clover.

The Swine Yard.

Breeding Pigs.

We are often asked whether pure-bred pigs of some popular race, say the Berkshires or the Essex, are more profitable for the farmer to handle for producing pork than hogs of mixed blood; and this is generally followed up by the observation that, unless these pure breeds are better for the purposes of the common farmer, no good purpose is subserved by breeding them. But practical men know that not only in regard to swine, bnt many other varieties of domestic animals, there are many pure breeds that are exceedingly valuable for crossing on other sort that are not profitable in the hands of ordinary farmers, upon ordinary keeping and ordinary management. Take, for example, the thoroughbred horse, with bone and muscle of such fine texture as to surpass all other breeds for speed and endurance, and even strength in proportion to their size; they are yet too light, and usually of a temperament too nervous for ordinary use. But when crossed on other sorts, they make our great American roadsters, and an infusion of the blood is necessary in the *make up* of a good horse for any pnrpose except for heavy draft; and even here, it is claimed that the best of the French horses, the Percherons, have a remote cross of Eastern blood.

The pure-bred black Spanish chicken is too tender for the climate of our Northern States, and the hens are not disposed to raise chickens; but crossed on common breeds the produce we have found to be unsurpassed.

On inquiry among many farmers of Illinois, Missouri and Kansas, recently, we were somewhat surprised to find a very strong partiality for a cross-bred pig of Berkshire and what seems here to be called the "Poland-China breed"—known in Ohio as Butler or Warren county hogs. For shipping there is a demand for light bone, and fine quality of flesh, which they say the Berkshires gives, while from the other sort they get the size and weight.

Of course every breeder will jndge for himself as to what is the best and most profitable type; it is not our purpose to become the advocate of particnlar breeds, to the prejudice of others. But we wish iu this connection to impress upon enterprising and public-spirited farmers the fact, that it is of the first importance to the public, that all pure breeds that are good should be preserved, for without this—without having *pure blood* to resort to—we cannot keep up the excellence of cross-breeds or mixed breeds.—*National Live Stock Journal.*

Making Good Pork.

The Utica, N. Y., *Herald*, thus discourses upon the making of good pork. The portion of the article relating to dirt might be taken home by some farmers in the West, though it must be conceded that, as a rule, under the eystem of feeding corn in fields, the ewine are always clean and cleanly fed:

There are many families that raise their own pork; yet what a miserable article do we too often find — flabby, greasy, rnnning to oil when cooked, and frequently rank, sometimes hinting of the sty, and sometimes of worse things. Now and then you meet with sweet, white, solid pork, that will bear frying, and ie perfect cooked in any way, reminding you of Elia's inimitable roast pig crackling. Besides, it costs no more to make than the flabby, wretched, rank stuff.

Why this difference? Why shonld we use a poor article when a good may be had at the same cost? It is because people are careless and ignorant. Any breed (or no breed) that comes into their possession by trade or otherwiee they use; and such feed as they may have, often refuse, of the poorest, they give, without regard to cleanliness or comfort. And thus the one kind of pork is made, or rather, makes itself. A large nse of milk or whey has much the same effect, making soft, flabby pork. A little of thie may be used as drink, or part drink. The rest should be mainly grain, and corn at that, or old corn best. The other grains may fed as adjuncts, giving variety, which, when well timed, will promote appetite. But experience has long ago demonstrated that there is nothing so good as eound old corn to make solid, eweet pork, regularly given, never too much at a feed, if the appetite would be retained; clean pens, cosy, well aired, warm in cold weather, cool in hot. A hog, though he will wallow in the mire (for the want of something cleaner to cool him), has yet a sense of the neat, and will seek, from choice, a clean place. He thrives nnder good treatment. Cold hurts him—he will make it manifest by unmistakable squeals and activity, and an excess of heat will make him suffer. These are to be avoided. Filth in a pen is transferred to the table in the pork.

We lose a great deal by feeding hogs in the open fields, after fall rains eet in and make a perfect quagmire of the feeding place. It would be money saved if a different course was adopted, and the hogs could be properly housed and fed on clean, dry floors.

Sugar Beets for Pigs.—Jonathan Talcott states that a Suffolk pig was fed on boiled sugar beets three times a day, from Angnst 16th to October 1st, during which time his weight increased from 360 to 450 pounds; the gain during September being 60 pounds.

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well as Treasurer's reports.

J. M. Hamilton.

List of Organizing Deputies.

County.	Deputy.	Post Office.
Alameda.	A. T. Dewey.	Oakland or San F'co.
Butte.	Wm. M. Thorp.	Chico.
Butte.	G. W. Colby.	Nord.
Colusa.	J. J. Hicok.	Grand Island.
Contra Costa.	R. G. Dean.	Antioch.
Inyo.	T. J. Farbee.	Bishop's Creek, Inyo.
Lake.	J. M. Hamilton.	Guenoc.
Los Angeles.	Thos. A. Garey.	Los Angeles.
Merced.	H. B. Jolley.	Merced City.
Mono.	T. J. Farbee.	Bishop's Creek, Inyo.
Monterey.	J. D. Fawler.	Hollister.
Napa.	W. H. Baxter, (Gen'l Dep.)	San Francisco
Placer.	A. D. Neher.	Roseville.
Sacramento.	W. S. Manlove.	Sacramento.
San Francisco.	I. G. Gardner.	
San Francisco.	John Riegler.	General Deputy.
San Joaquin.	E. B. Stiles.	Ellis.
San Luis Obispo.	A. J. Mothershead.	Moro.
San Mateo.	B. V. Weeks.	Pescadero.
Santa Clara.	W. G. Henning.	San Jose.
Solano.	R. O. Haile.	Suisun.
Solano.	J. C. Merryfield.	Dixon.
Sonoma.	Geo. W. Davis.	Santa Rosa.
Sonoma.	A. B. Nally.	Windsor.
Stanislaus.	J. D. Spencer.	Modesto.
Tulare.	M. S. Babcock.	Kingston, Fresno Co.
Yolo.	Wm. M. Jackson.	Woodland.
Los Angeles.	Thos. A. Garey.	Los Angeles.
Santa Barbara.	O. L. Abbott.	Santa Barbara.
Ventura.	Milton Wasson.	San Buenaventnra.

Farmers desiring to organize Granges, can apply to J. M. Hamilton, (W. Master), Gnenoc, Lake Co.; W. H. Baxter, (W. Sec'y), 320 California St., S. F.; J. W. A. Wright, (W. Lecturer), Borden, Fresno Co.; or to the nearest Deputy to their locality. Thos. H. Merry, (W. Ex-Lecturer) of Healdsbnrg, is also deputized to organize Granges.

California State Grange.

OFFICERS:

Master—J. M. HAMILTON, Guenoc, Lake Co.
Overseer—O. L. ABBOTT, Santa Barbara.
Lecturer—J. W. A. WRIGHT, Borden, Fresno Co.
Steward—N. L. ALLEN, Salinas, Monterey Co.
Assistant Steward—WM. M. JACKSON, Woodland, Yolo Co.
Chaplain—I. G. GARDNER, Grayson.
Treasurer—W. A. FISHER, Napa City, Napa Co.
Secretary—W. H. BAXTER, 320 California street, S. F.
Gate Keeper—R. B. WARDER, Waterford, Stanislaus Co.
Ceres—MRS. G. W. DAVIS, Santa Rosa, Sonoma Co.
Pomona—MRS. S. C. BAXTER, Napa City, Napa Co.
Flora—MRS. R. S. HEGELER, Bodega, Sonoma Co.
Lady Assistant Steward—Mrs. S. M. GARDNER, Grayson, Stanislaus Co.

Executive Committee:

J. M. HAMILTON, W. M., Chairman, of Guenoc, Lake Co
I. G. GARDNER, Grayson, Stanislaus Co
J. C. MERRYFIELD, Dixon, Solano Co.
H. B. JOLLY, Merced, Merced Co.
THOS. A. GAREY, Los Angeles, Los Angeles Co.
G. W. COLBY, Nord, Butte Co.
A. B. NALLY, Windsor, Sonoma Co.

California District and County Councils.

ALAMEDA COUNTY—Joel Russell, Haywood, M.; T. Hellar, S.
LOS ANGELES AND SAN BERNARDINO DISTRICT—T. A. Garey, Los Angeles, M.; J. F. Marquis, Anaheim, S.
MONTEREY AND SANTA CRUZ DISTRICT—J. R. Hebbron, M.; A. F. Richardson, S.
NAPA DISTRICT—J. D. Blanchar, M.; H. W. Haskell, S.
SACRAMENTO, EL DORADO AND PLACER DISTRICT—Officers not reported.
SAN LUIS OBISPO COUNTY—A. J. Mothershead, M.; J. M. Mannon, S.
SANTA CLARA COUNTY—H. M. Leonard, M.; I. A. Wilcox S. Regular meetings every three months, alternately at Santa Clara and San Jose.
SANTA BARBARA AND SAN LUIS OBISPO DISTRICT—Officers not reported.
SOLANO COUNTY-J. B. Carrington, M.; J. M. Jones, S.
SONOMA COUNTY— McPherson, M.; J. A. O'Brien, S.
STANISLAUS COUNTY—R. R. Warder, M.; Vital E. Bangs, S.
TULARE COUNTY—J. M. Graves, M.; F. L. Jefferds, S.
VENTURA COUNTY COUNCIL.—Officers not reported.
WEST SAN JOAQUIN DISTRICT, (Merced, San Joaquin and Stanislaus counties).—W. J. Miller Oristimba, M.; Thomas A. Chapman, Oristimba, S.

California Subordinate Granges.

[This list contains the names of Masters and Secretaries so far as reported to us, elected to serve during the year 1874. Secretaries and others will greatly oblige us by making needful corrections.]

ALAMEDA COUNTY.
CENTERVILLE, Cent.: Jas. Shinn, M.; J. L. Beard, S.
EDEN, Hayward's: Thos. Hellar, M.; Wm Pearce, S.
LIVERMORE, Liv. Valley: D. Inman-F. R. Fassett.
SUNOL, Sunol Stat'n: E. M. Carr, M.; S. W. Millard, S.
TEMESCAL, Oakland: E. S. Carr, M.; John Collins, S.
BUTTE COUNTY.
CHICO, Chico: E. Hallett, M.; H. W. Barnes, S.
EVENING STAR, Bigg's Station: E. W. S. Woods, M.; O. F. Butler, S.
NORD, P. O. Nord: G. W. Colby, M.; Peter Kern, S.
CALAVERAS COUNTY.
CALAVERAS, Jenny Lind: M. F. Gregory-A. Miles.
COLUSA COUNTY.
ANTELOPE VALLEY: H. A. Logan-A. T. Welton.
CENTER, Colusa; J. P. Kimbrell-W. G. Saunders.
COLUSA, Colusa: W. K. Estell, M.; R. Jones, S.
FRESHWATER, Colusa: P. S. Perdue-R. A. Wilsey.
FUNK SLOUGH, Colusa: E. C. Hunter-J. G. Wolfe.
GRAND ISLAND: Wm. Ogden, M.; J. H. Duffield, S.
NEWVILLE: B. N. Scribner, M.; S. Osborne, S.
PLAZA, Jacinto: F. C. Graves, M.; M. Kendrick, S.
PRINCETON, Princeton: A. D. Logan, M.; R. B. Rush, S.
SPRING VALLEY: D. H. Arnold, M.; I. T. Hayman, S.
UNION, Princeton: J. F. Garr, M.; W. W. Dollings, S.
WILLOWS, Princeton: J. W. Zumwalt-O. T. Hickelin.
CONTRA COSTA COUNTY.
ANTIOCH, Antioch: M. A. Walton, M.; J. D. Darby, S.
DANVILLE, Danville: C. Wood, M.; John B. Sydnor, S.
POINT OF TIMBER: R. G. Dean, M.; J. F. W. Carey, S.
WALNUT CREEK, Walnut Creek: Nathaniel Jones, M.; Wm. K. Daly, S.
EL DORADO COUNTY.
CLARKSVILLE, Clarksville: R. T. Mills-I. Maltby.
EL DORADO, El Dorado: C. G. Carpenter, M.; J. M. B. Weatherwax, S.
PILOT HILL, Pilot Hill: P. D. Brown-A. J. Bayley.
SUTTER MILL, Coloma: A. J. Christie-Henry Mahler.
FRESNO COUNTY.
ADAMS, Big Dry Creek: T. P. Nelson, M.; T. Wyatt, S.
BORDEN, Borden: J. W. A. Wright, M.; J. Fontaine, S.
FRESNO, Fresno City: D. C. Libby, M.; F. Dusy, S.
GARRETSON, King's River: W. J. Hutchinson, M.; W. W. Phillips, S.
SYCAMORE: A. C. Bradford, M.; J. A. Allen, S.
HUMBOLDT COUNTY.
ELK RIVER, Eureka: Theodore Meyer, M.; D. A. De-Merritt, S.
FERNDALE, Fernbdale: F. Z. Boynton-J. A. Davenport.
KIWELATTAH, Arcata: H. W. Arbogast, M.; C. Daniels, S.
MATTOLE, Petrolia: S. Goff, M.; D. J. Johnson, S.
ROHNERVILLE, Rohnerville: H. S. Case-S. Strono.
TABLE BLUFF: J. Sawyer, M.; B. H. C. Pollard, S.
INYO COUNTY.
BISHOP'S CREEK: T. J. Fubree, M.; W. T. Wiswall, S.
INDEPENDENCE: Josiah Earl, M.; J. B. White, S.
LONE PINE: C. L. Jackson, M.; R. A. Loomis, S.
KERN COUNTY.
BAKERSFIELD: S. Jewett, M.; Jerome Troy, S.
CUMMINGS' VALLEY, Tehaichipa: Geo. W. Thompson, M.; T. M. Yates, S.
LINN'S VALLEY, Glenville: A. B. Du Brutz, M.; S. E. Reed, S.
NEW RIVER, Bakersfield: J. G. Dawes, M.; J. Dixon, S.
PANAMA, Bakersfield: H. D. Robb, M.; J. F. Gordon, S.
RISING STAR, Panoche: O. Valpey-J. W. Craycroft.
TEHAICHIPA, Tehaichipa: J. Norboe, M.; J. Prewett, S.
WELDON, Weldon: R. T. Melvin, M.; J. T. H. Gray, S.
LAKE COUNTY.
GUENOC, Guenoc: H. A. Oliver, M.; A. A. Ritchie, S.
KELSEYVILLE: D. P. Shattuck, M.; T. Ormiston, S.
LAKEPORT, Lakeport: C. Cutler, M.; N. Phelan, S.
LOWER LAKE, Lower Lake: A. E. Noel-G. H. Snow.
UPPER LAKE: D. V. Thompson, M.; D. Q. McCarty, S.
LOS ANGELES COUNTY.
ALLIANCE, El Monte: S. S. Reeves-J. W. Marshall.
AZUSA, El Monte: W. W. Maxey, M.; J. C. Preston, S.
COMPTON, C'pton: C. W. Cottren, M.; A. F. Cottren, S.
EL MONTE, Los Angeles: G. C. Gibbs-J. H. Gray.
ENTERPRISE, Los Angeles: A. M. Southworth, M.; W. T. Henderson, S.
EUREKA, Spadra: C. Burdick, M.; P. C. Tonner, S.
FAIRVIEW, Anaheim: E. Evey, M.; J. M. Guinn, S.
FLORENCE, Los Angeles: J. Russell, M.; W. Porter, S.
FRUITLAND, S'ta Ana: N. C. Stafford-G. L. Russell.
LOS ANGELES: T. A. Garey, M.; T. D. Hancock, S.
LOS NIETOS: J. F. Marquis, M.; W. S. Reavis, S.
NEW RIVER, Los Nietos: W. Newton, M.; S. G. Baker, S.
ORANGE, Orange: J. Beach, M.; J. W. Anderson, S.
SILVER, Los Nietos: H. L. Montgomery, M.; W. P. McDonald, S.
SPADRA, Spadra: A. T. Currier, M.; Jos. Wright, S.
VINELAND, Tustin City: Dr. A. B. Haywood, M.; R. L. Freeman, S.
WESTMINISTER, Anah'm: M. B. Craig-W. F. Poor.
MARIN COUNTY.
NICASIO, Nicasio: H. F. Taft, M.; J. W. Noble, S.
POINT REYES: N. H. Stinson, M.; A. H. Stinson, S.
TOMALES: Wm Vanderbilt, M.; R. H. Prince, S.
MENDOCINO COUNTY.
CAHTO, Cahto: R. M. Wilson, M.; J. P. Simpson, S.
LITTLE LAKE: B. G. Mast, M.; W. A. Wright, S.
MANCHESTER: Joseph Wooden, M.; B. F. McClure, S.
POMO, Pomo: J. Mewhinney, M.; Geo. B. Nichols, S.
POTTER VALLEY: L. A. Preston, M.; Mrs. A. H. Slingerland, S.
ROUND VALLEY, Covelo: P. Handy-J. A. Crawford.
SANEL, Sanel: Alex. Marshall, M.; Jos. A. Knox, S.
UKIAH: W. D. White, M.; A. O. Carpenter, S.
MERCED COUNTY.
BADGER FLAT, Kreyenbagen's: A. P. Merritt, M.; A. F. Fowler, S.
COTTONWOOD: J. L. Crittenden, M.; J. M. Daley, S.
HOPETON, Hopeton: John Ruddle, M.; T. Eagleson, S.
LOS BANOS, Kreyenhagen's: Wm. M. Viney, M.; A. McGlashan, S.
MERCED: W. E. Elliot, M.; F. E. Tadlock, Jr., S.
PLAINSBURG: P. Y. Welch, M.; T. J. E. Wilcox, S.
SNELLING, Snelling: D. Yeiser M.; W. L. Hamlin, S.
MONTEREY COUNTY.
HOLLISTER: M. Pomeroy, M.; Wm. H. Oliver, S.
MORNING STAR, Castroville: C. E. Williams, M.; F. Blakie, S.
PAJARO, P. O. Watsonville, Santa Cruz Co.: D. M. Clough, M.; G. W. Roadhouse, S.
SALINAS: O. S. Arbott, M.; Clara Westlake, S.
NAPA COUNTY.
BERRYESSA, Monticello: J. W. Smittle-O. Schetter.
CALISTOGA, Calistoga: J. N. Bennett-L. H. Hopkins.
NAPA, Napa City: J. M. Thompson, M.; Manuel Eyre, S.
POPE VALLEY: J. A. Van Arsdale, M.; C. A. Booth, S.
RUTHERFORD, Yountville: G. S. Burrege-H. W. Crabb.
ST. HELENA: J. Llewellyn, M.; J. L. Edwards, S.
YOUNTVILLE: J. M. Mayfield, M.; Frank Griffin, S.
PLACER COUNTY.
LINCOLN: M. Waldron, M.; J. S. Marriner, S.
ROSEVILLE, Roseville: A. D. Nehr, M.; I. N. Nehr, S.
SHERIDAN, Sheridan: D. H. Long, M.; S. J. Lewis, S.
SACRAMENTO COUNTY.
AMERICAN RIVER, Patterson: E. G. Morton, Sr., M.; Cyrus Wilson, S.
COSUMNES, Sbeldon: J. A. Elder, M.; J. H. Atkins, S.
ELK GROVE: Obadiah S. Freeman, M.; Delos Gage, S.
ENTERPRISE, Brighton: J. M. Bell, M.; M. Toomey, S.
FLORIN: Caleb Arnold, M.; Wm Scholefield, S.
FRANKLIN: Amos Adams, M.; P. R. Beckley, S.
GALT, Galt: J. C. Sawyer, M.; J. L. Fifield, S.
GEORGIANA, Rio Vista: F. M. Kittell-G. A. Knott.
SACRAMENTO: W. S. Manlove, M.; A. S. Greenlaw, S.
SHERMAN ISLAND, Emmaton: J. M. Upham, M.; W. M. Robbins, S.
WALNUT GROVE: Solomon Runyon-J. V. Prather.
SAN BENITO COUNTY.
MOUNTAIN, San Benito: S. Kennedy-J. W. Mathews
SAN BERNARDINO COUNTY.
RIVERSIDE, Riverside: E. G. Brown-G. W. Garcelon.
SAN BERNARDINO, San Bernardino: R. Shelton, M.; J. Brodhurst, S.
SAN JOAQUIN COUNTY.
ATLANTA, Morano: W. J. Campbell-Mrs. J. W. Moore.
CASTORIA, Lathrop: H. W. Cowell, M.; J. Strahan, S.
COLLEGEVILLE, Col'ville: A. Mayberry-J. C. McIntosh.
ELLIOT, Elliot: Henry H. West, M.; N. S. Misiner, S.
FARMINGTON, Farmington: J. M. Groves-E. O. Long.
LIBERTY, Acampo: Justus Schomp, M.; J. J. Emslie, S.
LINDEN, Linden: John Wasley, M.; James Wasley, S.
LOCKEFORD, Lockeford: G. C. Holman-S. S. Stewart.
LODI, Lodi: J. W. Kearny, M.; Mrs. N. Crouch, S.
RUSTIC, Lathrop: J. A. Shepherd, M.; H. Moore, S.
STOCKTON, Stockton: W. L. Overhiser-W. G. Phelps
WEST SAN JOAQUIN, Ellis: M. Lammers-G. E. McStay.
WILDWOOD, Wildwood School House: Jos. Leighton, M.; A. B. Munson, S.
WOODBRIDGE, Woodbridge: J. L. Hutson-A. S. Thomas.
SAN LUIS OBISPO COUNTY.
ARROYO GRANDE, Arroyo Grande: W. H. Nelson, M.; D. F. Newsom, S.
CAMBRIA, Cambria: C. H. Ivins, M.; H. Olmstead, S.
MORO CITY, Moro: A. J. Mothershead-H. Y. Stanley.
OLD CREEK, Old Creek: Isaac Flood-R. M. Preston.
PASO ROBLES, Paso Robles: H. W. Rhyne-J. P. Moody.
SAN LUIS OBISPO, San Luis Obispo: Wm. Jackson, M.; E. L. Reed, S.
SAN MATEO COUNTY.
LA HONDA, La Honda: M. Woodhams, M.; W. A. Saunders, S.
OCEAN VIEW, Ocean View: I. G. Knowles-E. Robson.
PESCADERO, Pescadero: B. V. Weeks-H. B. Sprague.
SAN MATEO: A. F. Green, M.; W. H. Lawrence, S.
SANTA BARBARA COUNTY.
CARPENTERIA, Carpenteria: C. N. Cadwell, M.; G. E. Thurmand, S.
CONFIDENCE, Guadaloupe, A. Copeland-J. T. Austin.
SANTA BARBARA, S'ta Barb'a: O. L. Arbott, M.; Virginia F. Russell, S.
SANTA MARIA, Suey Station: J. Miller-M. D. Miller.
SANTA CLARA COUNTY.
GILROY, Gilroy: W. Z. Angeney, M.; H. Coffin, S.
MAYFIELD, Mayfield: F. W. Weisshaar-J. W. Pitman.
SAN JOSE, San Jose: Wm. Erkson, M.; Miss Jettora Watkins, S.
SANTA CLARA: H. M. Leonard, M.; I. A. Wilcox, S.
SARATOGA: F. Dresser, M.; Miss Jennie Farwell, S.
SANTA CRUZ COUNTY.
BEN LOMOND, S'ta Cruz: H. H. Buckles-C. Orachill.
SANTA CRUZ: G. C. Wardwell, M.; J. W. Morgan, S.
WATSONVILLE: J. McCollin-A. F. Richardson.
SHASTA COUNTY
COTTONWOOD: G. G. Kimball, M.; John Barry, S.
READING: J. F. Dinsmore, M.; S. J. R. Gilbert, S.
SOLANO COUNTY.
BINGHAMPTON: A. Bennett, M.; E. A. Beardsley, S.
DENVERTON: J. B. Carrington M.; G. O. Arnold, S.
DIXON: J. C. Merryfield, M.; B. F. Kelly, S.
ELMIRA: J. A. Clark, M.; M. D. Cooper, S.
MONTEZUMA, Collinsville: T. Hooper, M.; C. K. Marshall, S.
RIO VISTA: A. B. Alsip, M.; J. H. Gardner, S.
ROCKVILLE, Cordelia: W. A. Lattin-J. R. Morris.
SUISUN VALLEY: J. M. Lemmon, M.; A. T. Hatch, S.
VACAVILLE: E. R. Thurbur, M.; Oscar Dobbins, S.
VALLEJO: G. C. Pearson, M.; Chas. B. Deming, S.
SONOMA COUNTY.
BENNETT VALLEY, S'ta Rosa: I. De Turk-J. H. Plank.
BLOOMFIELD: Wm. H. White, M.; A. B. Glover, S.
BODEGA, Bodega: E. S. Pitne, M.; J. Wilkinson, S.
CLOVERDALE: Chas. H. Cooley, M.; J. B. Cooley, S.
GEYSERVILLE: C. M. Bosworth, M.; R. R. Leigh, S.
HEALDSBURG: C. Alexander, M.; W. N. Gladden, S.
PETALUMA: L. W. Walker, M.; D. G. Heald, S.
SANTA ROSA: Geo. W. Davis, M.; J. A. Obreen, S.
SEBASTOPOL: M. C. Hicks, M.; W. J. Hunt, S.
SONOMA: Wm. McP. Hill, M.; W. A. Berry, S.
TWO ROCK: S. O. Barlow, M.; Howard Andrews, S.
WINDSOR: A. B. Nalley, M.; J. H. McClelland, S.
STANISLAUS COUNTY.
BONITA, Crow's L'd'g.: J. W. Treadwell-A. B. Crook.
CERES: W. B. Harp, M.; C. N. Whitmore, S.
GRAYSON, Grayson: T. C. Brown, M.; A. C. Lander, S.
OAK DALE: A. S. Emery, M.; C. B. Inoalls, S.
ORISTIMBA, Hill's Ferry: W. J. Miller-T. A. Chapman.
SALIDA, Modesto: B. F. Parees, M.; A. B. Elmore, S.
STANISLAUS, Modesto: J. D. Spencer-V. E. Bangs, S.
TURLOCK: A. S. Fulkerth, M.; W. S. Robinson, S.
WATERFORD: R. R. Warder, M.; W. C. Collins, S.
SUTTER COUNTY.
SOUTH SUTTER, Pleasant Grove: Thos. Boyd, M.; Alex. Donaldson, S.
SUTTER, Meridian: W. C. Smith, M.; J. M. Cladden, S.
YUBA CITY: Geo. Ohleyer M.; S. R. Chandler, S.
TEHAMA COUNTY
FARMINGTON: Addison J. Loomis, M.; S. H. Loomis, S.
NEW SALEM, Paskento: C. Harris-J. R. Whitlock.
RED BLUFF: R. H. Blossom, M.; C. E. Fonda, S.
TULARE COUNTY.
CHRISTMAS, Visalia: A. B. Corey, M.; W. H. Stuart, S.
DEEP CREEK, Farmersville: W. G. Pennebaker, M.; F. G. Jefferds.
FRANKLIN, Kingston: F. Wyruck-P. A. Kanawyer.
LAKE, Kingston: M. S. Babcock, M.; J. S. Robinson, S.
TULARE: D. E. Wilson, M.; Victoria Wright, S.
TULE RIVER, Porterville: G. A. Williamson, M.; N. T. Blair, S.
VISALIA, Visalia: T. Fowler, M.; J. O. Blakeley, S.
WOODVILLE: J. A. Slover, M.; J. Stewart, S.
TUOLUMNE COUNTY.
SONORA, Sonora: S. S. Turner, M.; R. F. Williams, S.
VENTURA COUNTY.
OJAI, San Buenaventnra: C. E. Soule, M.; J. Hobart, S.
PLEASANT VALLEY: D. Rondebush-P. Browning.
SAN PEDRO, San Buenaventura: J. Y. Saviers, M.; D. D. DeNure, S.
SATICOY: Milton Wason, M.; E. A. Duval, S.
SESPE, San Buenaventura: S. A. Guiberson, M.; Thos. Marple, S.
VENTURA, San Buenaventnra: J. Willett, M.; Chas. Prebble, S.
YOLO COUNTY.
ANTELOPE: W. J. Olark, M.; O. L. N. Vaughn, S.
BUCKEYE, Buckeye: Wm. Sims, M.; L. Moody, S.
CACHE CREEK: D. B. Hurlburt, M.; L. D. Stephens, S.
CAPAY VALLEY: R. R. Darby, M.; P. M. Savage, S.
DAVISVILLE: Chas. E. Green, M.; John Krimmer, S.
HUNGRY HOLLOW, Yolo: G. L. Parker-C. O. Perkins.
WEST GRAFTON, Yolo: A. W. Morris-G. W. Parks.
YOLO, Woodland: J. A. Hutton, M.; D. Schindler, S.
YUBA COUNTY.
MARYSVILLE: O. G. Bockius, M.; Jas. M. Cutts, S.

Nevada Subordinate Granges.

RENO, Reno, Nev.: A. J. Hatch, M.; R. H. Kinney, S.
EAGLE VALLEY: G. W. Chedig-O. A. F. Gilbert, S.
CARSON VALLEY, Genoa: R. J. Livingston-J. S. Child.
WASHOE VALLEY, Franktown: Elias Owens, M.; G. D. Winters, S.

☞ Deputies who organize new Granges are requested to send the list of officers, and the names of all charter members, with other facts of interest, for free publication in the Rural Press, as early as possible.

The Grangers' Bank.

This institution commenced operations on Saturday last, Augnst 1st, at 415 California etreet. This fine room hae been completely overhauled and repaired and put in perfect order. The ceiling is taetefully frescoed in appropriate style for a Grange room, representing vines, flowers, fruit and grain. The walls are done in oil, repreeenting panel work, and are finely executed. On the panels in front of the vault are two fine paintinge, one reprcsenting the double horn of plenty, ox yoke and plow, and the other the bee hive, eignifying that "by indnstry we thrive." One of the horne is pouring out double eagles for the nse of the Grangers; and the other is emptying itself of tempting California fruits. The work is very neatly done, but the artist evidently never yoked up many oxen, as he has the bows inserted in the top of the yoke, instead of from beneath. The furnitnre and wainscoting are of the best workmanship. The desks of the tellers are beautifnlly lettered on gronnd glaes, "paying" and "receiving." In the rear of the main bnsiness room are two neatly furnished private rooms for the officers, in which every Granger and all others calling for businese or friendship are welcomed and at once made to feel at home.

We look upon the establishment of this bank as the greatest achievement the Order on this Coast hae yet made; and the beneficial influence which it must have upon all departments of bnsinees connected with the Granges, no one can donbt. But the bank is a baby yet, and needs nourishment and support. Don't expect too much of it, brothers, and don't feel hurt when yon find that the officers cannot do all they would like to do for yon. Surely the Grangers of California may well feel proud, and congratulate themselves on what they have accomplished in one short year.

Harvest Feast.—By special invitation we had the pleasure of participating in the Grangers' harvest feast last Satnrday. The table wae spread with a bonntifnl supply of "good things," and all wae sociability as the company gathered around the board. After the feaet, a very intereeting and inatructive essay was read by Mise Jewell Shney. Several appropriate selectione were snng, accompanied with instrumental music, which added mnch to the enjoyment of the hour. The Grange is in a prosperous condition, and seems to be fnlly accomplishing the object for which it was intended.—*Tulare Times.*

The Grangers' Warehouse.—The Grangers have commenced the construction of an immense grain warehouse on the line of the railroad at this place, under the euperintendence of Messrs. L. D. Stephens and N. Wyckoff. Ite dimensions are 200 feet by 120 and it will hold eomewhere about 800 tons.—*Yolo Democrat.*

The Chico Grange is actively employed in making arrangements for the storage and shipment of the farmers produce.

The Agricultural Professorship.

We are requested to publish the following resolntions, adopted by Livermore Grange, Alameda conuty:

Whereas, The Government of the United Statee, in order to promote the great intereste of agriculture, upon whose prosperity the snccess of all other industries as well as the well-being of the Government itself depends, has, through a wisdom born of a great necessity, donated to each State a vast amount of land for the endowment of Colleges of Agricultnre, in which the science of eoils and the means of production may be taught; and whereas, the State of California, following in the intelligent footeteps of the General Government, has, from the fund thus provided, erected edncational edifices worthy the overshadowing indnstry to which they were to be especially dedicated, and from whose halls it was intended that a stream of educated, practical farmers should flow; and whereas, the nnwise and enicidal policy of tnrning over this pricelese trnst of the producers into the control of men experienced only in the intricacies of law, the "pathies" of medicine, the politics of theology, the cent. per cent. of banking, or the bearing and bulling of stocks, has produced its natnral and inevitable reenlt; to-wit:

It has diverted (what should be) the College of Agriculture from its proper channel into a model Puritanical farm, in which the professors teach farmers' sons only to plow and harrow among Greek and Latin roots, while the President devotes all his leisure momente in explaining to them and the rest of the world the most effectual method of planting in provincial cant, the hoeing and reaping in Mongolian hyperbole; and, whereas, the policy thus dominating in the management of the University has, in the few years of its existence, managed to leave to the farming intereste of the State bnt one department (and that a snbordinate one) of the great institution created for their especial benefit; and, whereas, common rumor, seemingly well anthenticated, asserts that the Board of Regents are now seriously contemplating the removal of Prof. E. S. Carr (the only one of the faculty seeking to perpetuate the University to the object of its creation) from the Chair of Agricnltnre, thus virtnally closing the College of Agricnltnre to the interests of agriculture; and whereas such action betrays a malice that it is the bonnden duty of the producing classes of the State, who are so prond of the University and of Professor Carr, to whom agriculture is so largely indebted, not only to protest against, bnt to denounce and resent; therefore,

Resolved, That we, the members of Livermore Grange, P. of H., do in the most solemn manner protest against said proposed action of the Board of Regents, and wonld respectfully remind them that the noble university over whose interests they preside belongs to the *State*, in sacred trust for its producing industries; and that it was neither erected as a patrimony to a selfish cliqne, nor as a weapon to be used by a narrow-minded, bigoted man.

Resolved, That the unselfish endeavors of Professor Carr to bnild np the interest of agricnltnre among the people, as well as his nnremitting zeal in behalf of whatsoever conduces to the welfare of the commnnity, have merited the lasting gratitnde of every farmer in the State, and we hereby pledge him onr sympathy and support.

Resolved, That all the newspapers of the State, friendly to farming interests, be reqnested to publish the foregoing.

Passed unanimously, Angust 1, 1874.

Daniel Inman, Master.

F. R. Fassett, Secretary.

Healdsburg Granoe — Helping One Anothea.— I am glad to report the continued prosperity of our Grange, which now numbers 106, of which 38 are sieters and 68 brothere. Bnt it is not numbers that constitnte a good Grange; it is the carrying out in good faith the true spirit of our Order, obeying its injnnctions and living up to the beautiful lessons inculcated therein. With us all is harmony and good feeling. We meet every Saturday afternoon; our fraternal gatherings are intereating and mnch enjoyed by all. The following will show you how we deal with onr brothers in misfortune: On Friday, Jnly 24th, Brother James W. Simpson, a worthy farmer, and the head of a large family, had the misfortnne of having his barn, which wae filled with hay, his harnese and an empty granary all destroyed by fire. On the next day the Grange was informed of his loss, and they immediately voted to assist Brother Simpson. An order was given for 10,000 feet of lumber, at the mill, to rebuild his barn; and ae soon as it is ready the brothers have volnnteered to go with their teams, at one time, and hanl it for him, the distance being 26 miles. Thns you will eoon see a procession of 10 Grange teams on the road, driven by noble Grangers in whose hearts dwells the trne spirit of our Order—faith in the Grange; hope for a better day; charity, dispensed to onr sisters and brothers in distress, and fidelity to our principles. With these for a foundation we shall build a monument that will tower heavenward, and be as lasting as time itself. M.

In a New Role.—A telegraphic dispatch from Los Angeles statee that "the Grangers are taking steps for the establishment of a paper mill" in that city. If the Grangers establieh various mannfactnring enterprises throughout the State, they will place all classes under extraordinary obligations to them.

Granger Insurance Companies.

[Written for the PRESS.]

Insurance is one of the institutions of the age. Especially is this true with reference to life insurance. It has come to this that the husband and father feels that there is a duty to his family unperformed while he neglects to secnre them against want in case their protector be taken away. And no man feels secure while his building is not covered in part by insurance. Since this is true, and since men *will* insure, it becomes a matter of great importance to find the best method and most economical plan to accomplish this resnlt. We hold that there is only *one true* plan of insnrance, and that is, to insnre one another. In other words, that the plan be purely mutual in risks and benefits. This brings the matter peculiarly within the province of the Grange; for what is Grangerism bnt mutual aid? Acting npon this idea, our worthy hrother, J. D. Blanchard, after months of almost nnceasing labor, has presented us with a plan of fire insurance, at once the most concise, simple and economical which we think it is possihle to invent. Every feature of the plan has been snbjected to the severest criticism, and the brother feels confident that the Farmers' Mutual Fire Insurance Co. of California will completely meet the wants of the farmers in this respect.

The outlines of the plan are these: A person wishing to insure pays $5. This is used to defray the incidental expenses of the Association, and it secures the party the privilege of a policy in the association for five years. He then makes a deposit with the company of two per cent. of the value of the property insured, said deposit bearing interest at a given rate per cent. In case of loss hy fire, the interest which has accrued on deposits is nsed first, and if it he not sufficient to meet the losses, then the principal of the deposit is drawn upon. At the end of, or any time during the five years, the depositor can withdraw the balance after all expenses have been paid, by snrrendering the policy. In case of loss by fire not more than two-thirds of the valne of the property is paid. The capital stock has been snhscribed by 11 hrothers, among whom are such men as the Steel Bros., G. P. Kellogg, G. W. Colby and Andrew Wolf. These are the stockholders in the concern, but reap no benefit from it save the interest on their paid up capital stock. They have simply placed their money at interest in the Grangers' Bank to fnlfill the requiremeuts of the law concerning insnrance companies. There are eight Trustees, among whom are J. M. Hamilton and three other members of the Executive Committee, whose position in the Association is more honorary than anthoritative.

Now, the advantages of the method are plain. First, there are no large salaried officers to support; no finely furnished rooms to be paid for; then you don't have to help to insure hazardous town property; you are not paying your money to extravagant insurance companies. Your money goes into the Grangers' bank, thns strengthening the finances of the Order, which is of such vital importance in meeting and competing successfully with the money hags of our enemies. Your money does not go out of the country, nor even out of yonr own reach; as you can recall it at any time. Not one cent more of the deposit money is used than is necessary to defray the expenses and losses of the institution, which must he very small. It is purely and simply insuring one another hy placing money in a position where it can be used in case of accident, the money being yours all the time, and the interest accrning for your benefit.

Can anything be more just or more simple? Tens of thousands of dollars are being paid out by the farmers to rich incorporations who send a large portion of it out of the country. $60,000,000 are recorded as the profits of life insurance companies last year. The system is ruinous in the extreme. Especially is this the case with life insurance. No more outrageons swindling institntions exist in onr country, than some of the life insurance companies. Millions of dollars are collected hy these companies, and much of it is drawn from the farmers; for what farmer has not been "bored to death" by impudent, persistent life insurance agents? And who ever insured in one of these "hleeding" institutions and was satisfied afterwards, unless he died? Not one ont of a hundred find it as they expected, or as it was represented to them. More than half the persons insuring in these companies find the burden too heavy for them, and either take a "paid up policy," which is the same as burying the money they have paid in until their death, as no interest whatever is paid on it; or hecome disgusted and allow their policy to "lapse," thus leaving the cleau cash in the hands of the companies, often amounting to hnndreds and sometimes thousands of dollars.

We are glad to learn that Brother Jolley is at work on a mntual life insurance plan which will be equally as just and as simple as the fire association already formed. No one who is not acqnainted with the facts will appreciate fnlly the zealous, arduous lahors of Brother Blanchar. He has nohly given mnch of his time and money to the enterprise, and the Order owes, and will pay him a hig debt of gratitude. To the hrotherhood everywhere we volunteer this word of exhortation: Say *no! positively*, to every smooth-tongued, insinnating insurance agent. Tell them you have a "hetter thing." Tell them they have robbed us long enough. That we can insnre each other and take care of ourselves, without their assistauce, and thus another strong link will be welded into the chain which hinds ns together—*mutual, self-protection.*

J. E. F.

Grange Headquarters.

For the benefit of our brothers who cannot visit the Grange Headquarters in this city we will map out the situation of things as well as we can, so we will ask you to take an imaginary walk with us. First we will visit rooms No. 11 and 12, 320 California street. Here we will meet the State agent, Bro. I. G. Gardner, a perfect specimen of the genuine every-day farmer; bnt with his knowledge of farming he combines a fine tact for business. At present he has two subordinates, Mr. Winants as bookkeeper and an office boy. No one can become acquainted with hrother Gardner and not feel that the agency has fallen into good hands. He is also Vice-President of the Farmers' Mutual Fire Insurance Association. But let us step into the next room. That nervous, quick-moving little gentleman, with the "pincer specs" on his nose, who says, "How do you *do*?" with a most cordial grip of the hand, that is Bro. Baxter, the ubiquitous Secretary—Secretary of the State Grange, and Secretary of the Insurance Co., and Secretary of the Grangers' Bank; that's "him"—the man to whom the Order is so largely indehted for its development and progress on this coast. Energetic, zealous, warm-hearted—every enterprise for the good of the Order has found in him an ardent advocate and supnorter. We will also see his efficient deputy, Bro. J. Walter Ward, at his books or attending to the large correspondence, which forms a large part of the duties of this office—and it wonld make you smile audibly to hear some of the multitudinous questions he is called upon to answer. Ben Butler, with four secretaries, couldn't do the subject justice; hut the questions must be answered, and we leave the deputy to his task and step into room No. 14. A very pleasant, affable gentleman will take us hy the hand and ask us to be seated, and before we have conversed many minutes he will say something about fruit; and that is all very proper, as the fluent speaker is none other than Bro. A. W. Thompson, agent of the California Fruit Growers' Association. If you want to know anything about fruit or law, he can tell you; hut we have not time to stop this morning. At one or the other of these rooms we may see Bro. Hamilton, Master of the State Grange, and Bro. Blanchard, President of the Farmers' Mutual Insurance Co.; and if we stay for half a day we may see 40 or 50 Grangers from all parts of the State, coming and going—all in good spirits, and social and jolly. You will hear, "Why, how do you do?" and, "Well, so long," a dozen times an hour.

We descend one pair of stairs and call at Nos. 1 and 2. This is the office of the firm of E. E. Morgan's Sons. The moving spirit of the concern is not in, as he is at the bank; and so we will go there too—415 California street. On the large plate glass and on the glass door, you will see in gilt letters, "Grangers' Bank of California;" so step in and get acquainted.

After taking a glance at the beautiful room, let us pass the polite tellers and step into the hack room. That tall, portly gentleman in a gray suit, with somewhat ahrupt but very pleasant manners, is Bro. Cressey, Vice-President of the bank. If you want to talk *business*, he's your man. Business every inch of him and a good many inches too. That young man with high forehead and heavy brows, blue eyes set close together, and dark hair, dressed in the hight of fashion, with the bearing of a perfect gentleman, that is Bro. Walcott, President of the bank and resident partner of E. E. Morgan's Sons' shipping house, one of the shrewdest and most competent business men on this coast. The manner in which he has met and vanquished the best organized wheat ring in the world is proof of his sterling qualities, and of the metal in his composition. Bnt, if you haven't any money to deposit, and don't want to borrow any or ship any grain, let us step down to the corner of Sansome and Commercial streets. It's no use to tell you what place this is, for you see rows of cheeses, and harrels of dried fruit, and hams, and boxes of eggs, and coops of poultry, and piles of boxes of fresh, sweet hutter, and you know this must be the Dairy Produce Department of the Granngers. The business of this department is conducted by the efficient manager, Bro. Hegler, and three subordinates. The business is a success, notwithstanding the repeated, determined efforts of the older houses to break it down. The people are learning that they get fresh butter and good eggs here, and they *will* buy. We have now passed the ronnds. What do you think of the Graugers' capacity for doing business and taking care of themselves?

IMPORTANT DECISION OF MASTER HAMILTON. The charge that a Patron is acting as agent for a monopoly opposed to ns—or for a firm that makes unjust discriminations against tho Grange trade if sustained—is snfficient to justify expulsion from the Order nnder article 6 Sec. 2 By-Laws of State Grange. Either the agency or membership should be given up.

J. M. HAMILTON.

A NEW Grange will shortly be started at North Butte,

E. E. Morgan's Sons.

In the Colusa *Sun* of last week we notice an article on the subject of shipping grain, in which the above named house is represented as "playing sharp" on the Grangers. Whether Bro. Green was actuated by friendship for the farmer or not, we are very sorry that he should have been led to give publication to such misrepresentations. Did he realize that "our worst foes are they of our own household," and did he realize the time and labor which must be given to remove such impression from the minds of the naturally (and not without cause) suspicious farmers, he would search diligently to know "whether these things he so" hefore he gives them to the puhlic. In the article alluded to the author starts out by stating that this house of E. E. Morgan's Sons had engaged several vessels on their own hook at £4 10s. and expected to get more. Now whether they did do this or not we neither know nor care, for whose business is it but their own what they charter vessels for "on their own hook?" But we *do* know, from a careful examination of every circular sent to the different Granges, that the highest rates spoken of in any of them, to Liverpool, were £4 2s. 6d. Now how the brother got those £4 10s. stamped so indelibly on his fertile brain we don't know—all we can say is, he never got them through the proper channel, for he can't find them in any instructions to any Grange on the coast.

Now with regard to this £3 10s., and the £4 2s. 6d., whereby it is claimed these "agents" clear $5 per ton from the Graugers. This is as false as the former statement. In no case can it be made to appear that for vessels chartered at £3 10s. the Grangers were charged £4 2s. 6d. Now let us review the situation briefly. For years the farmers have been in the hands of a powerful monopoly, as every one knows. In order to hreak this monopoly an opposition must be established. How conld the Grangers establish this opposition without means, without ships, without credit abroad, without business relations with foreign houses, and without any knowledge of husiness? In this dilemma the house of Morgan's Sons offer their services. They have money and credit, and can get ships; but in order that they be justified in chartering a number of vessels it is necessary that they have some assurance that they will get the wheat to fill them. Now if this house agreed to carry the Grangers' wheat at £4 2s. 6d., and the Grangers have agreed to give it for a certain amount of grain, who is hurt? Should not the Grangers fulfill *their* part of the contract, as they expect the shipping house to do the same? Aud much more when they consider what they would have heen compelled to pay were it not for the opposition? And still more when it is asserted by Mr. Walcott that even outside of this contract the farmers shall have the advantage of the rednction in freight. Who's hurt? Now as regards low freights. No greater calamity can happen to the farmers than the reduction of freights below a living rate, for this would virtually close our harhors against vessels; and what would we do withont ships? Let us repeat what has heen said before; that the Grangers are satisfied that Bro. Walcott and the house he represents are their friends; that they are acting in the hest of faith; that they, and *they* only, stand hetween them and ruin. They know what the old ring is, and that a most desperate, deeply laid, well organized plan has been adopted to break this—the only opposition to their complete control of the market.

The Grangers expected outside pressure, but were not prepared to find their worst enemy within their own sacred precincts. The fact that the brother claims to he honestly working in the interests of the farmer don't excuse him for putting the most powerfnl weapons in the hands of our enemies whereby they may destroy us. But the drift of the article is too transparent to destroy the faith of a single thoughtful Granger, in the integrity of the man who has started out in one of the most daring undertakings, and who has staked more on the good faith of the farmers than any other living man has ever done.

New Grange.

EDITORS PRESS:—I organized Summit Grange, San Luis Ohispo county, California, July 25th, with 23 charter memhers, and the following list of officers: J. V. N. Young, M.; Anderson Smith, O.; S. P. Sitton, L.; John Wilkinson, S.; F. Young, A. S.; G. W. Richardson, C.; Andrew Harris, T.; A. T. Foster, Sec'y; L. D. Brians, G. K.; Mrs. Almira Young, Ceres; Mrs. M. E. Smith, Pomona; Mrs. Lottie M. Foster, Flora; Miss Lucy Young, L. A. S. Master's post-office address, Paso Rohles, S. L. O. Co.; Secretary's address, San Marcos.

A. J. MOTHERSEAD.

Moro, July 25th, 1874.

STORING GRAIN.—The Grangers are making arrangements generally to store their wheat for better prices. This is sensible. While only $1.42½ is now paid here, the Liverpool rate warrants $1.75 per 100 lbs. The price is kept down by the shippers. If farmers hold awhile till there is an accumulation of tonnage in the bay, prices will go up to the proper standard, and now that there will he plenty of warehouse room they can store it and no doubt raise all the money they need upon it for present purposes.—*Yolo Democrat.*

The Shipping Monopoly and the Grangers.

We clip the following excellent remarks from the *California Reporter:* The grain-shipping monopoly and the Grangers are just now in the midst of a furious battle, whose outcome is looked for with interest by the whole State. Mr. Isaac Friedlander has for years controlled the business of shipping our surplus crop, and has had it all pretty much his own way. The Grangers are making a stout effort to break the hack of his power; and, as he naturally doesn't want to nndergo that painful operation, he is fighting tooth and nail. On which side the victory will he, remains to be seen.

After stating the position of the opposing forces substantially as they have been given in our columns heretofore, the *Reporter* continues: Hence, it will he seen, that unless the Grangers hack up the firm, Friedlander will be in a fair way of coming out ahead. And this is the chink in the armor of his adversary that the old warrior is aiming at. Morgan's Sons are determined to fight it ont, and the chances are in their favor. The Grangers cannot help seeing, of course, that the defeat of Friedlander will shatter a monopoly that has cost them millions. The temporary gain that may be got from the ruinously low rates which Friedlander will offer, should be no temptation. He will inevitahly make them pay it back four-fold, if he can get rid of his rival. Certaiuly, they should not be such fools as to snap at so transparent a bait.

It is surely time that the old wheat ring were broken. The farmers can only have cheap transportation hy encouraging competition. Low freights are impossible without it. We should like to see Friedlander's weight taken from the farmers' back, and the profits of agriculture going where they belong—into the pockets of the producers. The present is the strongest effort that has ever heen made to kill a monopoly that has worked much injustice, and it should succeed. Morgan's Sons represent legitimate competition in this fight, and for the sake of that principle—for the Grangers, an extremely profitable one in this instance—we hope that the financial hones of Old Monopoly may be made to rattle.

Obituary.

FASSETT.—On the death of P. M. Bro. H. W. Fassett.

WHEREAS, In the wise dispensation of God's providence we are called to deplore the loss of onr beloved Brother, H. W. Fassett, of Fresno Grange, who has been stricken by the hand of death; and

WHEREAS, The relation which Bro. Fassett sustained to many of us, linked our hearts in close sympathy with his own; therefore,

Resolved, That we condole with Fresno Grange in the loss she has sustained, both in her originator and Master; for we could not but recognize in Bro. Fassett a rare combination of energy and perseverance, and those other qualities so requisite to constitute a good Patron.

Resolved, That we unite in paying to his memory that tribute of respect and affection to which his excellence of character and abilities of mind justly entitle him.

Resolved, That although Bro. Fassett was not a member of this Grange when he was called hence, still it is with feelings of reverence that his name is mentioned in our counsels as the originator; and in the far off future many will unite their gratitude with onrs to him for the earnest efforts by which this Grange was instituted.

Resolved, That we sympathize deeply with the afflicted relatives in this hour of their great bereavement. Another one of those happy members that were wont to assemble around the father's hearthstone has been summoned by the inscrutable decree of Providence, and another link that bound his loving friends to earth has been severed. They will miss him here and will await anxiously for his coming, but in vain. To them it is an irreparable loss, and we miugle our tears of sympathy. But to him it is a triumphant victory, and we rejoice in hope of a glorious reunion in Heaven.

Resolved, That a copy hereof be sent to the *Granger* for publication, and another copy, with the kindest regards and sympathies of this Grange, be tendered to the bereaved relatives of our deceased brother.

Approved, July 11th, 1874.

GEO. F. MOSTAY, R.S.,
West San Joaquiu Grange, No. 3, Ellis, San Joaquin Co., Cal.

WALNUT CREEK GRANGE.—By invitation of the W. M., Nathaniel Jones, of Lafayette, we enjoyed a six mile ride and visit to this Grange on Saturday last. The attendance was small, out of a membership of over 60. The farmers throughout the State are mostly harvesting, and consequently just now large meetings and "feasts" are not so much in order. The squirrel question and other matters of interest were ably discussed hy Brothers Hammitt, Jones, Lee, Gray, Huston, Renwick and others. Walnut Creek has an able and earnest Grange.

FARMERS' UNION.—At a meeting held last Saturday the organization of the Farmers' Union was perfected by the election of the following officers: W. W. Winn, President; F. R. Fassett, Secretary, and E. S. Allen, Treasurer. The Constitution and By-Laws were adopted and steps taken for active operations being entered into. Another meeting will be held this afternoon, when further business will be transacted.—*Livermore Enterprise.*

IN addition to the resolution passed by the Livermore Grange concerning Prof. Carr, it also passed a resolution declaring that the house of E. E. Morgan's Sons has been the prime cause of keeping freights down helow £5 per ton, and assuring them that Livermore Grange will stand hy them to the last in their struggle with the great monopoly.

THERE is now an average of 540 Granges to each State of the union, or 20,000 Subordiuate Granges in all.



Sometime.

[Written for the PRESS by JAMES ROANN REED.]

In the glow of the dying twilight,
When the morning is rosy and warm,
At noontide, or stillness of midnight,
Like a dream comes a beauteous form—
Maiden as lovely as Aidenn,
Pure as the starred sky above;
Golden-haired, lily-browed maiden—
She, whom I ever shall love!

Whither the lands where she dwelleth,
What skies may be arching o'erhead,
There is not e'en a whisper that telleth—
Not a star-glint to guide my lone tread.
Fairy with dwellings so airy
It fades, while I gaze, from my view;
Azure-eyed, vanishing fairy,—
Sole idol my heart ever knew!

Yet, tho' I never beheld her,
And wist not the clime where she is,
Full oft to my heart have I held her—
Our lips met with passionate kiss!
Lover so strange; passing over
The limits e'en fancy might set;
Dearly-loved, mythical lover,
My heart remains true to thee yet!

Aye! often when I am a-weary,
When storm clouds have darkened my sky,
Soft brush of an angel wing near me
Proclaimeth my love is anigh.
Maiden with message from Aidenn—
Cuddles she close to my heart;
Angel-sent, peace-bringing maiden,
None can tell what a treasure thou art!

Oh! sometime my arms shall enfold her,
My heart faint with rapture so rare;
If I may not on earth behold her,
I shall meet her at last Over There!
Vision of happy elysian,
I am longing, so longing, to see;
Long-delayed, dearly-loved vision—
My love of the sometime to be!

ANECDOTE OF SYDNEY SMITH.—The following is related of Sydney Smith, and that it is founded on fact there can be but little doubt, exemplifying, as it does, that peculiar and matchless humor for which Sydney was so remarkable. The thing occurred in Edinburgh, when Jeffrey, Broughsm, Sydney and the rest of that brilliant constellation of men of genius were shedding so great a luster upon "Auld Reckie" and the world. There was, at the time, a literary pretender and *bore* in Edinburgh, whose everlasting subject of discourse was "The North Pole," and whose delight it was to inflict his theme upon every patient listener. He met Jeffrey in the street one day, and after the usual salution, at once introduced his favorite subject. "D——n the North Pole," vociferated Jeffrey, and extricating himself from the bore's grasp, pursued the even tenor of his way. The former, wincing under Jeffrey's abrupt treatment, also went on his way, when, encountering the good-natured Sydney, he related to the latter (with much chagrin and disgust) what Jeffrey had said. "Ah!" (says Sydney,) "I wouldn't mind it. We all know Jeffrey. You'll hardly believe it, but in a conversation I had with Jeffrey, the other day, he actually *spoke disrespectfully of the Equator.*"

DOUGLAS JERROLD'S wit was often exerted in this kind of a way, amusing enough to bystanders but unpleasant to the butt. Thus a member of his club, hearing an air mentioned, exclaimed, "That always carries me away when I hear it." "Can nobody whistle it?" asked Jerold. Again, after a supper of sheeps'-heads, an enthusiastic gentleman exclaims, "Well, sheeps'-heads forever, say I," Jerold: – "There's egotism!" Again, when a man told him he thought he should have died of laughter at some practical joke, Jerold replied, "I wish to heaven you had!" a remark suggested, perhaps, by Cowper's couplet:

"He thought he should have died, he was so bad;
His peevish hearers almost wished he had."

LET not mistakes nor wrong directions, of which every man, in his studies and elsewhere, falls into many, discourage you. There is precious instruction to be got by finding that we are wrong. Let a man try faithfully and manfully to be right, and he will daily grow more and more right. It is at the bottom of the condition on which all men have to cultivate themselves. Our very walking is an incessant falling—a falling and a catching of ourselves before we come actually to the pavement! It is emblematic of all things a man does.—*Carlyle.*

A DAIRYMAN was awakened by a wag one night, who told him his best cow was choking. He jumped up at once, went out, and found a turnip stuck in the mouth of the pump.

"Is the colonel here?" shouted a man, sticking his head into a Kansas city street car. "He is," answered thirteen men as they rose up.

WHEN they find a man in Washington who hasn't a plan of his own for the solution of the financial problem, they drown him. No one has been drowned there yet.

A Tempest in the Pacific.

Homeward bound!

With what delight does the sailor utter these words.

He has been away from home and kindred for, it seems, almost an age; and now what a feeling of joy thrills his frame as the words are echoed from mouth to mouth. How he longs to see the old familiar faces once again; to embrace the dear friends he has left behind him, and to ramble the old walks in his native town with a new enjoyment and a freshness born of his long absence.

Such thoughts as these might have passed through my mind as the good ship traveled along with a splendid breeze, her stem pointed to the mother country and the golden shores of Southern California fast disappearing in the haze of distance. But the gloomy portions of them were soon dispersed by the bright sun and the beaming water, and returned to their dark and ghostly dungeons like the spirit of Hamlet's father when he said—

"Methinks I scent the morning air."

We had a splendid run down the west coast, fine weather and a smart breeze all the way—uncloudod heavens and foaming, sparkling, blue water by day; placid moonlight and twinkling stars by night. However, as we came to about 45 degrees south latitude the aspect of affairs changed. The sky assumed a leaden hue; dark copper-colored clouds were driven wildly across the gloomy firmament, and day after day no sun was visible.

It commenced to blow in strong, fitful gusts, and the water, a dull, treacherous looking indigo expanse, was agitated by the fitful wind into great hills and valleys, which tossed our vessel here and there like a piece of drift-wood.

We were afraid to carry more than the topsails, for when the squalls did come they came so suddenly as scarcely to give us time to shorten sail.

The thermometer, too, was rapidly falling, and the chill wind shrieking through the rigging caused us to button our coats more tightly and to tramp more sturdily on our walk fore-and aft the deck in the long, dreary watches of the night.

One dry we signalled a full-rigged ship at no great distance and found she was the "General Lee," a fine, diagonal built clipper ship belonging, if I remember right, to Boston; but, however, she had been in San Francisco with us and had sailed about the same time, being bound for Europe with grain, as we were.

We had been very intimate with the officers when in San Francisco, and many a pleasant dinner party had we organized between us, and many a pleasant evening had we passed together, engaged over our wines and cigars, in recounting the several vicissitudes of our past lives. Therefore this was an unlooked for but most agreeable meeting between old friends in the middle of the Pacific; and as she was steering nearly the same course as we, we calculated on keeping company with them for some days at least, for our rate of sailing was about on a par.

We exchanged questions and answers by signals one whole forenoon, and having wished each other *bon voyage* we resumed our course, for we had luffed half a point or so to keep her well in view.

We kept along with each other at a distance of six or seven miles for two or three days, when one day about noon the sky grew black as death and the wind sonshed mournfully through the rigging, bidding us prepare for what was foreshadowed.

The threatening and gloomy aspect of the elements hightened as the afternoon wore on, and the captain said to me, "We shall have a whirlwind out of this."

I acquiesced in his opinion, and we hove the vessel to under storm canvas. The "General Lee" was about eight miles from us, on our weather quarter, and was also hove to.

And there we were, rolling about on the long, heavy swell of the indigo water, the ship swinging a couple of points each way; all hands on deck standing in deep silence, looking over the rail, waiting for the whirlwind.

It was a solemn scene, and the faces of the officers and crew reflected its solemnity.

If any one broke the silence he spoke in a low undertone, instinctively paying tribute to the Master Power at whose behest the dreadful strife of the elements was now prognosticated.

Here comes the whirlwind! Far on our quarter the wind shrieks and howls with demoniac fury.

There is the track of the mighty wind in its revolving circles of death, marked by those destroying water-spouts—immense pillars of water erected by nature as a monuments to her vast powers.

Ha! the "General Lee!" God have mercy on that ship! for nothing can save her but a direct interposition of Providence. Nothing can be heard but the dreadful roaring of the wind; all eyes are strained in the direction of the jeopardized ship; the spray is borne high into the air by the fierce wind, and forms a mist, which gradually becomes denser, and, like a veil, shuts the vessel from our sight.

Doomed! the "General Lee" is doomed! She is now clasped in the deadly embrace of the whirlwind which closes round her, shrieking with, it seemed, a wild joy at its unlimited power over the mighty machine.

The whirlwind approaches nearer, yet nearer; it is within a mile of our quarter, and its circles seem gradually extending, its advances being marked by the eddying water, which is caught up in the air, and—

"Hoist the topsails!" roared our captain. "Quick! for your lives, men! Set the foresail and mainsail!"

We flew to our posts; the sails were set, and we were flying from the pursuing vengeance.

"The waterspout!"

It was approaching us with terrible velocity; if it struck us all were soon over. In advance of the others, we thought to escape them if this went clear of us. A thought flashed through my brain like summer lightning.

"Load the howitzer!" I shouted.

"Oh, thank God!" said the captain, "for that thought;" and a hand rushed below for powder, and the howitzer was loaded in an incredulously short space of time.

The fuse was applied, and a loud concussion rent the atmosphere; the current of air was destroyed, and the spout broke into a cloud of blinding spray, which obscured the atmosphere as with a dense vapor.

The whirlwind passed our stern, in its fierce circling eddies, within half a mile, leaving us safe. We sailed right out of danger and away.

A cheer burst from the men; a cheer for our captain, whose promptness had taken us clear of the approaching storm, which he immediately checked, saying in stern tones, with a reverence strangely in contrast to the usual levity and freedom of conversation on shipboard, and with, I believe, a genuine expression of his feelings:

"Thank God, rather, who has averted this peril from us; and do not, at a time such as this, give way to a selfish joy at your escape. Where is the "General Lee?" Think of her, and thank heaven we were not in her position, for most assuredly she is hundreds of fathoms deep in the ocean."

We felt it to be true—every word; and a silence fell upon the men, as an acknowledgement of our captain's words.

Our eyes were strained in the direction of the spot where once sailed as noble a ship as ever breasted storm, but in vain.

The "General Lee" was never heard of more. —*New Age.*

Matrimonial Calendar.

First anniversary—Iron.
Fifth anniversary—Wooden.
Tenth anniversary—Tin.
Fifteenth anniversary—Crystal.
Twentieth anniversary—China.
Twenty-fifth anniversary—Silver.
Thirtieth anniversary—Cotton.
Thirty-fifth anniversary—Linen.
Fortieth anniversary—Woolen.
Forty-fifth anniversary—Silk.
Fiftieth anniversary—Golden.
Seventy-fifth anniversary—Diamond.

EXCITED.—The Rev. Dr. Arnot, having been charged with excitement when speaking on total abstinence, has replied: "People need not tell me that I am excited on these questions. I know that I am. I would be ashamed before God and men if I were not. There is more in the public houses of Glasgow to stir the spirit of a minister than all Paul saw at Athens. In my ministry I meet the horrid fruit of these whisky shops. I see men and women perishing in these pitfalls. The number of the victims is so great that it overwhelms me. The Church is asleep, and the world too, and they are hugging each other. I am weary with holding, I must cry. I would rather be counted singular in the judgment of men than be unfaithful in the judgment of God."

INSOLENT MANNERS.—A haughty tone, a rude address, bruises no muscles, causes no physical pain, like the pangs of hunger or the misery of drought; but it hurts all the same; and if, as the proverb says, hard words break no bones, they none the less wound that self-esteem which lies at the root of half our sentimental grievances. Subordinates feel this domineering insolence of manner a great grievance when they are subject to it; so do superiors when they have to encounter the pertness of those whom they consider their inferiors. But the grievance in either case is based on exactly the same sentimental grounds, and to those who regard the physical as the sole real thing in life ought to count for nothing.—*Cornhill Magazine.*

AN Englishman was recently trout-fishing on the banks of his favorite stream, accompanied by the landlord of the inn at which he was stopping. The latter happening to come too close just at that moment his guest was throwing his fly the hook caught the poor wretch's eyelid, causing him intense pain. The sportsman coolly took out his hook, readjusted his fly, and, as the innkeeper continued howling at the top of his voice, "You can," said he in a whisper, "put your eye down in your bill, but I'll trouble you to stop that noise, so as not to frighten my fish."

PERHAPS love is never so potent as when it seizes upon those who have passed their first youth, or even those who have passed the prime of life. The choice made is then likely to be thoughly suited to the nature of the man; and any intellectual gifts on the part of woman are likely to be more attractive to a man of this age than to a younger person. Besides, there is a feeling that as life is not likely to be very long, this late love is the last thing to be clung to; and that after it, should it be lost, all will be desolation.—*Arthur Helps.*

Two things that are weakened by lengthening—Steamships and sermons.

A Base Phase of Crime.

The thrill that has passed through the public heart at the recital of the recent abduction case in Philadelphia is almost as peculiar as it is intense. Crimes more shocking, partaking more of the horrible, have occurred, and are still occurring; but this has sent a chilling tremor, a silent dread through the whole community which we have never seen manifested before. The crime itself is not a novel one, having been extensively practiced in the middle ages; but it has been looked upon as quite consistent with the social surroundings of those days; but happening at the present time, when society prides itself on having left the crimes of the dark ages some centuries in the rear, it tends to create a discouraging view of human nature. People are disposed at such times to doubt whether we are really progressing socially, or only beating round and round, like children lost in the wood; not very far from home, perhaps, but still coming no nearer to it. As a specimen of ingenious and heartless crime it has rarely been surpassed.

The facts in the case are as follows: During the last week in June two men were in the habit of meeting two small boys in Germantown, near Philadelphia, talking with them, giving them candies and toys, and thereby gaining their confidence. On the first day of July they invited the boys to take a ride in a carriage. After they had gone a short distance, they gave the elder boy some money, to buy some fire-crackers, and when he got out to make the purchase they drove off with the smaller boy, whose name is Charley Brewster Ross. He has not been seen by his friends since. The affair was reported to the police, and search was made in all quarters. After a few days, the father advertised for the boy in daily papers. On the 17th the following brief notice appeared in the *Ledger*: "Ross.—We are ready to negotiate." On the same day Mr. Ross received an anonymous letter stating that Charley would be returned for $20,000, and giving assurance that he was being treated well. To this Mr. Ross replied through the personals of the *Ledger*, "Ross will come to terms to the extent of his ability." Another letter was soon received stating that the child would not be given up for less than $20,000. Mr. Ross is a man of limited means, but he at once replied, "Ross is willing; have not got it; am doing my best to raise it." In reply to this the men sent the following: "We know that you are not worth much money, but we are aware that you have rich friends of whom you can borrow. If you love money better than your child, its blood be on your head. Any attempt to ascertain the child's hiding-place will result in its entire annihilation. We will turn the child up on our own terms. We know our business, and we are going to fight it out." At last accounts the parents were enduring agonies at the loss of their child. There is now no prospect of his being found, and it is certain that the ransom must be paid. It is more than likely if this plan succeeds other abductions will occur. Indeed, the telegraph brings an account of another case of child stealing, also in Pennsylvania.

THERE is no surer soul-death, no more inevitable paralyzing of worth and force than self-exaltation and self-praise. The shadow of self blights growth, maims power, cripples influence. There are men in some aspects almost great, in others pitifully small, because they will not stand out of their own shadow. There are men who have the ability and the will to perform the most valiant service for one and another great cause, who are wise, brilliant, eloquent; who yet here been of little or no worth to their fellow-beings, simply because they are willing to do nothing without securing full credit for it, to rear no column in the temple of regenerated humanity, unless they can inscribe their names on its capital.—*A. P. Peabody.*

HERE is a good story that Rev. Dr. Adams tells of himself. A lady parishioner once remarked to him that his sermons were a little too long. "Don't you think so, Dr. Adams," said she, "just a little?" "Ah, good sister," said he, "I am afraid you don't like the very 'sincere milk of the word.'" "Yes, I do," said she, "but you know the fashion now-a-days is condensed milk."

AGRICULTURE is the most certain course of strength, wealth and independence. Commerce flourishes by circumstances, precarious, contingent, transitory, almost as liable to change as the winds and waves that waft it to our shores. She may well be termed the younger sister, for in all emergencies she looks to agriculture both for defence and support. —*Colton.*

THE tide of our sorrows and sins has often arisen from a trivial spring; and the same is true of our earthly joys. Our daily trials and hourly blessings gather something of the radiance of the bow in the clouds in the day of rain, as we receive them from the pierced hands of Him whose death and intercession have made all things ours.—*Anna Shipton.*

ASTRONOMERS tell us that the tail of the comet will, after passing over the earth, envelop the moon, thus varifying the words of the poet:

"Soon as the evening shades prevail
The moon takes up the wondrous tail."

IN ancient times, the sacred plow employed the kings and awful fathers of mankind. *Thomson.*

THACKERAY was not a humorist in the sense that Dickens was a wit, in the sense that Jerold was; but he now and then said a good thing in a quiet way. He was pestered on one occasion, while in the country, by a young gentleman of an inquiring turn of mind, as to what he thought of this person and that person in England. "Mr. Thackeray," he asked, "What do they think of Mr. Tupper?" "They don't think of Tupper," was the reply. Another man of letters was mentioned, and it transpired that he was addicted to beer drinking. "Yes," said Thackerry, "take him for half and half he was a man." His connection with *Fraser's Magazine* was the subject of conversation, and the right of an editor to change the "copy" of his contributors was discussed. Thackeray maintained that no such right existed, except as regarded errors of grammar, and declared that the only person who could make alterations for the better was the author himself; and, as a rule, editorial changes were blunders. "I told an editor so once, and he did not like it. 'I have no objection to your putting your hoofs on my paragraphs,' I remarked; 'but I decidedly object to your sticking your ears through them.'" "He never forgave you, of course." "I never thought to ask." Thackeray and Jerold used to sit near each other at the *Punch* dinners, and Jerold was inclined to wrangle if everything was not to his liking; but Thackeray would keep the peace. "There's no use in our quarreling," he said: "for we must meet again next week." —*Lippincott's Magazine.*

KEEP WOOING.—An old story contains a lesson which many married couples have not yet learned. When Jonathan Trumbull was governor of Connecticut, a gentleman called at his house one day requesting a private interview. He said: "I have called upon a very unpleasant errand, sir, and want your advice. My wife and I do not live happily together, and I am thinking of getting a divorce. What do you advise, sir?" The governor sat a few moments in thought; then turning to his visitor, said, "How did you treat Mrs. W——, when you were courting her? and how did you feel toward her at the time of your marriage?" Squire W—— replied, "I treated her as kindly as I could, for I loved her dearly at that time." "Well, sir," said the governor, "go home and court her now just as you did then, and love her as when you married her. Do this in the fear of God, for one year, and then tell me the result." When a year passed away, Squire W—— called again to see the governor, and said: "I have called again to thank you for the advice you gave me and to tell you that my wife and I are as happy as when first married. I cannot be grateful enough for your good counsel." "I am glad to hear it, Mr. W——" said the governor, "and I hope you will continue to court your wife as long as you live."

HUSBAND AND WIFE.—Preserve sacredly the privacies of your house, your marriage state and your hearts. Let not father or mother, brother or sister, nor any third person, even presume to come in between you two, or to share the joys or sorrows that belong to you alone, to you two. With God's help build your own quiet world, not allowing the dearest earthly friend to be the confidant of aught that concerns your domestic peace. Let moments of alienation, (if they occur) be healed and forgotten at once. Never—no, never—speak of it outside, but to each other confess, and all will come out right. Never let the morrow's sun still find you at variance. Renew or review the vow at all temptations—it will do you both good. And thereby your souls will grow together, cemented in that love which is stronger than death, and you will become truly one. Thus do I pray for every married pair. —*A wife of forty.*

WE are ruined not by what we really want, but by what we think we do; therefore never go abroad in search of your wants. If they be real wants they will come home in search of you, for he that buys what he does not want will soon want what he cannot buy.

OLD age, says the proverb, is a courtier; he knocks again and again at the window and the door, and makes us everywhere conscious of his presence. Woe to the man who becomes old without becoming wise; woe to him if this world shuts the door without the future having opened its portals to him.

A FOOL and a lazy man stand a worse chance to succeed as a farmer, than in any other department of life. To be a good farmer, a man must have good common sense, and he must reduce the facts that nature reveals to him to practice. He must follow nature, not force her. He must be obedient to her mandates.

THE first three men in the world were a gardener, a plowman and a grazier; and if any man object that the second of these was a murderer, I desire that he would consider that as soon as he was so, he quitted our profession and turned builder.—*Cowley.*

IT is not high crimes, such as robbery and murder, which destroy the peace of society. The village gossip, family quarrels, jealousies, and bickerings between neighbors, meddlesomeness and tattling, are the worms which eat into all social happiness.

THINK well always, and then do as well as you can.

THE happiest women, like the happiest nations, have no history.

YOUNG FOLKS' COLUMN.

Baby Asleep.

Baby has gone to the land of dreams—
Hush or you'll wake him! how still it seems;
Carefully shut the bedroom door,
Noiselessly tip-toe across the floor.
See how sweet he looks as he lies,
With fringed lids shutting the dark brown eyes,
One pink palm pressing the dimpled cheek
And his red lips parted as if to speak.

Yonder, in the low rocking chair,
Is a broken plaything—he left it there;
And there in the corner beside the door
Lies a motley heap of many more;
Jack-knife, picture hook, marbles, ball,
Tailless monkey and headless doll,
And new bright pennies, his special joy,
By the father hoarded to please his boy.

There lie his shoes on the kitchen floor,
That all day long they pattered o'er—
Battered and chubby, short and wide,
Worn at the toe and cracked at the side;
And there hangs the little dress he wore,
Scarlet flannel and nothing more,
But there clings about it a nameless charm,
For the sleeves are creased by his dimpled arm.

Dear little feet, that are now so still,
Will ye ever walk in the paths of ill?
Rosebud lips, will ye ever part,
Bringing pain to a mother's heart?
Keep, O Father, that baby brow
Ever as pure from stain as now;
Lead him through life by thy guiding hand
Safely into the better land.

Death of the Chimpanzee.

"Joe," the Chimpanzee, which for three years has had the honor of a separate apartment in the monkey house at the London Zoological Gardens, recently died after about two months' illness. Of all the members of the ape tribe the chimpanzee is probably the most tractable, and of all the chimpanzees Joe was perhaps the best tempered fellow that ever existed. The readiness he always exhibited to learn any new trick the ingenuity of his keeper could devise was remarkable; and the good temper he always displayed when asked to perform them for the benefit of visitors was not less surprising. He emulated the achievements of Blondin and Leotard with equal success, and seemed especially proud of himself, when he was ordered to go through the series of gymnastic exercises which embraced the feats that have made the names of those men known all over the world.

If a nut were presented to him he would not crack it in the usual way, but would place it under the donor's foot and assist the process by administering a sharp blow with his fist on the toes of his unsuspecting visitor. He always seemed devotedly attached to his keeper, and when shut up close in his room would summon him by repeated knocks at the door. In the evening, when the time for bidding him "good night" approached, he used frequently to go into quite a frenzy of grief, tearing his hair, rolling on the floor, and screaming out like a bad-tempered, spoiled baby with extra strong lungs. Nevertheless, he was really good-tempered, and was never known to maliciously attempt to hurt any one.

He would show his visitors to the door with the utmost politeness, turning the handle and opening the door without assistance, and shaking hands with his departing guests. Joe had one fault. He might have taught pickpockets a lesson in the pilfering line of business which would have borne dangerous fruit in a London crowd.

Lofty Language.

You should have heard the children laugh! They were all going to the brook for cresses, and little Maggie Palmer was telling them about a negro man her mother had engaged during house-cleaning time. It appears he had once been a servant to a learned professor, and so had picked up any number of big words.

"Oh, girls! said Maggie, "you just ought to have heard him! When mamma proposed to yellow wash the kitchen walls, he stood up just like a dandy and said:

"'Miss Palmer, marm, if you will allow me to speak differentially about dis matter, whitewash would be appropriater, as discoloration of smoke and multifarous kitchen gasses is more conspicuouser than the yellow wash, marm.' And when mamma asked him what he would charge for whitewashing the hall ceiling, he made *such* a bow, and said:

"Can't say circumstantnally, marm. The altitude of my charge will depend on the elewation of the walls.'"—*St. Nicholas.*

TAKE a company of boys chasing butterflies, put long tailed coats on the boys, and turn the butterflies into guineas, and you have a beautiful panorama of the world.

HE KNEW IT.—"Arthur," said a good-natured father, "I did not know till to-day that you had been whipped last week."—"Didn't you, pa," replied hopefull; "I knew it all the time."

YOUNG Friendless asserts that he always finds himself more at sea when on shore than when he is on board his ship.

MANY a rich man, in bringing up his son, seems ambitious of making what Aaron made —a golden calf.

DOLLARS and sense do not necessarily travel together.

GOOD HEALTH.

The Human Frame.

No. 9—The Bones.

The bony framework of our bodies, representing as it does a mechanism permitting the most varied and complicated movements possible, consistent with the integrity of the machine as a whole, is not the least remarkable portion of "the house we live in." It is a perfect adaptation of means to ends; of physical structure to physical wants. Anatomists differ as to the number of pieces constituting the osseous system, some computing the teeth and sesamoid bones, while others reject these, and reckon only the true bones. Including the patellas (knee caps), which though sesamoid are always computed, there are 206 distinct bones in the human skeleton. These are fastened, or articulated, together in a great variety of ways; as for instance, the compact, dentated articulation of the cranial bones, which will permit fracture of their substance before the bones themselves will separate, and the free, "ball and socket" joint of the humerus (arm bone) with the scapula (shoulder blade). Of course, having to subserve so many different purposes, bones are very differently shaped. All the scientific principles involved in architecture or dynamics are portrayed more or less faithfully in their construction and adaptation; as for a familiar example, the power of the arch to resist superincumbent pressure is well illustrated in many portions of the body, as the vaulted bones of the skull, the foot, etc.

As to their chemical composition, they consist of about one-third animal, and two-thirds earthy matter. The animal, or organic, matter is chiefly gelatin; the earthy, or inorganic, consists for the most part of the phosphate of lime, carbonate of lime, etc. As is well known, in old age the earthy matter greatly predominates over the animal, thus rendering the bone exceedingly brittle and easily broken; while during childhood the reverse is the case, and the long bones of the infant may be bent considerably without being broken. Under an unhealthy *regime*, or insufficient earthy food, this animal element preponderates to such an extent that it becomes a fruitful source of disease or deformity; producing most commonly that disease known as "rickets." This disorder is always a result of deficient nutrition, and can be remedied in almost every case by correcting and toning up the digestion, and supplying food which contains an abundant proportion of the phosphates.

It would be well, also, if mothers would bear in mind the tender, cartilaginous condition of the bones of their children in early infancy, and not encourage, as is too often done, the precocious use of the child's limbs. Nothing is more annoying to the thorough anatomist than to see little, puny children tottering about on limbs which are bending beneath their load, and which, from this reason, are destined to cause their possessor to be dubbed in after life as "bow-legged."

Bones are very often diseased, broken or dislocated. In all such cases they should have the care of a competent physician; although it is wonderful to note, especially in the lower animals, the remarkable restorative power which nature sometimes exercises in cases of fractures, etc. We have frequently seen instances where a bone has been broken and the two ends widely separated, when new bony material was thrown out and the bones united and presenting the novel appearance of a square "elbow" in their course.

SACCHARATED CALOMEL CONTAINS CORROSIVE SUBLIMATE.—Dr. Polk, of Philadelphia, in the *Medical Times*, calls attention to the fact that corrosive sublimate is developed when calomel is rubbed up with sugar. He administered 10 grains a month after its preparation, with such poisonous effects as led him to test the compound, with the result as stated. He quotes from Alpius, who says: "When calomel is mixed in powder with white sugar, or calcined magnesia, or bi-carbonate of soda, corrosive sublimate is formed in 24 hours. Rather large quantities are formed in powders composed of calomel, white sugar and bi-carbonate of soda." We believe it is the general opinion among practitioners that the increased activity of the saccharated calomel, which, by the way, is an old remedy, depends on the increase of surface caused by its diffusion. But the development of the chloride puts a serious face on the matter.

WOMEN OF ENGLAND AND AMERICA.—We begin very much to doubt that the women of England are any more healthy than those of America, though the notion has a long time been prevalent. English women are larger, plumper and fatter than American women, but they do not perform so much work. American women are great workers, and have good powers of endurance. They are tough. If they would obey the laws of health they would be nearly or quite free from illness, except such as is inherited. It is said that English women are great walkers; but this does not indicate higher health, but habit.—*Herald of Health.*

STRYCHNINE POISONING.—A person who had taken five grains of strychnine for the purpose of committing suicide was successfully treated by skilful applications of chloroform, which alleviated the spasms. At the time a physician was called in, the poison had evidently been absorbed, and emetics were consequently useless.

Muscular Movement Without Life.

The persistence of motion in decapitated snakes, turtles and other low forms of life is familiar to every one. It is commonly explained by the relatively large nervous ganglia, independent of the brain, of such creatures. But it appears that many if not all muscles may contract without that stimulus of nervous action, with which alone we associate the possibility of conscious life. A striking illustration is given by Dr. Brown-Séquard in the case of two decapitated men. The arms were cut off; and for thirteen or fourteen hours, their muscles contracted in response to irritation by galvanism or mechanical stimulants. After that length of time, all signs of life had disappeared. He then injected the blood of a man into one of the arms and the blood of a dog into another. Local life was restored in both; the muscles became irritable, and the strength of contraction extremely powerful. In the arm in which human blood had been injected, the contraction was stronger than during life; yet the nerves remained quite dead.

On another occasion the same observer kept the eye of an eel, removed from the body, at a temperature of 36° to 40° Fah., for a period of sixteen days. By that time the eye was in almost complete putrefaction, yet the iris contracted when exposed to light. Nervous action was impossible, and muscular fibers themselves were considerably altered; yet they acted.

It is in connection with the rhythmical movements of the heart and other organs, however, that the most striking proofs of muscular action independent of the nerve centers are found. The diaphragm, for example, may be separated completely from the spinal chord without interruption of its rythmic action. Similarly the heart of a dog has continued to beat for forty-eight hours after its removal from the animal, and there is recorded the case of a man at Rouen whose heart was found to beat for 36 hours after the death of the body by decapitation. "I dare say," observes Dr. Brown Séquard, "that the great cause why we see those organs stop at death so quickly is that the phenomena of arrest of their activity have taken place at the time of death," the phenomena of arrest, we may add, being quite independent of the cessation of life. Other observers have demonstrated the rhythmic action of numerous other organs in man and the lower animals; motions that persist after, not death merely, but the entire separation of the parts from the rest of the body. Indeed Dr. Brown-Séquard claims to have found that rythmical motion is a common property of all contractile tissues, but one which shows itself only under certain conditions, different from the ordinary circumstances of life.

Still more remarkable is the fact that motions closely mimicking voluntary movements can go on in the absence of conscious life.

Dr. Séquard mentions a case in which he was called to see a man who was thoroughly dead of cholera, yet who persisted in certain complicated movements distressingly suggestive of life. The dead man would lift up his two arms at full length above his face, knit his fingers together as in the attitude of prayer, then drop the arms again and separate them. These movements were repeated many times, with decreasing force, until at last they ceased. To persons not knowing what may take place in the human body after death, these singular movements, observes the doctor, must certainly have looked as if the will power had been directing them. In fact, the family and friends all thought the dead man alive, and many tests had to be applied to convince them that death had really taken place.

It is worthy of notice in this connection that it is generally with the victims of cholera and other sudden and violent diseases that *post mortem* movements are most common, and consequently the suspicion of premature burial most likely to arise. That such movements are wholly independent of life was demonstrated beyond a doubt by Dr. Dowler, of New Orleans, who adopted the heroic expedient of cutting off the limbs of patients, dead beyond hope of recovery from cholera and yellow fever. Notwithstanding their separations from the nervous center, the amputated limbs continued their seemingly voluntary movements. Whatever may have caused them, it is evident that these imitations of life were not due to anything that could be associated with consciousness.—*Scientific American.*

AIR-PROOF FABRICS.—Air-proof fabrics ought to have only a very limited use. In India-rubber or gutta-percha textures we feel highly uncomfortable when we have to undergo much exercise, or have to give off more heat than usual. They become inconvenient, not because they stop the change of air entirely, which they cannot do, in fact, on account of the necessary openings in them; but only because they limit the universal exchange of air in the underlying garments. For protection against the wet from without they are well suited, but they produce another wet on our skin by impeding evaporation. They may be used in wet weather, when accompanied with cold or wind, but never, though wet, when it is warm or calm.—*Pettenkoffer.*

NEW CURE FOR RHEUMATISM.—Dr. Wagonhats, of Ohio, has cured himself of two severe attacks of acute rheumatism, by insulating his bedstead with a glass tumber under each of its legs. He has had the like success with two patients. How would boots with non-conducting soles answer to prevent rheumatism? —*Pacific Medical Journal.*

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SAN FRANCISCO:

Saturday, August 8, 1874.

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Inquiry About Grama Grass.

EDITORS PRESS:—Seeing an article in your issue of July 25th, headed "Grama Grass," I would be pleased to have you inform me where the seed can be obtained and price; also, what time to sow it. Yours truly, A GRANGER.

Kelseyville, Lake county, Aug. 3d, 1874.

[The seed can not be obtained at present in this State, the only localities where it grows being portions of New Mexico and Arizona, as stated in the article referred to. We presume it would be necessary to send to Santa Fé, New Mexico, for the seed, and for the first invoice or so the expense would be considerable. Once here, it would be subject to the same rules for its cultivation that similar grasses are, as blue grass, etc. The article in question was written in the expectation of some of our readers having New Mexican correspondents of whom they could obtain a sufficient amount of seed to give it a trial, and which, we trust, is the case. Unless our correspondent is so situated, he will have to wait for some other experimentist for the present.—EDS. PRESS.]

ANOTHER PRESENT OF FRUIT.—Mr. James Lick will please accept the thanks of parties engaged upon the RURAL PRESS for the three boxes of apricots sent to the office on Friday of last week. They afforded a general feast of apricots for all employed in the establishment.

THE first annual fair of the Bay District Fair Ground Association is to commence on the 7th and end on the 12th of September, 1874, at San Francisco, Cal.

Is the Potato "Played Out?"

It would probably be safe to declare that in nothing that the farm or garden produce have there been more "improved varieties" than in potatoes; and it would be equally as safe to guarantee that those who have been "sampling" this vegetable for the last quarter century, will agree with us in the assertion that none of the improvements excels the favorite potato at the commencement of their services in this matter. Where is there among the potatoes of the period anything equal for baking purposes to the "late pinkeye" of 25 or 30 years ago? On the other hand it will, we think, be as generally admitted that the present time offers nothing in this line that will compare with the poor varieties of those days, in solidity and rankness of flavor. There were fewer varieties then than at present. This was before the days of the early pinkeye and the early kidney potato; what was known as the "early potato" being a white variety, resembling the early rose in appearance, but far inferior in quality. It was only eaten as an early potato, and was a mere substitute for potatoes at that. The dryness of the regular pinkeye, with its tendency to burst while cooking, unfitted it for boiling; and the chief reliance for this purpose was the "orange potato," so named from its color. A large, coarse, grained, red potato, which was used principally for feeding to stock, about completed the assortment of those days.

The varieties of potatoes that have been admitted under the general head "improved," and have enjoyed a brief reign on the table, are almost numberless. Undoubtedly they were all of them, in their day, improvements on the degenerating varieties whose places they supplied. It requires a good deal of patience, perseverance and judgment to produce these varieties, and those who originated them deserve as much credit as though the improvement had been as permanent as they evidently anticipated; for they probably accomplished all that was possible, under the circumstances. We may suppose each to have triumphantly exclaimed, "Eureka," and we may imagine the disappointment of each as they saw their favorites loose caste, to be superseded by other improved varieties. They probably attributed this change to the fickleness of the public appetite; but such was not the fact. Mutability is particularly characteristic of the potato. Perhaps the pea ranks next in this failing. But even peas, like the cereals, are, in a measure, saved from deterioration by an interchange of seed between different localities. With the potato, however, the advantage is scarcely perceptible; and but little effort has been made on the part of potato-growers in this direction.

The present level of the cultivated potato is so far above its natural condition, that it seems as though there were a continual, unvarying tendency to go back to its normal state; and as though nothing but the production of new varieties from the seeds of the vine can prevent, even temporarily, this retrogression. We do not by any means believe that the potato is "played out," or even deteriorating; but prudence should teach us to still keep striving for novelty and change. And may we not hope to discover here the existence of a law by which the vegetable and animal kingdoms, where improvement has been effected, recede to their natural level when efforts at improvement cease?

Various causes have been assigned for the deterioration of the potato. In searching for these causes the attention has been given principally to the soil; the prevailing supposition being that the potato, in its growth, exhausted certain essential properties. A series of experiments made by Professor Ville, in France, was supposed to prove that the diseases that attack the potato are mainly the result of a deficiency in the supply of potash in the soil. This would probably accelerate the deterioration, but we have never observed any material improvement by change of soil. This vegetable has been bred up to a false and unnatural position; and by pampering it with potash and other stimulants it may maintain for a longer time its apparent health; but the history of the potato, we think, warrants the conclusion that it is continually tending to the low level from which artificial cultivation has elevated it.

But it does not necessarily follow that "the potato is played out." When it has reached a diminutive size in its retrogressive course and has become "soggy" in texture and rank in flavor, it seems to have reached its natural level and to remain there. The writer visited some years since a locality on the shores of Lake Michigan where the potato was allowed to grow in its primitive condition and gathered by the semi-civilized Indians for food. No cultivation was bestowed upon the soil with the exception of the stirring of the earth which the process of digging produced. The soil was of excellent quality, a light, dark loam, and the climate exceedingly favorable, allowing the potatoes to remain in the ground throughout the season without injury from the frost. Here the Indians would go to satisfy their immediate wants—never really harvesting—but using sufficient forethought to leave enough potatoes in the ground for next year's seed. They had practiced this system of farming for a term of several years, never planting, and no complaints were made about deterioration. The potato had reached its natural level.

While we have no fears that the potato will entirely run out, we can see no reason why we should not still keep striving for improvement. This must be done to prevent deterioration. We are hardly warranted in the belief that any better potato can be produced than former years have afforded; but, we may reasonably hope to escape the infliction of some of the execrable varieties that have been set before this and the preceding generations.

The Centennial Exhibition.

The readers of our paper are probably well informed as to the general plan of our great International Exhibition which is to be held in Philadelphia, 1876. For the benefit of those who desire more explicit information on the subject, below we give the rules and regulations of the Exhibition. Commissioners from all the States and Territories have been appointed. J. Dunbar Creigh, San Francisco, is the Commissioner for California. Alternate, Benjamin P. Kooser, Santa Cruz. Mr. Creigh is also one of the Vice-Presidents of the Commission. Joseph R. Hawley of Connecticut is President of the Commission for the year 1874-5. John L. Campbell of Indiana is Secretary for the same term:

RULE I.—The Exhibition will be held at Fairmount Park, in the City of Philadelphia, and will be opened on the 19th day of April, 1876, and closed on the 19th of October following.

The ten departments of the classification which will determine the relative location of articles in the Exhibition—except in such collective exhibitions as may receive special sanction—and also the arrangement of names in the Catalogue, are as follows:

I. Raw Materials — Mineral, Vegetable, and Animal.

II. Materials and Manufactures used for Food, or in the Arts, the result of Extractive or Combining Processes.

III. Textile and Felted Fabrics; Apparel, Costumes, and Ornaments for the Person.

IV. Furniture and Manufactures of general use in construction and in dwellings.

V. Tools, Implements, Machines and Processes.

VI. Motors and Transportation.

VII. Apparatus and Methods for the increase and diffusion of knowledge.

VIII. Engineering, Public Works, Architecture, etc.

IX. Plastic and Graphic Arts.

X. Objects illustrating efforts for the improvement of the Physical, Intellectual, and Moral Condition of Man.

RULE II.—Applications for space and negotiations relative thereto should be addressed to the Director-General, International Exhibition, Philadelphia, Penn.

RULE III.—Exhibitors will not be charged for space. A limited quantity of steam and water power will be supplied gratuitously. The quantity of each will be settled definitely at the time of the allotments of space. Any power required by the exhibitor in excess of that allowed will be furnished by the Commission at a fixed price. Demands for such excess of power must also be settled at the time of the allotment of space.

RULE IV.— Exhibitors must provide, at their own cost, all show-cases, shelving, counters, fittings, etc., which they may require; and all countershafts, with their pulleys, belting, etc., for the transmission of power from the main shafts in the Machinery Hall. All arrangements of articles and decorations must be in conformity with the general plan adopted by the Director-General.

Special constructions of any kind, whether in the buildings or grounds, can only be made upon the written approval of the Director-General.

RULE V.—The Commission will take precautions for the safe preservation of all objects in the Exhibition, but it will in no way be responsible for damage or loss of any kind, or for accidents by fire or otherwise, however originating.

Favorable facilities will be arranged by which exhibitors may insure their own goods.

RULE VI.—Exhibitors may employ watchmen of their own choice to guard their goods during the hours the Exhibition is open to the public. Appointment of such watchmen will be subject to the approval of the Director-General.

RULE VII.—Exhibitors, or such agents as they may designate, shall be responsible for the receiving, unpacking, and arrangement of objects, as well as for their removal at the close of the Exhibition.

RULE VIII.—The transportation, receiving, unpacking, and arranging of the products for exhibition will be at the expense of the exhibitor.

RULE IX.—The installation of heavy articles requiring foundation should, by special arrangement, begin as soon as the progress of the work upon the building will permit. The general reception of articles at the Exhibition Building will commence on January 1st, 1876, and no articles will be admitted after March 31st, 1876.

RULE X.—Space not occupied on the 1st of April, 1876, will revert to the Director-General for reassignment.

RULE XI.—If products are not intended for competition, it must be so stated by the exhibitor; and they will be excluded from the examination by the International Juries.

RULE XII.—If no authorized person is at hand to receive goods on their arrival at the Exhibition building, they will be removed without delay, and stored at the cost and risk of whomsoever it may concern.

RULE XIII.—Articles that are in any way dangerous or offensive, also patent medicines, nostrums and empirical preparations whose ingredients are concealed, will not be admitted to the Exhibition.

RULE XIV.—The removal of goods will not be permitted prior to the close of the Exhibition.

RULE XV.—Sketches, drawings, photographs, or other reproductions of articles exhibited, will only be allowed upon the joint assent of the exhibitor and the Director-General; but views of portions of the building may be made upon the Director-General's sanction.

RULE XVI.—Immediately after the close of the Exhibition, exhibitors shall remove their effects, and complete such removal before December 31, 1876. Goods then remaining will be removed by the Director-General and sold for expenses, or otherwise disposed of under the direction of the Commission.

RULE XVII.—Each person who becomes an exhibitor thereby acknowledges and undertakes to keep the rules and regulations established for the government of the Exhibition.

Special regulations will be issued concerning the exhibition of fine arts, the organization of international juries, awards of prizes, the sale of special articles within the buildings, and on other points not touched upon in these preliminary instructions.

RULE XVIII.—An official catalogue will be published in four distinct versions,—viz., English, French, German and Spanish. The sale of catalogues is reserved to the Centennial Commission.

RULE XIX.—Communications concerning the Exhibition should be addressed to "The Director-General, International Exhibition, 1876, Philadelphia, Penn."

The Centennial Commission reserves the right to explain or amend these regulations, whenever it may be deemed necessary for the interest of the Exhibition.

A. T. GOSHORN, Director-General.

JOHN L. CAMPBELL, Secretary

Philadelphia, July 4th, 1874.

The Comet and the Weather.

"Is he gone and hath nothing?" —*Mercutio.*

Perhaps some of our readers may have been led to exclaim, on the sudden and quiet disappearance of our late celestial visitor, with Mercutio, after his encounter with the "furious Tybalt," that he has been suffered to take his departure with too little ceremony or note—that he is gone and hath nothing. No doubt astronomers have embraced, to the utmost extent, all the manifold advantages which they now possess over observers on previous occasions, in securing every attainable fact which has been placed within their reach, as to all the various phenomena connected with these curious wanderers in space, and that in due time all the information gained will be spread before the public. These observations will no doubt do much to remove from the public mind the superstition which heretofore has so generally endowed them with attributes of terror, and caused them to be regarded as dreaded harbingers of disaster. Many of our poets, by their bombastic descriptions, have done much to confirm and perpetuate these superstitious notions. Instance the following allusion to several of these visitors by Du Barta:

"Here, in the night appears a flaming spire,
There, a fierce dragon, folded all in fire;
Here, with long, bloody hairs, a blazing star
Threatens the world with famine, plague and war;
To princes death, to kingdoms many crosses;
To all estates inevitable losses;
To herdsmen rot, to plowmen hapless seasons,
To sailors storms, to cities civil treasons."

Happily, however, the day of superstition is fast passing away, and comets are now known and generally regarded to be harmless, homeless wanderers in space, consisting, for the most part, of such attenuated forms of gas that they could scarcely penetrate even the highly rarified substance of the outer atmosphere of this earth; while their tails are literally nonentities, so far as substance is concerned, the mere shadowy reflections of polarized light. They no longer terrify or disquiet, save when ignorance is most gross, and so unnecessarily as to be more deserving of contempt than pity.

Do Comets Affect the Weather?

The attribute of danger from the presence of comets has now been pretty well eliminated from the minds of men; but there is nevertheless a very strong probability that the near approach of one of these bodies to the earth may to some extent affect the meteorological condition of our atmosphere, and thereby cause an unusual prevalence of storms. Either such is the case, or there is a most remarkable coincidence between the occurrence of such things and the near approach of comets, as may be seen from the following recorded facts:

During the presence of the comet of 1783, a very dense fog continued for fully a month over nearly or quite all Europe, Africa and North America. So far as could be determined by the inferior means of observation then available, this fog appeared at about the same day in all this widely extended area. The fog rose above the loftiest mountains; was not dissipated by even the heaviest rains or highest wind. It is said to have been a very dry fog, producing no especial effect upon the hygrometer, and to a certain extent possessing the property of phosphorescence.

The same or very similar phenomena were observed during the near approach of the comet of 1831, the tail of which was thought to have swept over and completely immersed the earth within its supposed substance.

The comet of 1826 was accompanied by unusually heavy rains, and consequent inundations.

The brilliant comet of March, 1848, seemed to have brought with it unusually cold and severe weather. The season was unfavorable for fogs and rains.

That of 1858 brought with it a dense and unpleasant fog, which was very general and lasted three weeks.

The comet of 1861 was noted for a series of tornadoes in regions separated by thousands of miles, and accompanied by most unusual electrical phenomena. Water spouts were numerous, often attended with severe inundations. These phenomena reached their culminating point during the day on which the comet made its nearest approach to the earth.

And now, at the very time when the visitor which has just left us was sweeping by us at its nearest approach, the Storm King has been holding a most terribly destructive course. The eastern side of the continent has been swept by innumerable thunder storms, while scores of human beings have been suddenly struck down by lightning. Every storm that passed seemed to have hurled thousands of thunder bolts upon the earth, scattering dwellings, churches and trees into splinters.

The terrible outburst from the clouds at and around Pittsburg, Pa., surpasses any disaster of the kind, perhaps, of which we have any record, especially in the sacrifice of human life. From various parts of the State of Nevada, from Arizona and Southern California comes the same terrible word of destruction by storm and rain. These storms, so sudden, so much of the same character, so far apart geographically, coming so simultaneously with the nearest approach of the comet, and taken in connection with so many similar coincidences in times past, would seem, very naturally, to suggest, in the mind of the inquirer, some connection between the two. The supposition is barely possible, but we leave the problem to the researches of those especially learned in comet lore.

The Mammoth Pavilion Accepted.

On Friday, July 31st, the Pavilion of the Mechanics' Institute Fair was formally transferred from the hands of the contractor, Mr. James Drury, to those of the Board of Managers of the Association. Besides the Board of Managers, a number of invited guests were present, including several members of the press. The RURAL PRESS being duly represented there, and, as many of the facts connected with the construction of the building are of a very interesting character, we propose to lay a few of them before our readers.

On the 7th of May the contract was awarded; and only three months previous to the date of our present issue much of the lumbor of which the Pavilion is constructed was growing in the forests of Oregon. Many of the timbers were cut to order to suit the vast dimensions of the building. Some of these timbers measure 80 ft. in length, 12x12 in., without a knot or flaw. The materials of which the structuro is composed are as follows: 1,703,000 feet of lumber, exclusive of shingles, which were 1,398,000 in number; 190,000 bricks for foundation; 4,000 lbs. of iron bolts; 306 kegs of spikes and nails. The building contains 6,287,000 onbic feet, covering about 4½ acres of ground. The hight of the great exhibition building, from the floor to the arched ceiling, is about 90 feet. The first floor does not cover the whole area of the building, a wide space on the east side heing appropriated to the display of horticulture.

The exhibition rooms of the upper floor extend nearly the full length of the building; the west side being reserved for the art gallery. A promenade 16 feet wide extends around these upper exhibition rooms. This is to be kept exclusively for promenading, and will offer the most favorable point for forming a general conception of the size of the building. A person standing at one end here and observing a group of men at the other end, could hardly recognize his friends among them—no matter how well dressed they might be. It is estimated that on the side opposite the picture gallery—including promenade—a thousand soldiers could parade.

The massive arches that span the enclosure, and the ornameutal halustrade that horders the promenade, give to the building, even in its present unoccupied conditiou, a very inviting appearanoe. But when all the exhibiting space is filled with the choicest products of industry and art, when the unoccupied space below, and the promenade above are thronged with delighted spectators, the whole brilliautly lighted from four thousand gas burners, the plants and fountains in the horticultural department refreshing the senses with their delicate influence, a scene will be produced such as the spectator may not see duplicated in a lifetime. We hope our rural friends will endeavor to so time their visits to San Fraucisco as to enable them to take their places among the tens of thousands who will visit this exhibition daily.

Mr. Drury, in completing his contract, rather startled the community, being one week ahead of the specified time. This gives the mauagers ample time to complete the inside arrangements. They are now "masters of the situation" at every point.

The almost incredibly short space of time in which this mammoth building has beeu constructed may possibly arouse a suspicion that it has heen done in too hurried a manner, and at the sacrifice of thoroughness; but such is not the case. The Building Committee was composed of men who would have permitted nothing of this kind, even had the contractor heen so disposed; and one of the most pleasant features of the pleasant occasion of last Friday was the extreme satisfaction expressed by all the managers with the manner in which the work had been done. In regard to this matter the unanimous thanks of the Board were voted to Mr. Drury. The pavilion, even in the course of its construction, has been one of "the sights" of the city, and has been visited by thousands, and the work examined by nnmbers of competent judges. We have not heard a word of unfavorable criticism. Every considération has been given to the safety and comfort, as well as to the ontertainment of visitors.

In locating the pavilion, the managers chose a situation most accessible by the street railroad cars, and in as close proximity as possible to the business portion of the city. The huildiug is located on Eighth street, extending from Market street to Mission street. The lot upon which the pavilion is erected is an extremely valuable one, and could scarcely be purchased at any price; but the owner, Mr. A. B. McCreery, generously granted to the Mechanics' Institute a lease of the lot for a term of five years, for the mere nominal considératiou of paying the taxes and street assessments on the property during that time. The Institute has the privilege of retaiuing possessiou of it the sixth year by paying $7,500. The managers were truly fortunate in securing this desirable location on such extremely favorable terms, and the generosity of Mr. McCreery is duly appreciated by the whole community. The entrance for visitors is on Mission street, and comfort and convenience in ingress and egress have been well provided for here. The upper story of the building juts over the sidewalk, forming a covered way by which visitors can enter from carriages or cars without exposure to the weather, and also protecting the spacious entrance from driving dust and rain, should storms occur.

One of the conspicuous enterprises connected with the approaching exhibition is the publication of a daily paper—the "Mechanics' Fair Daily."

This is to be published by Dewey & Co., proprietors of the SCIENTIFIC PRESS and RURAL PRESS. The managers of the paper, like the mansgers of the fair, are fully up to time in their arrangements. The exhibition opens on August 18th, and will continue from four to six weeks.

Keeping Butter.

In a recent issue of the RURAL PRESS we gave some comments on the keeping qualities of California butter; expressing the opinion that, probably, one of the reasons why California packed butter arrived in the Eastern cities in such good condition is simply that the butter was good before it was packed. A late number of the *New England Homestead*, in giving a bit of advice about packiug butter for market, alludes to the California method, and seems to give it preference over any other style, where distant transportation is required. We would like to see our Eastern butter-makers adopt the California method of packing; but we do not believe that hutter made in the atmosphere that surrounds most of our Eastern dairies would, though pickled in the California style, "ship and keep to any part of the world."

We give below the suggestious of the paper alluded to ahove:

Great difficulty has often been experienced in keeping hutter, and getting it to consumers, after a fine article has been made. For short distances use the Philadelphia butter tub, or ordinary hutter hox, each of which has a central metallic—usually zinc—box for ice, around which on shelves is placed the butter. For long distances wrap the butter—pound or two pound packages—in thin muslin, put in the tub or barrel in layers, aud filled with sweet pickle. Butter has come from California in this manner, and would ship and keep, if so prepared, to any part of the world. Before packing soak the vessel in strong brine for two or three days to saturate the staves.

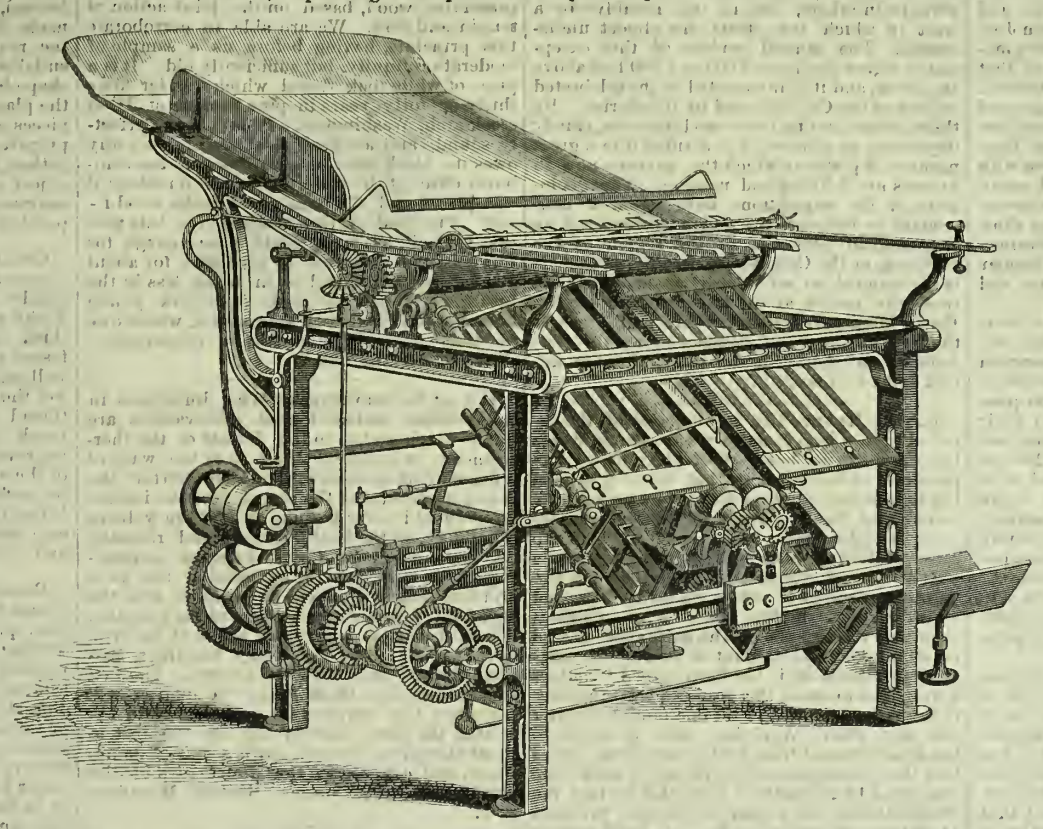
THE agitated elements from the north, south, east, west, the valleys and the mountains, reports of thunder and lightning displays, attended with cloud-burst, wind-storms, and deluges of rain still continue to reach us. Arizona has had these visitations. They have been witnessed in San Bernardino, Inyo and other counties where but little rain falls eveu duriug the winter season. At San Diego, there was, on the 29th ult., a grand electrical exhibition, such as is seldom witnessed iu this State. Peal after peal of thundor rolled along, and incessant flashos of forkod lightning lit up all the eastorn and northeastern heavens. This display was continued for nearly three hours, the storm gradually passing around to the north and northwest.

THE agents of the bondholders of the California and Oregou railroad are examiuing into its affairs.

Our New Folding Machine.

Among the improvements necessary to facilitate our increased husiness, we have recently procured a patent newspaper folding machine, and as we judge that most of our readers are not familiar with this class of machinery, we give herewith an engraving ropresentiug our new folder, which was manufactured hy S. C. Forsaith & Co., of Manchester, N. H. Until lately, the foldiug of newspapers in the publishing houses of the country required a large number of hands to perform, and this item iu the expense account was of no little consequence. By the employment of the Forsaith machine, the work is accomplished in a highly superior manner. Requiring the services of only a single operator, the machine will fold, in any desired form, 2,500 to 3,500 sheets per hour.

As will he seen by the engraving, the machine is very compact in form, and is a beautiful piece of workmanship. The printed sheets are placed upon the feed board, and the feeder



PATENT NEWSPAPER FOLDING MACHINE.

stands on a small platform hesido the machine. He slides the top sheet of the pile of papers down until its edge is caught by the grippers. These grippers carry the sheet forward along the parallel bars seen in front of the feed board, until it is in position to be creased by the blade which is seen uplifted. This blade descends at the proper moment across the middle of the sheet, doubling it, and at the same time starts it between the rollers, which carry the sheet through, folding it once. The doubled sheet falls upon the inclined bars below the parallel bars, aud is again doubled hy the creasing knife showu helow, so as to again start in between the two inclined rollers, and thus give it a seocnd folding. This operation is repoated twice more by similar devices, and tho paper falls into the V-shaped packing apparatus, shown at the lower right hand corner of the machine, where the papers are neatly packed.

The machines are made to fold sheets of different dimensions, and the sheets in passiug through the machine in the process of folding, are greatly improved in appearance, the results being similar to those produced by the dry press. The papers are, moreover, folded regularly, so that the paper cau be cut without cutting the reading matter.

ANOTHER RESERVOIA BREAK.—The great reservoir supplying the city of Trenton (N. J.) with water, suddenly gave way ou Monday last, sending down an immense volume of water through Pennington and Railroad avenues, in that city, and theuce on to the Deleware. It unindated all the houses in the noighborhood, and compelled the inhabitants to flee for their lives. Almost miraculously no lives were lost; but an immense destruction of property was occasioned. It is said that the break had been observed for some days, and workmen were actually engaged in repairing it when the whole embankment, 30 feet high and 25 broad, suddenly gave way before the pressure of water. These frequent giving way of reservoirs of late is certainly a matter requiring the most rigid scrutiny, hoth into the causes of tho past and the possibilities of the future.

THE SAN JOAQUIN RIVER.—The Stockton *Independent* statos that persous familiar with the San Joaquin river entertain the helief that, at the rato the water is falling, the stream, in the course of two weeks, at the farthost, will be navigable only by hoats of the lightest draught, if navigable at all.

Bay District Fair for 1874.

It is with the greatest pleasure that we call the attention of Califoruia and other cattle breeders to the fair to be held under the auspices of the Bay District Fair Gronnd Association, from September 7th to September 12th. The premium list is just to hand, and is undoubtedly one of the most attractive that has ever been offered in this State. In it we see the first fruits of the Cattle Breeders' Association, through the combined efforts of its membors to bring about a reform in the management of our agricultural fairs. It will be remembered hy our readers that this association (comprising some thirty odd of the most prominent breeders in the State) at the last meeting appointed a committee to confer with the executive committee of the Bay District Society; and is due to the efforts of the former, and the somewhat unexpected, but most judicious acquiescence of the latter that the alterations from the usual routine and list have heen effected. Next year, when the Bay District Society shall have got into proper running order, (for this season everything has been done in great haste,) we confidently expect to see still greater improvements, and the views of the breeders, who certainly are the hest judges of what they desire, adopted *in toto*.

We would call particular attention to the greater importance and attraction attached to the herd and sweepstakes rings. We also notice that the onerous charge of ten per cent. for entries to the latter, which the State Society persistently adheres to, and which has met with the unanimous condemnation of cattle breeders, as well as of other stock breeders, is here done away with. Neither is auy meution made of a *daily* parade of the heavy show cattle, a feature peculiar to California, and which the directors of all our agricultural fairs have hitherto considered indispensable. Amongst other notable changes we find that the premiums on cows are the same as those on bulls, which is as it should be. Jerseys and Alderneys are clubbed together under one heading and class, where they rightfully helong, the difference hetween them being a mere *technicality*; the Ayrshires aud Holsteins, which are both essentially milk cattle, are also made to compete with and against each other in one class. (The wording in the premium list in respect to these last two items is rather dubious, hut we know that the *intent* is such as we have stated). On the whole, we pronounce this list one of the most attractive ever offered in the State, and we consider the Bay District fair entitled to the patronage of all our hreeders. There is, in fact, not the slightest douht in our minds, but that the fair to he held in this city between September 7th and 12th, by the Bay District Fair Ground Association, will bring forth the finest exhibition of cattle, horses, sheep, swine, goats and poultry, etc., ever held in this State, or on the Pacific slope.

STANISLAUS COUNTY AGRICULTURAL FAIR.—At a meeting of the Directors of the Stanislaus Agricultural society, held in Modesto, at tho Farmers' Bank, on July 17th, 1874, it was ordered that the tenth annual exhibitiou should he held at Modesto on the 15th, 16th, 17th and 18th of Septemher. By order of the Board the President appointed Messrs. C. Dorsey, T. S. Bently and Stephen Rogers a commtttee to prepare a programme and prize list, to be submitted to the Board August 1st. The Board adjourned to meet at the Farmers' Bank August 1st, 1874, at 1 o'clock, P. M.

"THE BOW PARK HERD."—We have received a catalogue of the above named herd, the property of Hon. George Brown, Bow Park, Canada. The catalogue contains 254 pages, and the pedigrees of the members of the herd are carefully and elahorately given.

STRUCK BY LIGHTNING.—During one of the storms two weeks ago, Melvina, daughter of D. E. Isbell, was struck hy lightning, at the ranch of her father, on Reese river. She was prostrated by the stroke and severely injured, but will rocover.

KILLED BY COAL OIL.—Another victim of the business of kindling fires with coal oil is Miss Emma Smith, of Helena, Montaua, who was so hadly burued on July 10th that she died on the 12th.

THE Sixth Senatorial District Agricultural Association of the State of California propose to hold a district agricultural fair at Salinas City, Watsonville, Holister, or Santa Cruz, sometime in tho month of October next.

SAVED FROM THE PENITENTIARY.—Von Eten, the forgor, lately arrested in New York, and iu the hands of an officer from this city, to be delivered here, committed suicide in his cell by taking laudanum.

THE OLD STORY.—Another fatal accident took place at San José on the 31st ult. A boy fifteen years old, while dragging a gun over a fence, the muzzle toward him, was shot and almost instantly killed.

Miscellaneous.

Progress of Manufacturing Industries.

From various sections of the State we have gratifying evidences that the people are making progress in the matter of establishing manufacturing enterprises. These are the more observable in the larger interior cities. In Sacramento smelting works have recently been erected, and although work has been somewhat retarded for a lack of water, a considerable quantity of ore brought from Utah has been reduced to bullion. But there is a demand now made in Sacramento for the erection of furnaces for smelting the iron ore which is claimed to have been discovered in the vicinity of that city. The Lincoln (Placer county) coal has been well tested, and it is said can be utilized for this purpose. Sacramento certainly offers an inviting field for an industry of this character. The railroad company have large workshops there, and iron is the great ingredient in all the various departments of mechanism connected with a railroad. In Stockton the manufacturers of agricultural implements have found it necessary to enlarge their works, and we find it specially noted among the San Joaquin valley journals that the labor-saving machinery used in gathering the harvest of that valley has been largely of home manufacture. The Stockton Paper Co. are also making good progress. Several California journals are now printed upon the paper turned out at their works, which bears a favorable comparison with the same class of paper turned out of Eastern mills. The tanneries and other leather manufacturing establishments in Stockton also show a wholesome growth. From small beginnings they have arrived at the stage where regular exportations now take place to China and Japan.

There is now every probability that a shipbuilding industry has been permanently entered upon at Vallejo. A tug-boat was launched there last week, and another is in course of construction. The co-operative ship-carpenters are progressing satisfactorily with their schooner. And the ship-building company are preparing for operations on their 1,200-ton ship. In addition to which a boot and shoe company has been organized, which began business a few days ago. In Sonoma county, one or two chair factories are in operation, with satisfactory results. Cheese-making has also assumed some importance in and around Petalnma, and large quantities have been sold for the home market. Petalnma is also organizing a boot and shoe factory, with every prospect of success.

In the southern counties a similar disposition to embark in manufactnring enterprise is exhibited. Los Angeles already possesses a woolen-mill, and a project is on foot for organizing a company to manufacture paper. The oil-wells of San Fernando are in operation, and works for refining the oil have been erected. Passing up to the northern coast we find that Eureka, in Hnmboldt county, is moving to have a woolen-mill included in the industries of the place, and that at Crescent City, in Del Norte county, they are laying the foundation for a cheese factory. Added to the industries above mentioned are the number of wine cellars in process of construction all over the grape-growing counties—in Sonoma, Napa, Sacramento, Los Angeles, Lan Mateo, etc. These wine cellars nse large qnantities of casks, and the day will come when they will be manufactured at home. One citizen of Sonoma county has commeuced their manufacture. He obtains his timber from Lake county, where it remains one year to season before being hauled into Sonoma and made up into staves for wine casks.—*Bulletin.*

Luminous Signal.—M. Laussedat proposes, for the above purpose, to direct a spy glass from one station toward a second point, to which the signal is to be transmitted. In the focus of the instrument, he places a diaphragm having a very small aperture; so that, on looking through, the field of vision will he restricted to the tower, steeple or other locality at which the receiver of the signal is stationed. The eye piece of the telescope is then removed, leaving the disphragm, and behind the latter is placed, in the axis of the instrument, a light, the conjugate image of which, prodnced by the conveying glass, falls precisely on the openiug of the diaphragm. The lnminons ray transmitted through the telescope will fall directly on the edifice comprised on the restricted field of visiou, aud not elsewhere, and the light is therefore invisible to all without that field. The observer will perceive the objective of the telescope illuminated over all its surface; and necessarily the larger the diameter of the glass, the farther will the signal be visible.

Siemens' method of couvertiug iron into steel consists in melting wrought-iron in a bath of liquid pig-iron, the whole being made into steel hy means of very high temperature and the uon-oxidizing flame of the regenerative gas furnace. The decarburized iron is thrown in measured qnantities at regular intervals into the bath of pig-iron, the operation being completed by an addition of pig-iron which contains manganese in known proportion.

Vanilla from Pine Trees.—There have recently been submitted to the French Academy some small crystals which are the pure aromatic principle of vanilla. These, it is remarkable to uote, were extracted from conifers.

Geology of the West.

Among the geological deductions of the Wheeler expedition are the followlng: All that portion of the United States west of the plains is characterized by corrugation, that is, the geological formations once horizontal have been bent and broken and thrown into ridges so as to prodnce a mountainous country. The ridges vary greatly as to hight and length, but agree in a general northerly trend; so that in traveling uorth and south it is generally easy to follow valleys, while in going east or west one is confronted hy range after range that he must climb or go around. In the lower parts of this great monntain system, the slow but indefatigable agencies of rain aud stream have accumulated so great an amount of detritus that the valleys are clogged and the mountains nearly or quite buried. In this way have been prodnced the great desert plains of Utah, Arizona and Southern California, vast seas of sand and saliue clay, from the surfaces of which a few half snnken peaks jut forth as islands. These intermissions of the monntainous character are mere concealments, not interruptions, of the corrngated structure; but that structure is interrupted in one place—perhaps in others, but in one notably—by a tract in which the strata are almost undisturbed. The general surface of this exceptional region lies from 6,000 to 8,000 feet above the ocean, and it is intersected by the celebrated cañons of the Colorado and its tributaries. By these gorges and hy other modifications, chiefly dependent on erosion, it is divided into a great number of plateaus which the surveys now in progess are defining and naming. The geologists of the expeditions have found it convenient to designate the region, considered as a geological province, as the region of the plateaus, or the Colorado plateau system. It is surrounded on all sides by areas of corrugation, the ranges at the east constituting the Rocky Mountain system proper, and those st the west having been designated as the Cordilleras. At the north and south, these mountain areas coalesce.

Unit of Heat.—The introduction of the so-called unit of heat in matters of research in this branch of science has been of the greatest importance, as it is evident that the degrees of the thermometer are no direct measnre of the amount of heat present; for instance, there must be eight times more heat necessary to raise a gallon of water 10 degs. than to raise a pint of water to the same temperatnre; but the quantity required to raise a gallon 10 degs. and a pint 80 degs. is the same. This makes it clear that the amonnt of the snbstance heated must be taken into account as well as the temperature; therefore it has been agreed to adopt a nnit, and to make this equal to the quantity of caloric necessary to heat one pound of water one deg. Fahr. Applying this principle to the heat obtained from coal, it has been found that the combustion of one ponnd of anthracite coal gives 14,220 nnits of heat; that is, that the combnstion of one pound of this coal will heat 14,220 pounds water one deg., or 1,422 pounds 10 degs.; 142 pounds 100 degs., and 79 ponnds 180 degs., thus raising the latter from 32 degs. to 212 degs.; in other words, by means of the perfect combnstion of one ponnd of anthracite coal we may heat 79 pounds of water from the freezing to the boiling poiut. The perfect combustion of one pound of bituminous coal gives 13,500 nnits of heat, that is, one-twentieth, or five per cent. less than anthracite.—*Manufacturer and Builder.*

The French Metric System.—Mr. Sellers read before the Railway Master Mechanics' Association an exceedingly interesting paper on this snbject, in which he examined the cost of making a radical change in the standard measurement at this time, when the nse of machine tools, gauges, etc., is universal, estimating the cost of changing and renewing the stock of an establishment eqnipped for 250 machinists at not less than $27,000, without any change in drawings, and the complete change at not less than $150,000. Mr. Sellers concluded that the adoption of the metric standard in this country is now neither practicable nor desirable.

Preventing Railway Accidents.—An English inventor, Mr. C. Jordan, proposes to make the main lines without the usual switches, turnouts and crossings, being continnous from end to end, and to work such road by transferring trains where necessary from the main line to the adjacent siding, by lifting bodily from one line to the other. The liftiug will only be an inch or two, and the hydraulic apparatus as now constrncted will make nothing of the weight; while, as to time, Mr. Jordan calculates that a few minutes will suffice to transfer a train from one road to another without disturbing a passenger. The whole work, as regards the hydraulic apparatns, may be done by one or two lads.

The Largest Locomotive in the World. It is stated that the largest locomotive in the world is the "Pennsylvania," on the Philadelphia and Reading railroad. The principal dimensions of this engine are as follows: Diameter of cylinders, 20 inches; length of stroke, 26 inches; nnmber of driving wheels, 12; diamcter of drivers, 4 feet; and the weight of the engine alone is 60 tons.

Neyreneuf has ascertained by experiments that negative electricity attracts flame, which positive electricity repels.

Seasoning and Preserving Timber.

There are different ways of seasoning timber; the most simple is to dry it in the air under a shed, the next to immerse it in water for a season, salt water by preference, which dissolves some of the sap, which otherwise may promote decay; the next is to put it into a warm place, artificially heated, for instance by steam pipes; this produces a kiln drying. A still better way is to place it in a steam chamber, where steam under high pressure is introdnced; this penetrates into the fibers and prepares the wood for a more equal shrinkage when dried afterward; it is a kind of cooking process which coagulates the albumen, and thus augments the solid matter in the wood, preventing lumber thus treated from swelling afterward by dampness, and to shrink by dryness only half as much as other lumber.

The exposure to steam-pressure is no doubt among the simplest of the thorough methods. Experience has shown that an exposnre of timber during two or three weeks to high pressure steam will thoronghly season inch lumber, however green or wet it may be. Such seasonlug acts to some exteut as a preservative; however there are more thorough methods of preserving wood, based on the joint action of tannin and iron. We are able to corroborate this principle, having before us a sample of moderate antiqnity, but sufficiently old. It is a piece of white oak dowel which was for some thirty or forty years in pine flooring of Tiber creek arch, Washington. It is black, perfectly sound, and as hard as ebony; it evidently owes its black color and hardness to the combined effect of the Iron in the soil on which it was placed and the tannic acid in the wood itself. The cost of the materials for this process is small, as tannic acid pnre enough for this purpose can now be produced for about 10 cents a ponnd, and even much less in the futnre, as it can be made from bark, young branches, and leaves of many trees, which owe to that acid their astringent properties.—*Manufacturer and Builder.*

Use of Thermometers.—The differences in the ordinary meteorological observations are not so much owing to the defects of the thermometer, as a general thing, as to the want of a proper care in observation. To ascertain the true temperature of the atmosphere the instrument should never be hung against the walls of a building, as the heat absorbed and radiated will cause a change of several degrees, depending on the natnre of the material of the walls and side exposed to sun or wiud, as also the radiation from the internal heat of the bnilding. The best place is under the shade of an open cover or tree, away from any buildings, suspended a few feet above the gronnd. The fact that the air may be at rest or in motion will not affect the temperature. To ascertain the heat of the direct rays of the sun the instrument should be covered with a coat of lampblack, and exposed to the direct rays of the sun in a sheltered place.—*Western Manufacturer.*

Important, if True.—According to a late number of *Les Mondes*, two French chemists have succeeded in converting the nitrogen of the air into ammonia without expense, without chemical manipulation, and even without human intervention at all, by the use of certain hituminons schists. These schists contain all the elements necessary for the growth of plants in much larger proportions than farm-yard manure. Sulphide of carbon is produced at the same time, and it is said to be the only remedy for the phylloxera.

Filtering Alkaline Solutions.—By using asbestos paper placed in the bottom of the filtering funnel, or by want of this, a plug of the asbestos fibers, in the same way as cotton is used for a similar purpose. Strong alkaline solutions, which would destroy filtering paper, may be filtered.

Artificial Ivory.—A new process of manufactnre is to treat cotton waste acted upon by snlphuric acid with a mixture of alcohol, castor oil and camphor, add oxide of zinc, and rnn the resultiug paste through rollers. The product, treated with proper coloring material, may be also converted into artificial marbles.

Transparent Paper in Photography.—Paper dipped in a solution of castor oil in alcohol becomes quite translucent after the evaporation of the alcohol. To restore it to its original appearance the oil may be dissolved off by dipping in alcohol.

Every man who works indoors at any trade or pursuit which requires a cap on the head to protect the hair from dirt, should wear a paper one, instead of one of cloth or other heavy material. The latter so heats the head as to injure the scalp, and in multitudes of cases causes baldness.

An old and dirty sponge may be cleaned by first soaking it for some hours in a solntion of permanganate of potassium, then sqneezing it, and putting it into a weak solution of hydrochloric acid—one part acid of commerce to ten parts water.

Qualities Necessary in Ships.—Strength combined with lightness; great capacity for stowage; safety; speed; dnrability; economy in repairs; cost; draught of water.

Keeping Paste.—A few drops of carbolic acid stirred into a pint of common flour paste will preserve the paste in a good, usable order for a long time.

Artificial Flowers of Tin.

In a recent number of a Berlin journal we find the following directions for making accurate copies of natural flowers and leaves from ordinary sheet tin: The method is somewhat similar to that employed for wax flowers, but the dies, of course, reqnire to be made of stronger material. The leaf or petal to be copied is first oiled on one side, and then laid lightly upon some dry plaster Paria, or very fine sand, in such a manner that the oiled surface is uppermost. A little bank of clay is bnilt around it, and the mixture of plaster Paris and water poured in, care being taken to remove the air hubbles with a soft brnsh. Instead of plaster Paris paste, melted stearine, mixed with powdered gypsum, may be employed, where the leaves are quite thick and strong. Very delicate leaves must first be painted over with a brnsh dipped in soap water, after which several thin layers of plaster Paris are applied with a brush, fine wire being introduced to give it firmness. The leaves thus prepared are either oiled or used to make plaster casts, or they may be coated with black lead and have copper deposited upon them by electricity. The upper stamp having been formed, the matrix, or lower stamp, is easily made from this. The tin is first cut into the required shape, either by hand or by a suitable die, and then pressed into the required shape between iron or steel stamps, cast after the plaster molds just described. Each of the pieces required to form a flower, having been prepared separately, are carefully soldered together, a stem and leaves added, and the whole object so bent and twisted as to avoid the appearance of stiffness. They may finally be painted with the natural colors and varnished.

Cutting Glass Bottles.—Take a good three-cornered file, file a circular notch around the middle of bottle; let the notch be at least 1-16th of an inch deep, and, if the glass is very thick, ⅛ of an inch. Into this circular notch fasten a soft small lamp wick or thread of tow, well moistened with alcohol, taking care not to wet the surrounding glass surface. Light the thread, which should be large enongh to fill the notch and not wound too tight, and while burning revolve the bottle in the hands, taking hold of the ends, and holding it horizontally so as to confine the flame to one particular part. When burnt out, plnnge the bottle at once into cold water. If necessary, repeat the heating and cooling suddenly.—*Artisan.*

Removing Grease Spots.—In taking out grease from clothing, with benzole or turpentine, people generally make the mistake of wetting the cloth with the turpentine, and then rubbing it with a sponge or piece of cloth. In this way the fat is dissolved, bnt is spread over a greater space and is not removed; the benzole or turpentine evaporstes, and the fat covers a greater surface than before. The only way to remove grease-spots is to place soft blotting-paper beneath and on top of the spot, which is to be first thoroughly saturated with the benzole, and then well pressed. The fat is then dissolved and absorbed by the paper, and entirely removed from the clothing.—*Journal of Chemistry.*

Cement for iron railing tops, iron gratings to stone, etc., of a very excellent nature can be manufactured by taking equal parts of sulphnr and white lead, with about a sixth of borax; mix the parts together until they form a homogenous mass. When used the mass is wet with strong snlphnric acid, and a thin layer of it is placed between the two pieces of iron, which are then pressed closely together. In five days it will be perfectly dry, all traces of the cement will have vanished, and the iron will present the appearance of having been welded.

Removing the Teeth of Children.—The operation consists in simply slipping a rubber ring over the tooth and forcing it gently under the edge of the gum. The patient is then dismissed, and told not to remove the appendage, which in a few days loosens the tooth and causes it to fall out. Grown children, who shrink from the shock and pain of the dental nippers, may also have their teeth removed by means of the rnbber, which is a mild form of treatment.

Casein is the name applied to the nitrogenous constituents of milk, which are coagulated by acids, and which have received this name from their use in the manufacture of cheese. A portion of the nitrogenous substance, known as albnmen, is coagulated by boiling, and then forms those repulsive little films generally met with in boiled milk. Casein is soluble in fresh milk, but insolnble in milk which has turned.

The fractnre of a steel wire containing, say, seventy-five per cent. of carbon, when seen nnder the microscope, presents a tolerably flat surface, composed of innnmerable small, sharp, crystalline points, while that of iron is rough, more or less fibrous or mossy, and the fibers do not end in sharp points.

Softening Violin Notes.—M. Laborde states, in *Les Mondes*, that the disagreeable rasping tone peculiar to some violins may be avoided by placing a small strip of wax on the upper portion of the bridge. The notes are immediately rendered sweet and soft, and can be suited to the ear by regulating the size of the piece of wax.

Powdered chalk, added to common glue, strengthens it. A glue which will resist the action of water is made by boiling one pound of glue in two quarts skimmed milk..

Patent Rivet Pocket Fastening.

Alfred Rix, a well-known San Francisco lawyer, and M. A. Wheaton, a noted patent lawyer, are now in Anstin taking testimony in regard to who first invented the patent riveted overalls. A large amonnt of money is dependent on the issue, one heavy San Francisco firm having sued another for damages for infringement of patent, for which the plaintiff paid the sum of $20,000 and refused an offer of $150,000. The evidence taken before United States Commissioner Sbannon at Austin tends to show that the article is no novelty at all—a humble tinsmith, Billy Rowe by name, in the employ of Smith & Starratt of that place, having been engaged in riveting overalls with the same rivets and in the same manner for years past, which fact will probably invalidate the patent—on the ground that the riveting is no novelty—and anybody can wear riveted overalls without the "$2 per ton royalty."—*Exchange.*

Onr exchange probably is not aware that the recent decisions of our United States Courts do not justify its statement that the above "fact will probably invalidate the patent." On the other hand we very much donbt the possibility of defeating the patent referred to by the "facts" stated above. It is always easy to find some one who is willing to swear to prior use after an inventor has made a snccess of his invention. If the party referred to, "Billy Rowe by name," has nsed the invention for the past five years the said "Billy Rowe by name" is a very foolish "Billy Rowe" that he didn't secure a patent on it and reap the advantage which the patentee is now doing. If "Billy Rowe" did casually fasten pockets with rivets it is very evident that he did not make an invention. If he did he didn't know it or he undoubtedly would have secured a patent on it. Davis, the patentee, was an independent inventor and, being also a sensible man, he did what any sensible inventor wonld do—secured his invention by patenting it. Fnrther, after securing his patent he has succeeded so far in making a success tbat his riveted overalls have driven all of the common overalls out of the market; and the consequence is, he has the combined capital and influence of our wholesale clothing merchants pitted against him. No wonder nnder such circumstances that they were able to find some one willing to testify that he has made the article for several years. We believe Davis has a good and substantial patent.

New French Rifle.—A gunmaker of Limoges has snbmitted to the military commission at Vincennes a rifle of very novel construction. It is thus described in a Paris journal: The new gnn presents nothing remarkable exteriorly, but the lock is so arranged that the breech is opened by cocking the piece, and the charge being introduced, the breech is closed and the gun fired by touching the trigger. The cartridge consists of a hollow, leaden cone filled with powder, and closed at the base by means of a piece of cork. At the moment the cartridge is introduced into the breech the powder escapes by a small hole in the cork, and an imperceptible ball of fulminating powder, which forms the priming, takes its proper position. The triple action of cocking, loading and firing is thns effected simultaneously, so that a man with very little experience can fire twenty ronnds a minnte. The cartridges are stored in an iron tube, which is placed parallel with the barrel, and contains 30 balls, so that the piece may be fired as many times almost without any interval, and withont removing the stock from the shoulder, as there is nothing to be done bnt to cock and pull the trigger.

Danger Signal.—MM. Lartique and Laforest have recently invented a novel device, intended as a danger signal, which is now in successful use on some of the French railroads. A whistle is arranged on the locomotive so that it will, when once opened, continne sounding until shut by the engineer. The same device which tnrns the disc signal, so as to show the danger side, is intended to transmit a current of electricity to a little projection between the rails. When the engine passes over this spot, a metallic brush hanging between its wheels strikes on the projection and sweeps over it, at the same time transmitting the cnrrent to an electro-magnet which pnlls the whistle open. The latter, by continnously sonnding, warns the engineer.

Cheap Manufacture of Oxygen.—Mr. Mallet manufactnres oxygen from the sub-chloride of copper. This salt has the property, when moistened and exposed to the air, of absorbing oxygen, forming an oxychloride. When this is heated, water is first liberated, then the oxygen, and the snb-cbloride, in its original condition, is left behind. The process is claimed to be continuous, and 100 pounds of the material will fnrnish, it is said, 50 cnbic feet of oxygen at each operation.

New Alloy.—A new invention consists in the prodnction of a metallic alloy resembling silver more closely than any alloys heretofore prodnced in color, specific gravity, malleability, ductility, ring and general characteristics. For these pnrposes the following metals are combined: copper, nickel, tin, zinc, cobalt and iron. In some cases, also, a small proportion—say one-half per cent.—of aluminum is added.

A novel watch has been invented by a Swiss watchmaker of Aargau. The motive power is compressed air.

Pipe Joints.—Mr. J. Phillips, of Hammersmith, has received a patent for a new method of making tight joints for pipes. The joint is of the spigot and faucet kind, the spigot and fancet being made with tapering parts fitting or nearly fitting each other at the front and back of the joint, with an annular cavity between the fitting parts, which cavity is filled with cement of fused material introduced through apertures in the periphery of the fancet. To prevent escape of the fillings in, rings of yarn or otber yielding materials may be placed in annular grooves in the tapering parts of the spigot and faucet.

Milk sugar can be prepared by coagulating the casein, and removing that along with the fat, and then evaporating the whey to crystallization, and purifying by filteration through animal charcoal. It is manufactured principally in Switzerland, and comes into market crystallized on strings, when it somewhat resembles an ear of corn.

Mechanics' Fair Daily.



Immense Free Circulation!

Printed in the Pavilion for Every Visitor.

The Daily will be a large, eight-page sheet, 28 by 42 inches. It will be circulated each day, in part, to a new list of readers—residents of both City and Country, throughout the Coast—numbering during the Exhibition

Over 100,000 Readers,

Making a list of individual readers greater than that of all other city papers combined. Each issue will be

Handsomely Illustrated,

Spicily written and beautifully printed, with new body type, on a new press of a style never before used in this city.

Advertisements Displayed

In showy type will be one of our Specialties. Rates will be reasonable.

Our Columns will afford the best, first-class advertising in the Fair.

As a reliable firm in an established business, we will guarantee Satisfaction to all patrons. ☞ No objectionable advertising will be admitted.

Advertisements should be sent in soon to secure a good position and an early insertion in our

Prospectus Edition,

To be issued before the opening of the Fair. The

The "Fair" Daily Printing Office

Will open in the pavilion for printing business, address and visiting cards, labels, circulars, notices, etc., for Exhibitors and Visitors. The Nonpariel (new style) job press will be used, with new and unique type.

☞ Send for or call and see our Sample Sheet.

L. P. McCARTY, Business Manager
W. H. RATTENBERRY, Assistant.

DEWEY & CO.,

Publishers and Patent Agents.

Office of the Mining and Scientific Press and Pacific Rural Press, No. 224 Sansome, Cor. of California Street. July 16, 1874.
bptf

Davis & Sutton, Commission Merchants,

For California Fruits; also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwangor & Barry, Rochester, N. Y.; O. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.
3v8-1y

Brittan, Holbrook & Co., Importers of

Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

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THE AVERILL CHEMICAL PAINT

WILLLAST THREE TIMES AS LONG as the best lead and oil, without CHALKING; is of any desired color. It is prepared for immediate application, requiring no Oil, Thinner or Drier, and does not spoil by standing any length of time. It is equally as good for inside as outside work; over old work as well as new; in fact, where any paint can be used the AVERILL CHEMICAL PAINT will be found superior to any other. Any one can apply it who can use a brush, which truly makes it the FARMER'S FRIEND.

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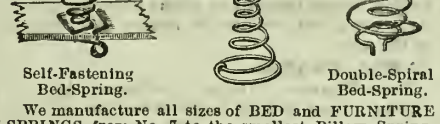
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We manufacture all sizes of BED and FURNITURE SPRINGS, from No. 7 to the smallest Pillow Spring; also, the Double Spiral Spring, which is the most durable Bed Spring in use. It is adapted to upholstered or skeleton beds. We have the sole right in this State to make the celebrated Obermann Self-Fastening Bed Spring. Any man can make his own spring bed with them. They are particularly adapted to Farmers' and Miners' use. Send for Circulars and Price List to

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Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, Etc.

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B. F. WELLINGTON,

(Successor to E. E. Moore).
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Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

San Francisco, July, 1874

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo. F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements.

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rates
Storage taken at lowest current rates. 4v8-tf

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.

H. K. CUMMINGS. 1858. H. H. RALSTON. 1873.

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Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have no interests that will conflict with those of the producer.
4v23-1y

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PETALUMA, CAL.

Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

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21v6-1y Petaluma, Sonoma Co., Cal.

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Highest price paid for Flax Seed and Castor Beans delivered at our works.

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WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, the squirrels, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is sure death. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up dry and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

Santa Clara, April 20th, 1874.

H. P. Wakelee, Esq.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. Arguello.

San Leandro, Cal., April 3d, 1874.

H. P. Wakelee, Esq.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. Estudillo.

Dougherty Station, Alameda Co., Cal.

Mr. H. P. Wakelee, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, O. M. Dougherty.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

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CALIFORNIA STATE GRANGE,

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We are now prepared to handle and dispose of all Dairy Produce, Eggs and Poultry.

This house is under the immediate control of the California State Grange; the Business Manager a thoroughly practical farmer and dairyman, Master of Bodega Grange and General Deputy for California for the organization of Granges in any part of California. Special rates to members of the Order; though any one may sell through our house and avail himself of our mode of doing business.

In shipments give plainly the name and P. O. address. Any persons wishing legitimate information concerning our business should write to the house, and are cautioned against accepting for facts many rumors now current. All sales guaranteed. ja31-tf

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Business College.

The Twenty-Fifth Session commences July 20th, 1874.

A day and Boarding School for both sexes; the only Institute on the Pacific Coast where a thorough Academic and business education can be obtained.

The Business College Department

Is under the supervision of James Vinsonhaller, who for many years was at the head of Business Colleges of San Francisco.

For circulars address

26v7-3m JAMES VINSONHALLER.

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Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

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GEORGE JOHNSTON,
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Or, W. F. JOHNSON, Folsom, Sacramento County, California. Refer to Lachmau & Co., San Francisco, and Johnston Brandy and Wine Manufacturing Co., Sacramento and Marysville. 2v8-12w

Napa Ladies' Seminary.

The next term will commence on TUESDAY, AUGUST 4TH, 1874, and continue for twenty-two weeks. This institution offers thorough instruction in a quiet, healthful location, easy of access from any part of the State.

Instructions in Piano forte, Guitar and Vocal music by a superior teacher. French taught by a competent teacher.

It is very desirable that pupils should be present at the opening of school, although they can enter at any time, and be charged from the time of entrance. For particulars of school apply to

MISS. S. F. McDONALD, Principal,
Napa City, Cal.

REFERENCES.

Rev. R. Wylie, Napa; Hon. C. Hartson, Napa; R. T. Montgomery, Esq., Napa; G. E. Goodman, Esq., Napa; D. McClure, Esq., Napa; Rev. Dr. Goodbridge, San Francisco; Rev. P. V. Veeder, Yokohama, Japan; Geo. K. Ginyas, Esq., San Francisco; James A. Crow, Esq., Stockton; R. O. Baldwin, Esq., San Ramon; J. R. McDonald, Esq., Grayson; J. B. Crow, Esq., Hills Ferry; Rev. C. M. Blake, San Francisco; Major Snyder, Sonoma; S. Alstrom, Esq., White Sulphur Springs; Geo. L. Kenny, Esq., San Francisco; Hon. R. C. Clark, Sacramento. 1v8-2m

Agricultural Notes.

COLUSA.

Storage.—Colusa *Sun*, Aug. 1: Colusa is now very well prepared for storage. The large additions to Jones' warehouse have been completed, and it is now the most convenient shipping honse on the river. The Farmers' Storage and Commission company are getting along finely with their immense building. The foundation is all complete and the framework is going np. The foundation reats on two-inch redwood plank cut two feet long and laid close together the length of the bnilding. On the top of these is laid eight by eight redwood timber; theae are five feet apart; the sills are of pine, and are alao eight by eight, and are supported by stndding only two feet apart, standing on the redwood timbers above mentioned—so the bearings over the foundation are five feet one way aud two feet the other. On the top of these come the two by twelve joists, aud then a donble floor of inch boarda. Thia completes the fonndation. It is 320 feet np and down the river by 120 back. Already an immense quantity of grain has been piled up on the floor, and they are receiving large quantities daily. Each of theae warehouses has scales for weighing by the load.

CONTRA COSTA.

Flourishing.—Antioch *Ledger*, Aug. 1: For many years it was believed that neither wheat nor treea wonld grow in thia valley. Time hss proved that these opinions were erroneous. The former has for several years been cultivated with wonderfnl success, and one who rides through the valley may now become convinced that the latter can be successfully grown. Dnring the past two years a goodly number of orchards have been planted and the trees in nearly every instance exhibit a thrifty, rspid growth. The fruit-bearing orchards and vineyards of Messrs. Walton, Barclay, Sellers, Halstead, Wrighton, Welch and many others, are living evidences that fruit may be grown and matured in its greatest perfection in this valley. The ahade trees in the streets of Antioch, also, should be sufficient evidence to convince thoae who have ever been ready to maintain that "treea will not grow here," of their mistake.

FRESNO.

Cotton.—Fresno *Expositor*, July 29: From Fred. Kramer we learn that the cotton field of Dr. Brandt is looking finely. The plants are about three feet in hight, and are bushing out well; they are thickly covered with sqnares and blossoms. The crop gives every appearance of being auccesaful. It ia anperviaed by James N. Ainsa, a gentleman who has had extensive experience in growing the staple in Sonora, Mexico—a far dryer climate than ours, where nothing can be raiaed without irrigation, Mr. Ainsa givea personal attention to the irrigatiou of the field, and he expresses a firm belief that he can raise cotton with succeas and profit in thia connty.

Ira Stroud informs ns that feed in the mountains is now good, and sheep are in excellent order and doing well. Some snow still exists on the north aides of the mountains, but it is melting rapidly. We learn that beara are causiug some trouble and damage by raidiug on the sheep camps at night, but they are not so troublesome as in former years. In Panoche valley, the orops, mostly hay, have been secured, and although the expectations of the farmers were not fully realized, still many of them have secured fair crops and done well. Baled hay ia aelling at from $17 fo $20 per ton, and finds a ready market.

INYO.

Grain.—Inyo *Independent*, July 25: The grain threahing season is now farly begun. Tho crops, so far, are turning out remarkably well. Westerville's machine is at work on Walters' crop, near the Post, which is yielding so well as to make Mr. Walters' method of planting worth mentioning. That is simply, to aow during the fall or early winter, instead of the spring months, aa is the general custom. We saw thia crop a ahort time before it was cut, and it is rarely we have seen a more promiaing one in any portion of the State, the fine atand being mainly due to the early aowing.

NAPA.

Drying Grapes.—Napa *Reporter*, August 1: Mr. J. H. Post, of St. Helena, is this year trying the experiment of drying his crop of fifteen tons of Miasion grapes to aell for cooking. It is thought that they will bring abont aix cents per pound in San Franciaco, and aa it takea three tons of the undried fruit to make one of dried, the fresh fruit will thus realize aome $40 a ton, with the trouble of drying, whatever that may be. The Mission grape for wine is worth, we believe, thia year, about $15. It may be that an extensive market can be opened np for carefully prepared dry grapea, and the result of Mr. Post'a experiment will be looked forward to with considerable interest.

NEVADA.

Fruit. — Grass Valley *Union*, August 1: The fruit crop this year in Grass Valley and vicinity ia now an assnredly great one. More fruit will ripen, fall from the treea and rot this year, in this neighborhood, than the resident population could consumo in two years' time. The fruit ia of the fineat quality, too, and greatly auperior to that raised in any of the Eastern Statea, or in the valleys of California. And yet, next winter, when a can of fruit ia wanted, in order to give variety to a family meal, the purchaser will go to a grocery store and find canned fruit in plenty, but all of which has been put up in one of the New England States. California, especially the mountains thereof, lets a great crop go to waste and then sends off to the Eaat to purchase that which it lets rot. There ia no economy in such proceedings. The present fruit crop ought to be saved in cana or jars, or by drying, to the extent at least of supplying the home demand. And then there are plenty of boya and girls here to do the work of drying fruit; but the labor of those boys and girla is now allowed to go to waste jnst as the fruit crop is allowed to rot. Economy demands a reformation in such matters.

SAN LUIS OBISPO.

Crops.—San Luis Obispo *Tribune*, Aug. 1: Our fine agricultnral valley is still kept in a turmoil by the grain harvesters. The headers have almoat completed their season's work; but the threshers have yet a considerable task before them. The returns, as a general thing, are good; and our farmers, from what observations we have made, are in good spirits; indeed, many of them have good reason to be jubilant at the dividends realized from their last fall'a investment. Our neighbor, Mr. J. W. Slack, reports to us that in the last five weeka he has headed about 1,000 acres of grain, all fair to good—some really excellent—and we must remember that his header ia only one among the rest, and their name is legion. His prize piece he awarda to Mr. Welsh, near the Morro, a field of wheat containing about 16 acres, which, he is confident, will make nearly 100 bushels to the acre.

SANTA CLARA.

The Harvest. — Gilroy *Advocate*, Aug. 1: We have been having most favorable weather of late for our farmers. The harvest time is usually oppressively hot and disagreeable, but so far there haa been but little ground for complaint on that score. Cutting and threshing is progresaing, not rapidly, but aurely, and the yield is generally good. Scarcely any smut has beeu discovered in thia vicinity, although there is some little rust, occasioned by the fogs and the cool, damp weather. It will not scriously affect much of the grain, however. The fruit crop is not generally up to the yield of former years, neither in size or quantity, although the quality is very good. Apples, pears and grapes seem to be doing well, but other varieties will not come up to the standard. The condition of the weather, together with the late rains, haa contributed mostly to this result. Of some localities the above remarks will not hold true, for there will be some very fiue fruit raised here. Prices are remuuerative, and the supply quite plentiful.

The cutting of the Gilroy tobacco crop, which commonced some weeks ago, discloses a large yield of superior tobacco. The damage done by the worms in all the fields would not amount to $100.

SANTA CRUZ.

A Few Samples.—Watsonville *Pajaronian*, Aug. 1: Mr. A. F. Richardson, the genial Secretary of Watsonville Grange, has one fine piece of wheat of 20 acres near the road, of the White Australian variety, which is estimated will produce at least 1,000 sacks; some of hia neighbors assert that it will go over 80 aacks of 100 ponnds to the acre. But his fancy piece ia a strip of seven acres, pnt in on ground that last year was planted to potatoes, and is the finest field of wheat we ever saw. The wheat is the White Australian, and in the whole field you will hardly find any of it that atands leas than five feet and a half, while the moat of it will go over aix. We have a large bunch of it in our sanctum, pulled at random in the field, which we would invite our friends to examine. It is all over six feet. If that field don't go 100 centals to the acre we shall be disappointed. Mr. Fred Therwachter, who is tilling 100 acres, showed ns through a field of 17 acres of White Australian Club, of which we have a sample in the office, which is nearly aa good as the crack piece of Mr. Richardson. The field will go from 60 to 70 bushels to the acre.

SISKIYOU.

Haying.—Yreka *Union*, Aug. 1: Scott valley farmers have been busy for aome time past in cutting and putting up their hay crop. This crop ia said to have turned out excellent—better even than was expected. Hay we nnderatand is worth from $7 to $8 per ton in the field.

SONOMA.

Our Wheat Crop.—Sonoma *Democrat*, Aug. 1: Twenty thousand tons will be over rather than under the mark. From the best information we can gather of last year'a crop, Petaluma ahipped 4,000 tons; Santa Rosa, 4,000; Healdsburg, 2,000; Fulton, 1,000; Sonoma, 1,000; total, 12,000.

Allowing 5,000 tons for home consnmption and aeed in the past year, we have a total product of 17,000 tons for 1873. The yield this year will, if anything, be under that figure. While some cropa come np to the average, many will fall ahort at least one-third. If we have a surplus of 12,000 tons for shipment the crop will equal our expectationa.

The Catawba Grape.—On rich bottom lands it ia well known that the grape doea not produce, the atrength of the vine going to wood instead of fruit. The grapes are small, do not ripen and suffer from mildew. Geo. Hood of this place has been experimenting for some years on different varieties for the purpose of finding a grape that would thrive and ripen on bottom land. He has upon his place a vine of the Catawba variety trellised on a frame work. It is just aeven yeara from a graft on a native stalk. It covers 1,400 square feet of surface and will bear this season nearly a ton of grapes. The frame has given away with the weight. The bunches are large and they ripen thoronghly. No indication of mildew has ever been noticed. Those who have no land suited to grape cnltnre will find that a aingle vine of this variety will supply all the grapes required for table nse, and it may be that its growth would be profitable for wine.

STANISLAUS.

Grain Movements.—Stanislans *News*, Aug. 1: Althongh grain is abundsnt, it arrives in town qnite slowly. The low prices paid by apeculators is evidently the reason. Nor is it likely to improve for some time. Farmera are not inclined to sell more than they can help, to meet current expenses. If there is not an improvement in prices, storing will be the genera rule among the farmers in this locality.

SUTTER.

Draining the Slough.—Sutter *Banner*, Aug. 1: Last week a public meeting was called, which adopted measures to drain the slough. Work commenced Monday on Bunces' farm, and a ditch five feet across the top, two feet deep and three feet wide on the base, continued up the slough. On Thursday they had reached the water west of town, which was soon drawn off. The ditch ahould be run to the tule, and this levee diatrict pay for it. On this condition every farmer along the line would certainly give the right of way. It is a public affair and must be attended to.

Our Levee.—Above and below town are portions of levee which shonld be enlarged this fall by all meana. Property in this levee district ia becoming very valuable, and should a break possibly ocour at the head of the slongh above town, the damage wonld be immense. Let us widen that portion of the levee and make donbly secure.

TEHAMA.

A Good Piece of Land.—Tehama *Independent*, Aug. 1: Hugh Mooney, who owns a farm joining our town site, has jnat finished harvesting hia wheat; the yield is an average, estimated by the sacks, of 30 bushels to the acre. This land has been sown in wheat for 23 consecutive aeasons, being plowed and aeeded every winter, and has never failed to bring a good crop. The largest average of any field barvested in this neighborhood was that of John Western, containing 400 acres, and yielded a little over 40 bnshels to the acre.

YOLO.

Wheat Movements.—Yolo *Mail*, July 30: The warehouaes are being gradually filled, and we expect in a short time to see more lively times in Woodland. The price of wheat is $1.40 @ $1.45 and weak at that. Thomas & Hunt are shipping about 80 tons daily. They do not wish to keep it on hand, as the quotations are ao weak that they fear a atill greater decline. The farmers aeem to think that this depreasion in the market ia only temporary, and many of them have concluded to store for a better market.

Sugar Factory.—The preliminary steps are now being taken to build a branch Beet Sugar Factory in Davisville, Yolo county. The experiment of beet-raising uear that town has proved that the soil is calculated to produce a much finer quality of beet than that near the Sacramento or main factory, and as the transportation of the raw beet from Davisville to Sacramento ia considerable of an item of expense, the capitalists referred to have taken stepa to organize and build a factory at that place as a branch of the one at Sacramento. The company have cultivated this year 380 acres of beeta, which at thia time look splendidly, and will yield, aa we are informed by Mr. Dresbach, 15 or 20 tons per acre. The land lying between Willow Slough and Putah creek, and much of that bordering on either side of these two water-beds, is better adapted to raising the sugar beet than grain; and if thia company should build a factory, we have no doubt but that all the land-owners in the sections named will make an effort in that direction. Another fact in connection with the above ia proper at this time. Items have appeared in the papers stating that the army worm was destroying the crop near Davisville. This is a miatake. A few of these worms made their appearance in one of the fields, but a few turkeys were placed in it, and soon cleared them ont. There never was a finer prospect than now appears in these several fields of beets.

Goon Yield.—Mr. Theodore Weyand, of West Grafton, harvested 900 sacks of wheat from 65 acres of volnnteer. This is a little over 28 bushels to the acre, and we imagine it is the best volunteer crop in Yolo oonnty.

Our Next Fair.—The eighth annual fair of the Sonoma and Marin District Agricnltnral Society will commence in thia city on the 14th of September—six weeks from next Monday. The last fair was the best that has ever been held, and a credit to the district in many respects; but in some departments it was far short of what it ought to have been. In dairy prodnce, wine, leather, grain, vegetables and several other products for which the diatrict is well adapted and widely noted, the display was meager and nnsatisfactory. Not one prodncer in twenty who conld have made a creditable exhibition contributed to any of the departments above named. There was but one exhibit of potatoes, one of leather, two of butter and cheese and three or four of grain. All were excellent in quality, bnt the quantity ought to have been ten-fold greater. We trust that our farmers will remember the lamentable deficiency last year, and see to it that there is a more satisfactory display at the coming fair. —*Petaluma Argus, July 31st.*

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Aug. 4th, 1874.

For Week Ending July 21st, 1874."

Paving Blocks.—Philip Zadig, S. F., Cal.

Railway Car Axle.—Henry H. Rhodes, S. F., Cal.

Treating Fats to Separate the Stearine from the Oleine.—Francis J. Kraft, S. F. Cal.

Hatchet.—Robert H. Morrison, S. F., Cal.

Gear-Cutting Machine.—John A. Peer, S. F., Cal.

Railroad Switch.—Bourgin. pierre, Oakland, Cal.,

Closing Gas Retorts.—James R. Smedberg, S. F., Cal.

Gas-Purifiers.—James R. Smedberg, S. F., Cal.

Taade-Mark.

For Powder.—Joseph W. Willard, S. F., Cal.

——"The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

Foreign Patents.

British Patents for Pacific Coast Inventors

Following ia a list of inventions patented or protected by Provisional Specifications in England, by inventors in the Pacific States and Territories, from January 1st to Jnne 30th, 1874:

Dental Filling.—Charles E. Blake, S. F., Cal.

Pump and Engine.—William D. Hooker, S. F., Cal.

Filter.—P. Huerne, S. F., Cal.

Rock Drilling.—W. W. Dunn, S. F., Cal.

Breech-Loading Fire-Arm.—Alfred Swingle and Frank A. Huntington, S. F., Cal.

Food from Milk.—B. Smith, S. F., Cal.

Air Engine.—Wm Manson, S. F., Cal.

Gear-Cutting Machine.—John A. Peer, S. F., Cal.

Dried Fruit at the State Fair.

The folly of allowing vast qnantities of fruit to lie and rot in the orchards, is slowly breaking upou the minds of the California fruit-growers. Hence, we aee devices for drying fruit attracting a constantly increaaing amount of attention. Iu the Sacramento *Record*, of a late date, we find the following. At the last meeting of the State Board of Agriculture, Mr. Aldeu applied for, and waa granted, the privilege of offering a number of private premiuma for different varieties of fruits preserved by hia process. We understand he proposes to offer some $200 in premiuma, to be awarded by Committeea in the same manner that the Society'a premiums are awarded. This is a very liberal proposition on the part of Mr. Alden, and will no doubt resnlt in great benefit to the State, in calling attention to the excellent manner of preparing our fruits for commerce, and thus stimulating the valnable industry of fruit cnltnre. We notice the Society haa offered a premium of $50 for the best method of drying fruit, to be exhibited in operation daily during the Fair. We nnderstand the Alden company are taking atepa to have some of their machines on exhibition, to comply with the offer of the Society.

Ryder's American Fruit Dryer.

We furthermore learn by the following paragraph, from the *California Reporter*, from Mr. Keeler, agent for Ryder's frnit dryer, that that machine will enter the list in competition with the Alden dryer. The *Reporter* aays; "The agent for this dryer, Mr. J. M. Keeler, 306 California atreet, wishes to say that he does not propose to make aure of a premium at the State Fair, by offering one himaelf; but will aay to those using the American dryer that the person who makea the finest showing at the fair, aa to excellence and variety, shall have 20 per cent. of the cost of thia dryer refunded, and the one who excels in any two varieties over all others, 10 per cent.; and any one variety five per cent. The exhibitors will have the privilege of selecting three prominent dealers in dried fruits as judgea. This is with the consent and approval of the officers of the State Fair. As to the liberal premium offered by thia worthy organization, that ia a free fight for all, and as Americans generally come off victorions, there is hope for the American dryer. All the reqnirements for working on the ground will at least be complied with."

Grasshoppers are making sad havoc with the hay harvest in Montana. It is estimated that ranches yielding 100 tons last year will not yield ten tons thia.

Geo. W. Chapin, Real Estate Agent, 434 Montgomery St., San Francisco, buys and sells Ranches in all parts of the State. City Real Estate exchanged for Country Property. Money Loaned. Post Office Box 1120.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, August 5th, 1874.

The week has been an uneventful one in Produce circles, so far as the Cereals are concerned. In less importsnt and outside articles of Produce there have been a few astonishing changes, but the general tone of the whole market is about as last reported. With regard to Grain, although exports are going forward regularly, the present seems to he marked with much uncertainty ss to future prospects, and while holders are unwilling to sell at the existing low rates, they aro hy no means assured of a large rise in the fall. One thing is positive, however, and that is that shippers will have the advantsge of low tonnago and plenty of it, as the competition in freights has seldom hefore been so strong. The fleet now on the wsy to this city is simply enormous.

The New York *Evening Post's* financial writer ssys, on the 1st instant, that the latest reports in regard to crops are encouraging. In regard to Cotton, we see that good authorities are on record to the effect that the crop will be the largest since the war, notwithstanding the diminished acreage. The most unfavorable estimates concede fully average crops. As to Wheat, a good part of which is marketed, it is estimated that the crop will exceed that of last year hy 25,000,000 hushels; this of course including what is grown in the Pacific States. The Corn crop of tbe South is several weeks late, hut is now coming forward rapidly. The Western Corn crop is still promising, but will prohahly be less than last year. The Sugar crop of Louisiana is unexpectedly good, the overflow of the Mississippi having prepared every one to look for a diminished yield. Rice is reported in fine condition. Tobacco is not so good as last year. The Frnit crop is short.

Receipts—Have heen as follows for the week: Flonr, 6,355 barrels; Wheat, 185,890 centals; Barley, 9,100 centals; Oats, 4,860 centals; Corn, 1,400 centsls; Rye, 5,920 centals; Beans, 670 sacks; Mustard Seed, 250 sacks; Flax Seed, 80 sacks; Potatoes, 16,540 sacks; Sweet Potatoes, 410 sacks; Peas, 40 sacks; Onions, 912 sacks; Hides, 3,436; Wool, 1,280 bales; Hops, 38 Bales; Hay, 1,770 tons; Straw, 208 tons; Wine, 30,400 gallons; Orangss, 4,400; Lemons, 1,320. It will be noticed that receipts of Wheat ars rapidly increasing. Shipments of Potatoes to this port are slso unususlly lsrge. Altogether, the movement of Prodnce hither has heen much more important than has been the case for a long time.

Barley—Is steady, with not very heavy transactions for the week.

Beans.—No chsnge in quotations. Receipts still light.

Beeswax.—Qnlet at 25@27½.

Broom Corn.—No sales reported.

Buckwheat.—Quotations nominal.

Corn.—Supplies coming forward freely. The price is nnchanged—$1.90 and $1.95 for White and Yellow.

Dairy Produce.—Butter continues very firm. Choice Fresh is in active demsnd. Firkin is selling at an advance of 2c. Cheese is very dull.

Eggs.—Eggs have taken another upward turn. Today the price for Fresh California ranges from 32½c. to 37½c. The rise does not appesr to extend to Eastern and Oregon Eggs, snd the former, even when "candled," are found to he in such poor condition ss to be almost nnsalable at any prics—and that is saying a good deal, in this city of hoarding houscs snd restaurants.

Feed.—No change in quotstions. Hay is in good supply. Brsn and Middlings are very firm, aud in small lots sell considerably sbove the regular mill price.

Flour.—A few sales of Superfine have been reported as low as $4, but the run of the market to-dsy is as given in our table. The demand is light. Supplies of old crop Wheat having run short, millers will soon nse new

Game.—But little in market. Venison may sgain he hsd, hut not much has come in. Small birds are selling st 75c.@$1 ₱ dozen.

Honey.—The supply is ahundant. Rates remain unchanged.

Hops.—The new crop will he in the market in a few days. Hops of last year's growth ars already very much depressed. A cotemporary estimates that opening prices for new crop next week will he 20@22c.

Nuts—Are selling at unchanged rates.

Oats.—Nothing new to report.

Onions.—Very plentiful at low terms. Receipts full.

Potatoes.—The market is dull. Only very choice lots will command the highest quotations noted. Sweet are coming in more plentifully and have declined.

Poultry.—A dealer states that only once hefore, since he has been in the bnsiness, have prices for Chickens fallen so low. When fair Broilers can be obtalned for $2.50 ₱ dozen, even newspaper men can indulge, without danger of boing charged with extravagance. Hens and Roosters are $2 off. Turkeys have declined 2c. ₱ lb. Ducks are also a little lower.

Provisions.—Hams, hoth Californla and Eastern, are qulte firm at the advance.

Rye—Is heing received in considerable lots. Prices again lower.

Seeds.—Market qulet. No changes yet.

Wheat.—So far no noteworthy movement in quotations has taken place. This week prices are about the same as last; a little stiffer, if anything. Sales have not been large. The last report of the Department of Agriture shows that the average condition of wlntor Wheat for the whole country is 104. Spring Wheat is placed at 96. Foreign reports of the condition of the crops are not so favorahle.

Wool.—The local trade is qulet. A Bostou dispatch of the 1st inst., says: Domestic Wool continues to come forward freely from all points, and the receipts still largely exceed any previous year in the history of the trade. Early in the week trade was comparatively qulet, hut for the past few days bnyers have been quite numerons, including many leading manufacturers, and sales foot up a fair average.

DOMESTIC PRODUCE.

WEDNESDAY M., August 5, 1874.

BEANS.			
Beans, sm'l wh.₱ lb	5	@	5¼
do, butter	6	@	7
do, large, do	6	@	7
do, lage	2¾@		2½
do, pink	1½@		2
do, pea	5	@	5¼
do, Lima	5½@		6½
BROOM CORN.			
Per ton	$80	@	200
DAIRY PRODUCE			
Butter, Cal. choice ₱ lb	32½@		35
do, good	30	@	32½
do, inferior	25	@	30
do, firkin	27	@	30
do, pickled	30	@	32½
Cheese, Calnew		@	14
do, Eastern	13	@	16
EGGS.			
Eggs, Cal. fresh ₱ dz	32½@		37½
do, Oregon	22	@	25
do, Eastern	15	@	17
do, Ducks'	—	@	25
FEED.			
Bran, per ton	17 00	@	18 00
Middlings	27 50	@	28 50
Hay	9 00	@	14 00
Straw, ₱ oalc	— 70	@	— 75
Oil cake meal	—	@	32 50
Corn Meal	42 00	@	43 00
FLOUR.—Superfine & Extra.			
Alviso Mills, hbl	12½@		5 75
California	4 12½	@	5 75
City Mills	4 12½	@	5 75
Comme'l Mills	4 12½	@	5 75
Golden Gate	4 12½	@	5 75
Golden Age	4 12½	@	5 75
National Mills	4 12½	@	5 75
Santa Clara Mills	4 12½	@	5 75
Geneses Mills	4 12½	@	5 75
Oregon	4 12½	@	5 75
Vallejo Star	4 12½	@	5 75
Venns, Oakland	4 12½	@	5 75
Stockton City	4 12½	@	5 75
Lambard, Sac	4 12½	@	5 75
FRESH MEAT.			
Beef, fr quality ₱ lb	7	@	8
do, second do	5	@	7
do, third do	4	@	5
Veal	4½	@	6
Mutton	5	@	5½
Lamb	5½	@	6½
Pork, undressed	6½	@	6¾
do, dressed	9¼	@	9¾
GRAIN, ETC.			
Wh't Cal. o'st.cl	57½	@	1 65
do new	1 55	@	1 60
do, shipping	1 72½	@	1 77½
do, milling	1 75	@	1 80
Barley, Fesd	1 37½	@	1 50
do new	1 00	@	1 20
do, Brewing	1 65	@	1 75
Oats, good to choice	1 50	@	1 60
do common	1 35	@	1 50
Corn, White	—	@	1 90
do, Yellow	—	@	1 95
Buckwheat	—	@	2 25
Rye	1 10	@	1 20
HOPS.			
California, 1873	12½@		18
East'rn '73 ch'ices	30	@	40
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey, choice	20	@	25
do Dark	8	@	12½
do Strained	5	@	10
Pulu	9	@	10½
Onions	60	@	1 00
NUTS—JOBBING.			
Cal. Walnuts	13	@	14
Peanuts per lb	6	@	7
Cbile Walnuts	10	@	11
Pecan nuts	13	@	15
Brazil do	12½	@	14
Coc'anuts, ₱ 100	9 00	@	10—
Alm'ds h'd shell	10	@	12½
do, soft	18	@	24
Filberts	18	@	—
POTATOES.			
Sweet, per 100 lbs	2 50	@	3 50
Cuffee Cove	—	@	—
H. M. Bay	1 00	@	1 20
Pigeon Pt	—	@	—
Humboldt	—	@	—
Petaluma	—	@	—
Mission	90	@	1 25
Salinas	—	@	—
Bodega	—	@	—
Sac. River	60	@	90
S'ta Barbara	1 0	@	1 15
Old Potatoes	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per lb	18	@	20
do gobblers	16	@	18
Hens, per dz	4 50	@	5 50
Roosters, young, large	4 50	@	5 50
Broilers	2 50	@	4 00
Ducks, tame, doz	4 50	@	5 50
Geese, per pair	1 50	@	2 00
Hare, per doz	2 50	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	—	@	—
Mallard Ducks	—	@	—
do small	—	@	—
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	00	@	1 25
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 50	@	2 00
do tame	4 00	@	5 00
Venison, per lb	10	@	12½
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medinm	—	@	13
do Heavy	—	@	12½
Eastern do	13½	@	14
Hams, Cal	15	@	15½
do Whittakers	—	@	17
do Duffield, ch	—	@	16
do Plankton & Armour	—	@	15
do Boyd's	—	@	15½
do Stewart's	—	@	15½
Eastern Should'r	9	@	10
do new bams	—	@	—
Cal. Smoked Beef	10	@	11
Lard	13	@	14
SEEDS.			
Alfalfa	13	@	15
Canary	5	@	6
Flaxseed	5	@	6
Ky. Blue Grass	40	@	50
Millet	12	@	15
Mustard, white	2	@	3
do. Brown	3	@	4
Italian Rye	25	@	30
Perennial do	30	@	35
Timothy	13	@	15
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Clover Red	—	@	20
do White	60	@	75
Alsike	—	@	—
Esparto Grassin Packets	—	@	1 00
WOOL, ETC.			
Spring, short, lb	22½@		25
do cnoice Nort	24	@	28
Medinm grades	18	@	22
Fall clip	—	@	—
Burry	14	@	18
Hides, dry	16	@	19
do wet salted	8	@	9
Tallow, Crude	6½@		7
do Refined	7½@		9

FRUITS AND VEGETABLES.

WEDNESDAY M., August 5, 1874.

The wholesale Fruit market is well supplied with all kind of Summer Produce. The season for Cherries is about over, and there are hardly any left in market. Bartlett Pears are becoming more plenty, and ars now quoted at $2@2.50 ₱ hox. The first Nectarines have made their appearance, selling at wholessle for $3@4c ₱ lb. Watermelons and Canteleups are coming forward more freely and are now much cheaper. Pomegranates are to he seen in a few houses. Tbe price is $6@7 ₱ 100. Figs are not very plenty yet. The varieties of Grapes now rlpe have hecn increased in numher by the addition of Black Hamhurg, Malvoisie, Mission and Rose of Peru. The Sweetwater Grapes have also again heen reduced in price. All kinds are moderately cheap, hut will soon be much more so. Six hundred and fifty tons of Fruits and Vegetables were shipped from Sacramento during the present week for the markets the other sids of the Sierras and the East. There is every indication that the shipments will bs much larger next week, and continus to increase rapidly throughout the season.

Dried Fruits remain at ahout the same quotatione. New Dried Apricots are now on hand.

Asparagus is again a little cheaper, ths price having fallen to 7@8c ₱ lb. Green Peas are growing oomparatively scarce and have advanced, though they are at still quite reasonable figeurs. Green Corn is now selling at 15@18c ₱ dozen. Cucumbers have fallen to 6@8c ₱ dozen.

FRUIT MARKET.			
Tahati, Or. ₱ M	35 00	@	40 00
Lorita, do	—	@	—
Osl. do	—	@	—
Limas, ₱ M	—	@	15 00
Cal. Lemons, ₱ M	—	@	40 00
Australian do	50 00	@	—
do per hox	7 00	@	8 00
do Scoily ₱ h'x	15 00	@	16 00
Bananas, ₱ bnch	3 50	@	5 00
Cocoanuts, ₱ 100	9 00	@	10 00
Pineapples, ₱ dz	7 00	@	9 00
Apples	2½@		5
Oberries	—	@	—
Blackherries	6	@	8
do wild	—	@	—
Hnckleherries	—	@	18
Strawberries ₱ lb	8	@	12
Gooseherries	—	@	—
Raspherries	12½	@	15
Currants	1	@	3
do black	—	@	18
Apricots	1½	@	2
Plums	2	@	15
Peaches, ₱ lb	3	@	10
Pears, Eating	1 00	@	2 50
do Cooking	—	@	—
do, Bartlett	2 00	@	2 50
Crab Apples	5	@	6
Nectarines	3	@	4
Wat'rmel's ₱ 100	15 00	@	20 00
Cantelo's ₱ 100	10 00	@	15 00
Pomegran's, ₱ 1006	00	@	7 00
Figs	8	@	12½
Grapes, Bl'k H'g	8	@	10
do Mnacat	—	@	—
do Malavo'e	6	@	8
do Sweetw'r	5	@	6
do Mission	3	@	3½
do Rose of Peru	—	@	8
do Tokay	—	@	—
do Morocco	—	@	—
do St. Peter	4	@	—
DRIED FRUIT.			
Apples, ₱ lb	6½@		8½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	11	@	12½
Apricots, ₱ lb	—	@	12½
Plums, ₱ lb	8	@	10
Pitted. do ₱ lb	15	@	20
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½@		12½
Bisck Figs, ₱ lb	8	@	10
Whlte, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	20	@	35
Zante Currants	8½	@	8½
Dates	12½	@	14
VEGETABLES.			
Asparagus	7	@	8
Beets	—	@	1
Oabbage, ₱ 100 lbs	—	@	2 00
do new, doz	50	@	60
Carrots, ₱ 100 lbs	1 00	@	1 25
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garilc, ₱ lb	6	@	8
Green Peas	3½	@	4
Green Oorn ₱ doz	15	@	18
Sum'r Squash, lb	4	@	5
Marro'fat Sq'sh, tn	60	00	@—
Artichokes, ₱ doz	15	@	25
String Beans, ₱ lb	—	@	5
Lima Beans	8	@	—
Parsnips	12½	@	15
Shell Beans	2	@	6
Pappers, ₱ lb	12½	@	20
Okra ₱ lb	25	@	40
Okra, Green	6	@	8
Cucumbers, doz	6	@	8
Tomatoes	3	@	5
Egg Plant ₱ lb	4	@	6
Rhnbarb	2½	@	3
Lettnce	12½	@	20

GENERAL MERCHANDISE.

WEDNESDAY M., August 5, 1874.

Bage and Bagging are still in good demand, and the transactions are large. Coffees are weaker. Coal Oils are shading off. Sugars are firm at the new rates.

BAGS.			
Eng. Stand Wht.	—	@	14¼
Detrick's Machine Sewed, 22x36 E.	—	@	13½
do 22x36, do E W	—	@	14
do 20x40, do A	—	@	14¼
Flour Sacks ½s	10½	@	12½
" ¼s	6½	@	7¼
Stand. Gunnies			
double seam	15	@	16
single seam	13	@	13
" Wool Sacks	65	@	—
Barley Bags 24x36	—	@	15¼
do 23x40	—	@	15½
do 24x40	—	@	16¼
do 28x36	—	@	17
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in. gds	9½	@	10
do 45	10½	@	11
do 80	—	@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ ₱ cans	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl	—	@	3 50
Sardines, qr hox	1 75	@	—
do bf boxes	3 00	@	—
COAL—Jobbing.			
Australian, ₱ ton	10 00	@	—
Coos Bay	—	@	10 00
Bellingbam Bay	—	@	8 50
Seattle	—	@	11—
Cumberl'd, cks	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	19 00
Liverpool	11 00	@	12—
West Hartley	12 50	@	—
Scotch	9 50	@	10 00
Soranton	15 00	@	17 50
Vancouver's Isl	11 00	@	11 50
Cbarcoal, ₱ sk	75	@	—
Coke, ₱ bhl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	22	@	23
Costa Rica per lb	23½	@	24
Gnatsmala	21	@	22
Java	28½	@	30
Manilla	22	@	—
Ground in os	—	@	30
Chicory	10	@	—
FISH.			
Pac. Dry Cod, new cases	6	@	6
do boneless	11	@	12
Eastern Cod	7	@	8
Salmon in bbls	8 00	@	—
do ½ hbls	4 50	@	—
do 2½ ₱ cans	—	@	3 00
do 2 ₱ cans	2 65	@	2 75
do 1 ₱ cans	1 75	@	—
Do Col. R. ½ b	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mess	3 00	@	3 50
" Ex mess, ½ bs	—	@	12 00
Sm'k Herr'g, bx	50	@	55
NAILS.			
Assorted size, ₱ lb	4¾	@	7
OILS.			
Pacifio Glue Co. Neat F't No. 1	—	@	1 00
Pnre	1 25	@	—
Castor Oil, No. 1	—	@	1 75
do do No. 2	—	@	1 60
Cocoannt	45	@	50
Olive Plagniol	5 00	@	—
do Possel	4 75	@	—
Palm	9	@	—
do Bacicalmpi	—	@	—
Linseed, raw	—	@	1 02
do bolled	—	@	1 07
China nnt in os	—	@	82½
do bulk	70	@	72
Sperm, cruds	—	@	1 40
do bleacbed	—	@	2 20
Ooast Whales	35	@	40
Polar, rcfined	50	@	55
Sperm	1 40	@	1 50
Lard	95	@	1 05
Coal, refined Pet	37½	@	40
Oleophine	—	@	34
Devoe's Bril't	25	@	28
Long Island	—	@	34
Eureka Cala	8 75	@	9 00
Devoe's Petro'm	26	@	29
Barrel kerosene	—	@	26
Ollve	4 00	@	9 50
Downer Kerose'e	—	@	42½
Gas Light Oil	—	@	34
PAINTS.			
Atlan. W. Lead	7½	@	12½
Whiting	—	@	2
Putty	4	@	4½
Obalk	—	@	1½
Paris White	2¾	@	—
Ochre	—	@	3½
Venetian Red	3½	@	5
Red Lead	7	@	11
Litbarge	10	@	11
Eng. Vermillion	1 00	@	1 25
RICE.			
China No. 1, ₱ lb	6½	@	6¾
do 2, do.	5½	@	5¾
Japan	5½	@	6
Siam Clesned	7	@	—
Patna	—	@	6¼
Hawaiian	7	@	7¾
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	20 00	@	23 00
do coarse	15 00	@	20 00
SOAP.			
Castile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Allsplce, per lb	15	@	16
Cloves	45	@	47½
Cassia	22½	@	25
Citron	—	@	30
Nutmeg	—	@	1 07½
Whole Pepper	17	@	17½
Pimento	—	@	15½
Gr'nd Allsp'rd	—	@	1 00
do Cassia do	—	@	1 50
do Cloves do	—	@	1 50
do Mustard do	—	@	1 25
do Ginger do	—	@	1 00
do Pepper do	—	@	1 00
do Mace do	—	@	1 60
SUGAR, ETC.			
Cal. Cube per lb	11½	@	—
Partz' Pro. Cube bbl or 100 lb hxs	—	@	11¾
do in 50 lb hxs	—	@	12
do in 25 lb hxs	—	@	12¼
Circle A crusbed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	11½
Golden C	—	@	10½
do Roy'g grade	—	@	6½
Cal. Syrup in bls	—	@	5½
do in ½ bls	—	@	55
do in kegs	—	@	60
Hawaiian Molasses	10	@	20
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@	1 00
Gunpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@	1 25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered hxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb hxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	45	@	55
Dwa f Twist	57	@	62½
12 inch do	57	@	62½
Ligbt Pressed	65	@	75
Hard do	60	@	70
Conn. Wrap'r	40	@	50
Penn. Wrapper	20	@	30
Ohio do	7	@	15
Virgi'a Smok'g	60	@	95
Fine ct cbe'g, gr	8 50	@	9 25
Fine cut chewing, huc'ts ₱ lb	75	@	90
Banner fine cnt	—	@	9 00
Eureka Cala	8 75	@	9 00
TURPENTINE.			
Eastern	60	@	65

LUMBER.

WEDNESDAY M., August 5, 1874.

The demand for Lumber is said to be slackening a little but the aspect of trade is favorahls. Prices are unchangsd. A telegram from Ottawa, Ont, 31st ult., says: At the Lumhermen's Convention held here the following resolutions were passed: In consequence of the over production hy manufacturers of Lumber and Timher, it is hereby agreed that the firms here represented shall shut down their mills at the earliest possibls moment, and reduce their usual production hy one-half, either by that means or hy curtailing their operations during the eneuing winter. This agreement is to apply to manufacturers of square timber as well as manufacturers of Lumber. A resolution was also passed authorizing the Secretary to correspond with the Lumher associations of the United States, asking their co-operation, with a view to general curtailment of their mills.

CARGO PRICES OF REDWOOD.		PUGET SOUND PINE —Retail Price.	
Rough, ₱ M	$16 00	Rough, ₱ M	20 00
Rough refnse, ₱ M	12 00	Fencing and Stepping, M	37 50
Rough clear, ₱ M	32 50	Fencing, 2d quality, ₱ M	30 00
Rough clear refuse, M	22 50	Fencing, ₱ lineal foot	1c
Rustic, ₱ M	30 00	Flooring and Step, ₱ M	30 00
Rustic, refuse, ₱ M	24 00	Flooring, narrow, ₱ M	32 50
Surfaced, ₱ M	26 00	Flooring, 2d quality. M	25 00
Surfaced refuse, ₱ M	16 00	Laths, ₱ M	3 25
Flooring, ₱ M	30 00	Furring, ₱ lineal ft	¾
Flooring, refuse, ₱ M	20 00	**REDWOOD—Retail.**	
Beaded flooring, ₱ M	32 50	Rough, ₱ M	20 00
Beaded floor, refuse, M	22 50	Rough refuse, ₱ M	16 00
Half-inch Siding, M	22 50	Rough Pickets, ₱ M	18 00
Half-inch siding, ref, M	16 00	Rough Pickets, p'd, M	20 00
Half-incb, Surfaced, M	25 00	Fancy Pickets, ₱ M	30 00
Half-inch Surf. ref., M	18 00	Siding, ₱ M	25 00
Half-inch Battens, M	22 50	Tongued and Grooved, surfaced, ₱ M	32 50
Pickets, rongh, ₱ M	13 00	Do do refuse, ₱ M	22 50
Pickets, rough, p'ntd	16 00	Half-inch surfaced, M	40 00
Pickets, fancy, p'ntd	25 00	Rustic, ₱ M	35 00
Shingles, ₱ M	2 25	Battens, ₱ lineal foot	¾
		Shingles ₱ M	2 50

RETAIL GROCERIES, ETC.

WEDNESDAY M., August 5, 1874.

There are no speoial changes in miscollaneous Groceriee, etc., but Flour, Butter and Sugar sympathize with the wholesale Produce and Merohandise markets.

Butter, Cal. ch'loe	30	@	37½
do common	25	@	30
Cheese, Cal., lb	12½	@	15
Lard, Cal., lb	12½	@	15
Flour, sx. fam. bl	5 75	@	6 00
Corn Meal, lb	2½	@	3½
Sugar, wn. orsh'd	—	@	12
do lt. brown, lb	7	@	9
Ooffee, Sbarhoro's family gr'nd, lb	—	@	35
Coffee, green, lb	24	@	32½
Tea, fine blk, 50, 65, 75	@1		00
Tea, finst Jap, 55, 75, 90	@1		00
Candles, Admant'el	7	@	25
Soap, Cal., lb	—	@	10
Can'd Oysters, dz.	2 0	@	2 50
Syrup, S F. Gol'n	35	@	40
Dried Apples	8	@	10
Dr'd Gen. Prunes	15	@	17
Dr'd Figs, Cal	9	@	10
Dr'd Peaches	10	@	12
Oils, Kerosene	30	@	35
Wines, Old Port	3 50	@	5 00
do Fr. Claret	1 00	@	1 25
do Cal., dz. hot	3 00	@	4 50
Whisky, O. B, gal	3 50	@	5 00
Fr. Brandy	4 00	@	10 00
Rice, lb	10	@	12½
Yeast Powders, dz	1 50	@	2 00

METALS.

WEDNESDAY M., August 5, 1874.

Reports from London, New York, etc., show a stringency in stocks of Quicksilver on hand, and the price bas been advanced throughout the world. Hers the present quotation is $1.45 ₱ lb. with no intimation as to where the rise will stop, if ever. This yield of tbe New Almaden is steadily decreasing and it is reported that the works are to he temporsrily shut down. High rates for Quicksilver mean a largs diminntion in profits for all gold and silver mines and a possible snspension of work on very low grade ores.

American Pig Iron, ₱ ton	—	@	40 00
Scoton Pig Iron, ₱ ton	—	@	40 00
White Pig, ₱ ton	—	@	50 00
Refined Bar, bad assortment, ₱ lb	—	@	3½
Refined Bar, good assortment, ₱ lb	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5¾
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	08	@	09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	9½	@	—
Norwsy Iron	8	@	—
Rolled Iron	6	@	—
Other Irons for Blacksmiths, Miners, etc.	—	@	4½
COPPER.—			
Brazers'	31	@	32
Cooper Tin'd	45	@	—
O. Nie'l's Pat	50	@	—
Sheathing, ₱ lb	—	@	24
Sheathing, Yellow	—	@	25
Sheatbing, Old Yellow	—	@	12½
Composition Nails	24	@	—
Composition Bolts	24	@	—
TIN PLATES.—			
Plates, Obarcoal, IX ₱ box	—	@	16 00
Plates, I C Charcoal	14 00	@	14 50
Roofing Plates	12 50	@	15 00
Banca Tin, Slabs, ₱ lb	33	@	37
SHEET.—English Cast, ₱ lb	20	@	25
Anderson & Woods' American Cast	10	@	17
Drill	18	@	22
Flat Bar	18	@	22
Plough Points	16	@	17
ZINC.	—	@	11
Zinc, Sheet	—	@	11½
NAILS—Assorted sizes	5¾	@	8
LEAD.—			
Pig, ₱ lb	5¾	@	6
Bar	6½	@	7
Sheet	—	@	9
Pipe	—	@	8½
QUICKSILVER, per lb	—	@	1 45

S. F. RETAIL MARKET RATES.

WEDNESDAY M., August 5, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

In the retail market Poultry has been reduced in price, correspondingly to the ohanges down towu. Eggs are very scarce and high. Meats, Game and Fisb are held as hitherto

| | | | |
|---

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m



A. G. STONESIFER,

BREEDER OF

Pure Blooded French Merino Sheep,

Has for sale a choice lot of Rams and Ewes, on the Oristimba Ranch, six miles west of Hill's Ferry, Stanislaus County, Cal. 22v7-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

N. GILMORE,

Importer and Breeder of

Angora or Cashmere

GOATS

—OF—

PURE BLOOD

—AND—

ALL GRADES.

For sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address

N. GILMORE,
El Dorado, El Dorado county,
11v6-eow California.

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to bred to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

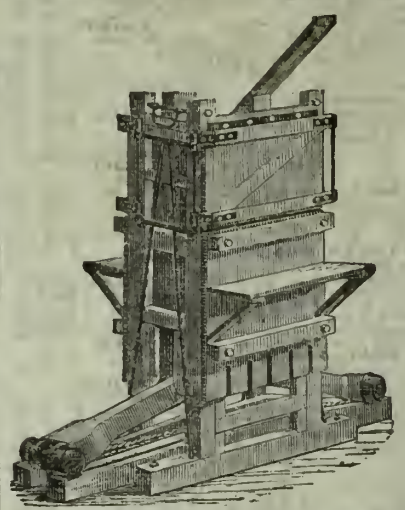
5v8-3m THOS. BUTTERFIELD & SONS.

1873. THE IMPROVED EAGLE HAY PRESS. 1873.

THE KIMBALL MANUFACTURING COMPANY,

OWNERS OF THE PATENT AND SOLE MANUFACTURERS ON THE PACIFIC COAST,

COR. FOURTH AND BRYANT STS., - - SAN FRANCISCO, CAL.



Several years were devoted by the patentee to the perfection of this powerful press.

Its unprecedented sale at the East induced the Kimball Manufacturing Company to introduce them in California and the Pacific States.

During the past season a number of important improvements have been made, in order to gain all the power desired in condensing the weight and size of the bales. The wood and iron of the frame have been increased and strengthened, and it is now the most perfect and powerful press in use.

It Possesses Other Advantages:

Being cheap, simple to manage, with no intricate machinery to get out of gear, thus losing time waiting for a new piece.

All who have used these presses pronounce them superior to anything used heretofore.

The power applied by means of two levers increases in ratio to the resistance; and as the levers approach a perpendicular position, the power can be scarcely estimated.

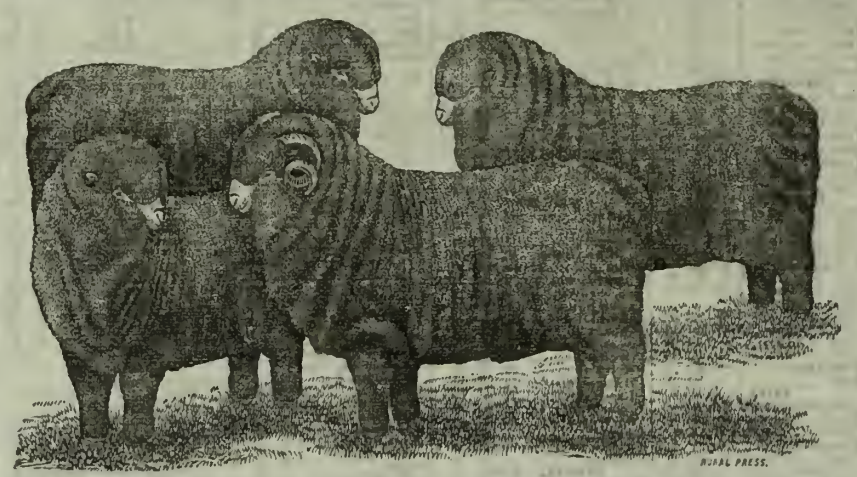
Three men, with one horse, can bale from ten to fifteen tons per day; each bale weighing from 300 to 350 lbs., using less rope than any other press.

When a bale is pressed and fastened, the follower runs down of its own weight and the bales can be taken out on either side.

On account of its great power, it is well adapted to pressing hides, rags, cotton or moss.

The particular attention of wool growers is called to our improved Wool Press, constructed on the same principle, which was tested at the State Agricultural Hall, Sacramento, April 18th, 1871, and stood the test of a bale of wool weighing 550 pounds. Reference, Major Robert Beck.

These presses are manufactured in San Francisco by the Kimball Car and Carriage Manufacturing Co., who have a stock constantly on hand. Prices $250.00 for Hay Presses; $350.00 for Wool Presses. Weight of Hay Press, 2,500 lbs.; Wool Press, 3,500 lbs. Can be shipped in pieces or set up. 13v7-2am-3m

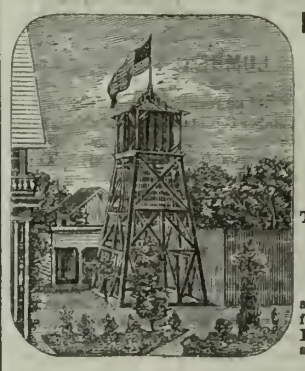


L. U. SHIPPEE, Importer and Breeder of Thoroughbred Spanish Merino Sheep and Short-Horned Durham Stock, Stockton, Cal.

I wish to call your attention to my flock of Spanish Merino Sheep, both Ewes and Bucks, imported during the last two years, and selected from the best flocks in Vermont. Unequaled on the Pacific Coast for quality and size, many of them having taken first premiums both in Vermont and California. Should you or any of your friends require sheep of this quality, you will do well to call and examine this flock before purchasing elsewhere, as I intend to sell them at greatly reduced prices from what they have formerly been sold.

My Flock Consists of 1,500 Sheep, 1,200 Imported and 300 of my own Breeding.

P. S.—This flock is not only the finest but the largest flock of imported Spanish Merino Sheep on the Pacific Coast. They have been selected from the flocks of the best breeders in Vermont, such as Rockwell, Sanford, Rich, Hammond, Saxton, Dean, Ellsworth, Remley, Stickney, and others who are acknowledged to be among the best breeders of Spanish Merinos in America. 21v7-eow-4m



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the Plains of Kansas, Nebraska, Missouri, Iowa and Illinois, where no other mills have been known to stand any length of time. All we ask is a full investigation of the DEXTER.

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO

4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.



The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept upon the MERINO RANCH



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. City Office—315 California Street, San Francisco.

SEVERANCE & PEET,
10v7-eow Importers and Breeders of Spanish Merino Sheep.

U. S. LIVE STOCK EXCHANGE,

S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.





Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER,
22v6-ty President Board of Directors.

Agricultural Articles.

C. CREGO. — S. C. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET..... .....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Heifield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pitkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
24v5-3m San Francisco.

WATERHOUSE & LESTER,

IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware.

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

☞ Send for price list.

ALSO AGENTS FOR

Woolsey's Patent Wheels,

The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has the metallic-shouldered band; and it can be repaired as easily as the common wood wheel.

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WATERHOUSE & LESTER,
122 and 124 Market street, and 19 and 21 California street, SAN FRANCISCO.
17, 19 and 21 Seventh street, - - SACRAMENTO.
21v7-3m

MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

THE CELEBRATED MITCHELL WAGON



15v7-3m

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 2Iv7-3m

H. C. SHAW,

STOCKTON, CAL.

Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
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Shipping---Vessels Up.

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FOR LONDON DIRECT

THE MAGNIFICENT A 1 CLIPPER SHIP,

MONETA,

621 Tons,

W. SINCLAIR.....Master.

FOR LIVERPOOL DIRECT.

The magnificent A 1 Clipper Ship,

SEA WITCH,

1288 Tons,

BAKER.....Master

These fine vessels have nearly full cargoes engaged and will have very quick dispatch. Freights taken in lots to suit shippers.

Will be followed by the splendid A 1 Iron Ship

GLENGARRY,

1769 Tons,

Due here in May; or by other first-class vessels,

Liberal advances made on shipments of produce consigned to our Liverpool house, Messrs. Robert Rodgers & Co.

RODGERS, MEYER & CO.

19v7-3m

IMPORTANT TO FARMERS!

X Line to Liverpool.

DIRECT.

The New A 1 Clipper Ship

FRIEDLANDER.....1,038 tons registe

Is intended to sail with dispatch.

Freight taken in lots to suit shippers.

Apply to E. E. MORGAN'S SONS,

320 California Street,
San Francisco.

J. WAGNER,

MANUFACTURER OF

FRENCH BURR MILL STONES AND PORTABLE MILLS.



General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. 13v7-3m-2am

TREADWELL & CO.

We certify that the partnership of Treadwell & Co., doing business in San Francisco, California, is composed of Leonard L. Treadwell and James F. Place, who both reside in the city and county of San Francisco, and William O. M. Berry, who resides in Oakland, Alameda county, California.

San Francisco, Cal., May 26th, 1874.

LEONARD L. TREADWELL,
JAS. F. PLACE,
WM. O. M. BERRY.

STATE OF CALIFORNIA,
CITY AND COUNTY OF SAN FRANCISCO.

On this May 27th, 1874, before me Henry C. Blake, a Notary Public, in and for said city and county, personally appeared Leonard L. Treadwell, James F. Place and William O. M. Berry, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

HENRY C. BLAKE, *Notary Public.*

Filed May 1st, 1874.

WM. HARNEY, County Clerk,
By S. C. ELLIS, Deputy.

jy4-4w

Anglo-Californian Bank.

LIMITED.

Successors to J. Seligman & Co.

London Office.....No. 3 Angel Court.

San Francisco Office.....No. 412 California street.

Authorized Capital Stock, $6,000,000,

Subscribed, $3,000,000. Paid in, $1,500,000.
Remainder subject to call.

DIRECTORS IN LONDON—Hon. Hugh McCulloch, Ronben D. Sassoon, William F. Scholfield, Isaac Seligman, Julius Sington.

MANAGERS:

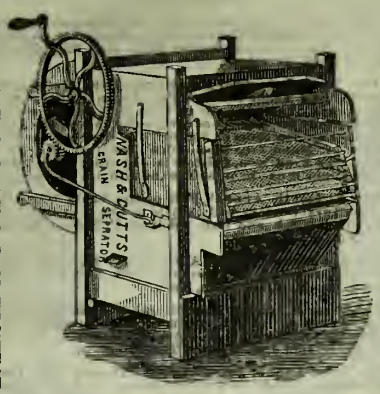
F. F. LOW and IGNATZ STEINHART,
SAN FRANCISCO.

The Bank is now prepared to open accounts, receive deposits, make collections, buy and sell Exchange, and issue Letters of Credit available throughout the world, and to loan money on proper securities. 2v27-eowbp

PURCHASERS please say advertised in Rural Press.

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT GRAIN SEPARATOR AND FAN MILL.



THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars address

NASH, MILLER & CO.,
No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

GEO. H. TAY & CO.,

614, 616 and 618 Battery St., S. F.,

OFFER FOR SALE

IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

RUBBER HOSE, ETC.

STOVES and RANGES,

THE RICHMOND RANGE,

THE HENRY CLAY,

THE EMPIRE CITY,

THE ALVARADO.

THE MONITOR, wrought iron body, cast iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

MILK PAILS, PANS, CHEESE HOOPS, ETC.

BABBIT METAL.

Wire for Fencing and Baling.

ALSO, METALS, HOUSE FURNISHING HARDWARE, JAPANNED GOODS, ETC., ETC.

22v7-3m

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,
Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.



21v2-1y

A Beautiful Brass Mounted Pocket

MICROSCOPE, said by a celebrated physician TO BE FULLY EQUAL IN POWER TO ONE HE PAID EIGHT HUNDRED DOLLARS ($800) FOR. Just the thing to look at miles on trees, shrubs, grain, or on sheep and calves. A look through it will astonish you. *Every Granger should have one.* Sent free to any address on receipt of ($1) one dollar green backs or postage stamps. Address, CHAS. P. KIMBALL, 513 Hayes street, San Francisco, California.

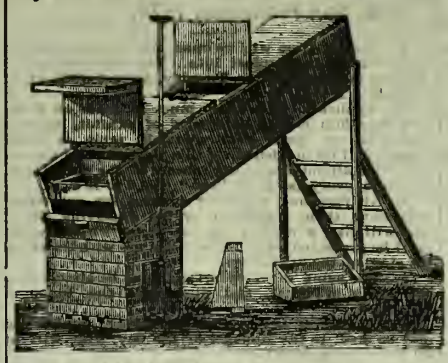
3v28-1m

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIEROE & CO., 627 Sacramento St.,
14v7-3m bet. Montgomery and Kearny Sts., S. F

Ryder's American Fruit Drier.



This DRIER is a perfect success in the East, and will be on this Coast when its merits are known. Its cheapness brings it within the means of every Fruit Grower The uniformity and perfection of its work challenge comparison. The principle claimed for this Drier (and violated in all other Driers in use), is, that no moisture shall come in contact with the fruit after the cut surfaces are once sealed by the heat, to open the cells and allow the aroma and fine qualities of the fruit to escape, which makes it undeniably the most perfect, as it is the most simple mechanical method for cureing Fruits, Vegetables, Meats and Grains ever invented. This Drier can make Raisins and the most beautiful crystalized fruit confection, equal to any imported. Can any other Drier do this? The fruit cured on this Drier last season, in this State, took the premium at the State Fair. Our Factory Drier will cure 60 bushels of peaches in a day. Send for Circulars. Farm, County and State Rights, and Driers with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

THE CELEBRATED

SLUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

J. M. KEELER & CO.,
Commission and Forwarding Merchants.

Agents for Eastern Manufacturers, 306 California street, San Francisco.

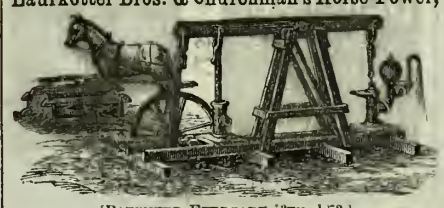
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
v7-2m-3m Cor. J and 10th Sts., Sacramento.

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m 304 California Street.

EUREKA WAREHOUSE,

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY 1ST, 1874.—First month, 50 cents per ton; each month thereafter, 37½ cents per ton. At regular monthly rates not to exceed $2.75 per ton for the season. Season rates, $2.00 per ton. Second weighing, 10 cents per ton.

Grain received on dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to Messrs. E. E. MORGAN'S SONS, San Francisco.

4v8-4m A. J. GOVE, Manager.

LANDS AND HOMES FOR SALE

RANCHOS

FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STREET,
ap25-tf N. E. Cor. Montgomery.

Tobacco and Vegetable Land for Sale

AT A BARGAIN.—A farm of 100 acres near the thriving and rapidly growing town of Gilroy, Cal. This land lies on and along Carnedero Creek, and is distant from Gilroy six miles, by a good and level road Fully 25 acres of the tract are adapted in every respect for the cultivation of tobacco, now the most remunerative crop of that section of the country; 25 acres suitable for vegetables; good house of five rooms; young orchard and abundant supply of pure mountain water. Good market at all seasons of the year in Gilroy for vegetables and farm products. Apply to B. B. MINOR, 411½ California street, Room No. 4. ag1-tf

DAIRY RANCH FOR SALE,

Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Obispo.
20v7-3m

FARMING LAND,

TO LEASE ON SHARES.

1,000 ACRES,

Or any part of same, being levied and of similar character to that of SHERMAN ISLAND. Apply to

W. T. S. RYER,
No. 330 Pine street.....SAN FRANCISCO, CAL.

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.

CROSS & CO., Sole Agents,
316 California Street, - - - SAN FRANCISCO.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

Ask for LEA & PERRINS' Sauce, and see name on wrapper, label, bottle and stopper.

Wholesale and for export by the Proprietors, Worcester; Crosse & Blackwell, London, &c., &c., and by Grocers and Oilmen universally.

1v8-1y

THE CELEBRATED NEW DRAW-FEED

WHEELER & WILSON

SEWING MACHINES

Are without exception the most desirable for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in public favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.

E. W. HARRAL, Agent,
20v7-4m-15p 427 Montgomery street, S. F.

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 44 Cal. Market, S. F

Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The RURAL PRESS—established Jan. 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfluities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericniture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast, that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the RURAL has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than has been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the RURAL PRESS.

The S. F. Market Reports

Will receive greater attention in the department of DOMESTIC PRODUCE than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the PACIFIC RURAL PRESS. We commence the new year with a regular circulation of

Over 5,000 Copies,

A far greater issue than that of any weekly on this Coast, independent of a daily publication. If our friends will continue to "help us help ourselves," we hope to reach a circulation of 8,000 this year, and do a correspondingly greater service of good. While we have the greatest advantages and can make by far the best weekly for

Agriculturists on This Side of the Continent,

We cannot expect one-half so large a circulation as journals in older and more populous districts. Consequently readers cannot rightly expect such a paper here at Eastern rates.

No Premiums But a Good Paper

Do we offer. A flashy chromo (or cheap map), with an ill suited paper, will hardly satisfy the farmers of this Coast, whose time is too precious for trifling. To many of you the benefit of a reliable and valuable paper should reach a hundred fold its cost, while to all a poor journal would be dear at any price.

Sample Copies Furnished Free

On receipt of stamp for postage.

Agents are Wanted

Who will do more or less active canvassing. To such we will furnish free samples and pay liberally for their services.

Terms of Subscription:

One year (payable in advance).....$4.00
Six months.....2.25
To Granges and Farmers' Clubs, furnishing club lists, $3 per annum.

DEWEY & CO., Publishers,
Office, No. 224 Sansome street, San Francisco.

Rules and Regulations of the Ninth Industrial Exhibition, Mechanics' Institute, San Francisco, 1874.

1. The Pavilion will be open for the reception of goods on Monday, August 10th. The exhibition will be open to the public on Tuesday, August 18th, at 11 o'clock, A. M.

2. Applications for space must be made on or before July 20th, stating character of exhibit, amount and kind of space required—wall, table or floor. Blanks will be furnished for this purpose, and a clerk will be in attendance at the Library of the Mechanics' Institute, every day from 12 to 1, and 7 to 10 P. M.

3. All persons presenting articles for exhibition must have them registered by the Receiving Clerk, who will give a receipt for the same, which receipt must be presented when the articles are withdrawn, at the close of the exhibition.

4. The name of every article must be attached by the exhibitor to it, and filed with the Board of Managers.

5. In case of any misunderstanding, application may be made to the Manager of the day, who will at all times be in attendance.

6. Articles intended for sale will be labeled accordingly, but cannot be removed until the close of the exhibition, except by written permission of the Managers.

7. Steam power will be provided, so that machinery of all kinds may be seen in actual operation, and every facility possible will be given to exhibit working machinery to the best advantage.

8. Perishable articles will be received, or may be removed at any time during the exhibition, with the consent of the Managers.

9. The most effectual means will be taken through the agency of the Police and otherwise, to guard and protect the property on exhibition; and it will be the purpose of the Managers that all articles shall be returned to the owners without loss or injury. Still, all articles deposited will be at the RISK OF THE OWNERS.

10. Articles intended for exhibition must be entered and placed on exhibition on or before Friday, August 21st.

11. The Managers are desirous that articles should be presented early. Those from abroad, intended for exhibition, should be properly packed, and if not consigned to exhibitor's agent, must be marked: "MANAGERS OF NINTH INDUSTRIAL EXHIBITION, SAN FRANCISCO-CAL." Articles from foreign countries should be accompanied with a certificate by the American Consul, in order that, upon their arrival, the proper course may be taken to have the duties remitted. All articles thus received, arriving too early, will be stored free of cost to the exhibitor, and the Managers will have them duly placed in proper position for exhibition. No freight charges will be paid by the Managers, but exhibitors are notified that arrangements are being made with various transportation companies to repay freight charges on evidence of return of goods exhibited.

Information will be furnished on addressing MANAGERS OF NINTH INDUSTRIAL EXHIBITION, SAN FRANCISCO, CAL.

Removal.

July 13th, 1874, the business office of this Journal was removed just one block east of our former location, to No. 224 Sansome Street, southeast corner of California, over the Bank of British Columbia, where we have secured large and elegant quarters. This removal is made in consequence of the sale of the building which we formerly occupied, to parties who will proceed immediately to demolish the present structure and erect a new and magnificent block in its place.

[Diagram Showing Location of Dewey & Co.'s New Offices.]



Designing

ana

Engraving

at

This Office.

We are prepared to do fine Wood Engraving for illustrating Landscape Scenery, Buildings, Machinery, Works of Art, Manufactured Articles, Trade Marks, Seals, Etc. We have a first-class

Machine for Engraving

A portion of the work, which can be finished thereby more perfectly than by the eye and hand alone. Our patrons can depend upon first-class work always, and at reasonable prices. Samples can be seen at our office.

DEWEY & CO.

A COMPLIMENT.

PLAINSBURG, MERCED CO., CAL., June 22, 1874.

DEWEY & CO.—*Gentlemen:* I herewith tender my grateful acknowledgements for the energy, promptness and efficiency which you have displayed in procuring my patent.

Although you were entire strangers to me when I first communicated with you, I soon felt satisfied you were gentlemen of integrity, and shall always be happy to represent you as such. Very truly yours,

H. W. RUCKER, M. D.

FARMERS write for your paper.

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th. R. S. Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhibition of the Machanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers, Mechanics' Institute, No. 27 Post street, San Francisco, California in order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Willis-ton, Secretary; J. B. Frisbie, Treasurer.

The First Annual Fair of the Bay District Fair Ground Association will be held at San Francisco, Cal., commencing on September 7th, and ending on September 12th.

Hints to be Remembered.

A note dated on Sunday is void.
A note obtained by fraud, or even from one intoxicated, can not be collected.
If a note be stolen it does not release the maker—he must pay it.
An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.
A note by a minor is void.
Notes bear interest only when so stated.
Principals are responsible for their agents.
Each individual in partnership is responsible for the whole amount of the debts of the firm.
Ignorance of the law excuses no one.
It is a fraud to conceal a fraud.
The law compels no one to do impossibilities.
An agreement without consideration is void.
Signatures in lead pencil are good in law.
A receipt for money is not legally conclusive.
The acts of one partner bind all the others.
Contracts made on Sunday can not be enforced.
A contract made with a minor is void.
A contract made with a lunatic is void.

HELP FOR TOWN OR COUNTRY.

The long established and well-known Intelligence House of Crossett & Co. is now receiving numerous applications from the rural districts for supplying help of various kinds for Domestic, Farm, Mechanical work, etc., and are thus supplying a want that has long been felt in all parts of the interior of the State.

A long residence in the interior, preceded by a ten year's experience in this city, in the business of supplying help for both city and country, has given the undersigned such a general knowledge of the wants of the community in relation to help of every kind, and the sources of supply for the same, that we feel abundantly confident of our ability to give the best satisfaction to both those in search of, and those who are in need of help—whether for the chamber, the kitchen, the farm, the mine, the factory or for general work.

Send in your orders trustingly, and you can depend upon having them promptly and satisfactorily filled in accordance with the character of the labor called for—male or female, skilled or unskilled, and of any nationality that may be specified, and on the most satisfactory terms. Address, CROSSETT & CO., Agents, San Francisco, 606 Clay street. aul-tf

Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

L. P. MCCARTY—General Agent.
W. H. RATTENBERRY—California.
CHAS. W. OTIS—Contra Costa County.
CHAS. T. BELL—Alameda, Santa Clara and Santa Cruz Counties.
J. W. ANDERSON—Orange and Santa Ana, in Los Angeles County, Cal.
HOON ALSTON—San Luis Obispo, San Bernardino and San Diego Counties.
JAS. KEARNEY—Alisador, Calaveras, Tuolumne and Mariposa Counties.
B. GOODWIN—Sacramento County.
S. G. CRAWFORD—Nevada, Sierra and Plumas Counties.

Mining and Scientific Press,

(Established in 1860.)

The oldest, largest and best Mining Journal. Devoted, also, to Science, Invention, Mechanic Arts and Industry on the Pacific Coast.

Subscription to the above, $4 a year; Sample Copies, post paid, 10 cts.—four for 25 cts. Address,

DEWEY & CO., Publishers,
No. 224 Sansome st., S. F.

CAMPO, SAN DIEGO CO., CAL., July 3d, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* To-day I received the patent and other papers of my animal trap, that you so successfully worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long. I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into your hands.

I remain yours truly, A. M. GASS.

PLAINFIELD, July 4th, 1874.

MESSRS. DEWEY & CO.—*Dear Sirs:* I acknowledge receipt of yours of 2d inst., inclosing my Letters Patent. I thank you for the interest you have taken in obtaining the same. Yours truly, M. W. COON.

DR. E. J. FRASER, Homœpathic Physician and Surgeon, has removed his office and residence from 102 Stockton street to No 305 Kearny street, northwest corner of Bush. 6v7-3m

IMPROVE YOUR POULTRY.



IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.

Oakland Poultry Yards,

Cor. 16th & Castro Streets, Oakland, Cal.

Young Fowls now for sale at reduced prices. Also a few of my imported Fowls in pairs or trios. Send stamp for illustrated circular, containing a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,
4v8-tf P. O. Box 659, San Francisco.

THE NEW WINCHESTER REPEATING RIFLE,

(Model of 1873.)

San Francisco Agency.



The Winchester Repeating Arms Company, of New Haven, Conn., have recently made still further valuable improvements on the celebrated Henry Rifle, which now make it, beyond doubt, the most magnificent weapon in the world. They have just introduced this beautiful arm upon the market, and their San Francisco Agency is fully supplied with all the various styles, together with cartridges for the same.

In the manufacture of the new gun, iron mountings (blued or case-hardened) have been substituted for gun metal or brass, thus increasing the strength of the arm and decreasing its weight. It is also now so constructed as to carry a Central Fire Cartridge holding one-third more powder than used in the cartridge of the model of 1866, thereby greatly augmenting the power and accuracy of the weapon.

THE SPORTING RIFLE

Has a Set or Hair Trigger which can be used at will—set or not set, as preferred. All the arms have a sliding lid which covers the opening in which the Carrier Block moves up and down. This lid, by the action of the Carriar Lever, is always open when the gun is fired, and closed by hand when the firing ceases, thus protecting the lock and inner works of the gun from dust and rain.

Various other improvements, which it is not necessary to mention in detail, by which the strength of the several parts is increased and the general appearance of the gun improved, have also been made.

There is now a greater variety of the Sporting Rifle than heretofore. They can be had with a length of barrel (round or octagonal) ranging from 24 to 30 inches, fitted with Globe and Peep Sights, or any other kind in use.

The Carbine is now made with all the improvements above referred to, except the set trigger.

The Sporting Rifle and Carbine will also be made as Extra Arms, Gold, Silver or Nickel Plated, plain or beautifully engraved.

MILITARY ARMS.

Still further improvements have been accomplished which overcome all objections heretofore raised against the Repeating Rifle as an army gun. It is safe, certain and effective in fire, whether used with deliberation or during excitement in action, and no more motions are required than in operating the old model gun.

More extended and minute particulars concerning the new gun can be had by writing or applying to the San Francisco Agency for circular.

CARTRIDGES.

The trade is notified that the Shells of the Central Fire Cartridge for the new gun can be reloaded, and that the Winchester Repeating Arms Company are manufacturers of every description of Cartridge used for Carbine, Rifle and Pistol of any make, and that the Company have a full stock constantly on hand at their San Francisco Agency

JOHN SKINKER,
Sole Agent for Pacific Coast,
NO. 108 BATTERY STREET, SAN FRANCISCO.

NOTE.—Also Agent for the Dupont Powder Company and Eagle Safety Fuse Manufacturing Company.
ow-bp

GEO F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

And Tree Seeds,

GARDEN TOOLS, TREES, PLANTS, Etc.

No. 317 Washington Street, San Francisco,

Between Battery and Front.

jy11

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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, AUGUST 15, 1874. [Number 7.

Reclamation of Tule Land.

EDITORS PRESS:—In relation to the report of General Sherman Day and myself, on the investigation and survey in view of the reclamation of swamp land, District No. 107, and the improved method recommended by us to reclaim the same, permit me to submit the following:

The investigations we were directed to make, were commenced at a dam thrown across the month of Rocky slough, near the shore of Old river, and extended along the bank of the river to Indian slongh, thence along Indian slough to the upland. We instituted a series of borings, at intervals, along the whole route, some taken inland, but mostly at the bank of the river.

As the borings progressed, soundings with a lead were taken at distances of 20 to 50 feet from the shore, to determine the depth of the river and ascertain the character and quantity of material that could be obtained from that source for levee purposes.

The details of these examinations, illustrated with diagrams and cross sections, together with explanatory field notes, accompany our report, but are omitted here.

The brown, peaty and spongy surface, peculiar to low tule lands, was fonnd to average along the bank of the river about seven feet in thickness, forming a tenaceous, elastic crust, composed of tough tule roots and interlaced fibrous matter, with a slight admixture of sediment and vegetable mould, gradually softening downward until it becomes almost semi-fluid at the bottom. Where the peaty crust ends, an under stratum of the consistency of an ordinary mud bar begins. This formation, extending from the river bed inland, gradually hardens downward until tough blue clay, resting on hard pan (so-called) is reached, the depth varying from 15 to 24 feet from the snrface of the land. The composition of this formation is principally clay and very fine sand, with a slight admixture of mica and sulphuret of iron, the proportions slightly varying at each boring. This material has not the solid consistency necessary to make a levee of, but combined with the tough, peaty surface, is considered admirably adapted to the pnrpose.

The examinations made by inspection and boring satisfied ns that the general character of tnle lands bordering on the San Joaquin river and its branches, as here described, were identical. This peculiar formation, marvelously fertile, commencing at nothing at the upland, was found to attain the greatest depth, some 30 feet to hard pan, along the banks of the main river.

We did not chain the distance from point to point where the borings were made, but we selected those places which indicated soft formation and treacherous foundations for building a levee npon, and which had caused the greatest trouble and expense from breaks and keeping the levee in repair, and there made the tests with the greatest care.

This we did to satisfy ourselves with regard to the practicability of building a substantial and permanent levee npon the worst places, and at a reasonable cost, with the material at hand. Of this, there is in our minds no question, at a cost not to exceed $3,500 per mile (there being 26½ miles extent of levee), nor more than $10 per acre (there being about 17,126 acres) assessment on the land within the district. to cover cost of canal from Point of Timber to Dutch slough, as well as catch-water to collect and carry off the rain fall from the uplands, flood gates, repairs, ditches, drain and all.

The sedimentary deposit or mud bars, which will be nsed in part as material to bnild the levee of the plan proposed and heretofore explained, will be found along the shore.

The brown, spongy, light and peaty material, of which the present line is built, is found unsnitable to the purpose. It shrinks to that degree, when dry, as to leave fissures or cracks in the top of the levee from two to two and a half inches wide per lineal yard, which not only pass water, during high tide, from the river to the land, but destroy cohesion and lateral stability of the structure, as well as its power of resistance to hydrostatic pressure, and permanence.

To this cause all the breaks, inundations of the land, destruction of crops, and pecuniary loss to owners, so lately experienced, and severely felt, are attributable.

From these investigations, carefully made by the surveying party, consisting of General Sherman Day, the undersigned, Captain J. A. Welch, J. C. Stump and others, it was apparent to all, that the present levee is not only badly built, but is improperly located some 90 feet from the river shore, on soft and yielding ground. It was found by the borings that the peaty formation, overlying the clayey material and hard pan (so called), was greater inland than near the river bank, the only place where a levee, on tule land, can be safely located. As to the method of building a levee properly located and constructed, which we believe can be done, we would recommend this. In all cases the work shall be preceded by careful boring, to ascertain the depth of the peaty formation, and whether any subterraneous passages which do sometimes occur, underlie the surface, forming a crust of varying thickness, called float land, of sufficient strength to support cattle, and even the levees. In front of Captain Lockhart's ranch, the sounding rod, while boring, dropped five feet from the bottom of the float land to the top of the soft earth stratum beneath.

The next step should bo to stake off the baso lines of the levee 30 feet apart, and 25 feet from the outside line to the brow of the river bank. Tracing out these base lines, an incision with a sharp tule knife some four feet long, through the tough surface, down to the less tenacions and soft material below, ought to be made, to completely detach this continuous belt from the adjacent surface of land, as a foundation upon which the levee will be built. The work of building this levee will be commenced by coating the surface of this belt with plastic material, taken from the river bed with a dredge, and deposited in place, thus forming a bed, as it were, of mortar. Upon this bed of mortar a course of peaty material, taken from the adjoining drain and the present levee (by utilizing which a great obstacle and an ugly feature will be removed from the land), will be laid and well grouted with the semi-fluid substance, dredged from the river so that every crack or interstice shall be filled. The manner of doing the work, will be similar to the constrnction of a wall of rubble masonry, built up in courses with full beds of mortar, grouted in every course. As the levee or wall, composed of impervious earth and peaty material, is carried up, on this continuous detached belt, described above, the levee from the superincumbent weight or load, will slide downward in the groove, made in the land by the sinkiug of the detached belt, lubricated by water, nntil the whole mass settles and rests permanently on the sub-stratum below. The flexibility of the levee, from its composition of peaty substance and plastic material, will adapt itself to the undulations of the earthy substratum, and thus form, when in place, a perfectly impervious barrier to the ingress of water, from the river and tides, whether above or below the surface of the land. And we hold that the water wall standing alone, independent and detached as it will be, will stop land-cracks, that often occnr, to the full depth of the peaty formation, varying from seven to 25 feet, as for instance in Twitchell Island, where a crack opened a wide channel to the river, letting in the water, and flooding the land.

The foundation of this levee will differ from the one built in the nsual way, inasmuch as the base of the latter rests on the surface of the ground, on which, when the tide is high, the hydrostatic pressure is great; by virtue of the force exerted against it, and the seepage and currents of water nnder it, which first lifts and lubricates, then slides, and breaks the levee and floods the land. Whereas the former (the levee proposed) will have its base two feet below the surface of the land, and is thus supported by a shoulder or prop of earth behind it, which prevents sliding, and gives the levee statical resistance that will render it solid and immovable.

It will be necessary during the progress of the work, and from time to time after the levee is completed, to keep the top at a true level.

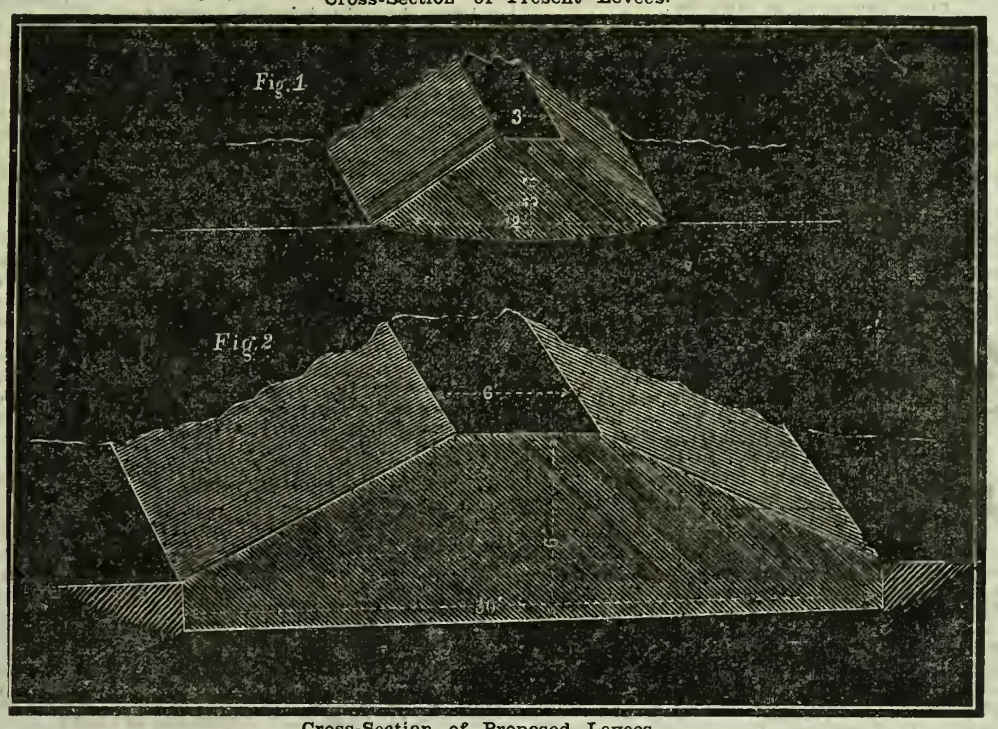
Fig. 3 in the accompanying diagram shows a plan of the foundation belt, which is cut, as described in the accompanying "Report," 25 feet from the river shore.

Fig. 4 shows a cross-section of levee for closing sub-passage, in connection with a scotion of the bank. Referring to figure, *b* represents the bank of the river, *c* the peaty material, *d* the sub-stratum, *e* the sedimentary matter, *f* the sub-passage closed against the ingress of water.

The dimensions of the finished levee at the base will be the full width of the peaty 30-foot belt, six feet wide at the top and six foet high from the ground snrface, with slopes two horizontal to one perpendicular. It is assumed from what is known of other levees, as for instance that of Sherman Islaud, the best example on peaty land, Grand Island being the best found on sedimentary laud, that the levee under consideration will settle on an average two feet, the point at which the levee slopes will begin; this will give 12 square yards area of cross section above the surface, and 6.66 square yards below the surface, or 32,841 cubic yards per mile. What number of cubic yards will settle below the surface, in very soft ground, or at subterraneous places, which bear a small proportion to the whole, can only be determined by practical experience. The same may be said of the dredging from the river, and depositing the plastic or grouting material on the levee. Enough, however, is ascertained from estimates made by reliable parties, willing to contract for the doing and completing the work in accordance with the plan described, to judge with a great

[Continued on Page 108].

Cross-Section of Present Levees.



Cross-Section of Proposed Levees.

Plan of Foundation Belt.

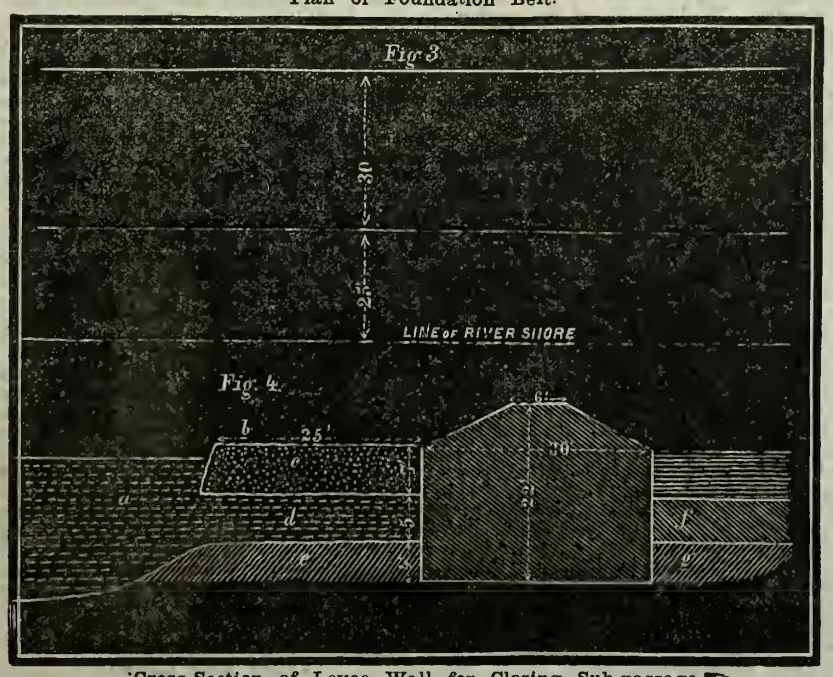


Fig. 4.

Cross-Section of Levee Wall for Closing Sub-passage.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

What Shall we do with Our Boys?

EDITORS PRESS:—Such has been the heading of many editorials in all the papers of this State, including the RURAL, and I, in several communications to the latter, referred to it in a general way; indeed, speaking of silk culture. Give first our boys and girls a chance, said I, for in no other industry can they be worked with so much advantage as in that one of silk growing. But, thanks to a little experience, I have to take all that back, for our poor boys, whose bread the heathen Chinaman is taking out of their mouths, would work; and I was lucky in raising but a small number of worms this year, otherwise I had been put at much inconvenience. Here is a short narrative of this year's experience:

Before proceeding any further, let me tell you that the place I own and upon which I am raising my silkworms is a splendid one, on a hill overlooking the surrounding country; with neat and smooth walks laid all over it; beautiful beds of flowers, so gay to look at; patches of most luscious strawberries; groves of mulberry trees, fields of grapevines, etc., which make it one of the prettiest spots around Nevada. So just after having set my silkworm eggs in the hatching box, and having a very small lot of eggs that had hatched on their way from Italy, I took my

Boy No. 1.

He was a lad of 17, a very quiet and good boy. As I had no worms yet to feed except that small lot referred to above, I set him to work at something else, and made him clean the cocoonery windows. But after dinner the boy came back with a note from his mother; said she: "Your work is *too hard* for Eddy, please find another boy." It was plain that the boy's mother didn't like to have her Eddy do such menial work as cleaning the windows of the silkworms' house. And, of course, I had to look for another boy.

Boy No. 2

Was 14 years old, and intelligent enough, but rather lazy; and very fond of reading, hunting and swimming. However, to make this boy like the place—for I had to be away every forenoon, leaving him there all alone—I got some good books for him to read, and let him take my gun once in a while to kill doves. This boy's father was dead, and his mother was hardly making a living by washing clothes. I paid the boy $15 a month, and all the work to be done was to pick leaves, feed the silkworms, pick strawberries and do other sundry little things. The boy stood it well 40 days, and just when we were most busy with the worms, he quit, telling me he didn't like raising silkworms. Next day the boy was gone swimming, hunting and bumming, never minding whether his poor mother had to work so hard to get grub for him and his brothers, and keep his ragged clothes together; this was several days before the Fourth of July. The next one,

Boy No. 3,

Was a bright youth, 13 years of age, and quick to understand anything. The Fourth of July came along, and to give the boy a chance to enjoy it, I arranged my affairs so as to do without the boy's help for that day, although it was very inconvenient to me. My kindness was of no avail, for next day the boy told me he had enough of it. Since then he could be seen every day in town, preferring likely a hoodlum life to that of an industrious boy.

I tell you the truth, I had about enough of it, and felt quite discouraged about employing white boys on my place. I still tried it again and engaged

Boy No. 4.

He was a smaller boy, only nine years old, and as besides I had very little to do, I gave him $10 a month. He said it suited him and his mother—a very poor woman. He was getting along well enough, when, on the fifth day, all at once, at the same time stepping high on his toes, this little urchin said: "Sir, I will work no more at $10 a month." "Then," said I, "you g-g-git!" and so he did.

Urchin, thought I, you will be the last one that I will try, sure, for as next year I intend to raise quite a number of silkworms, I do not wish to repeat the experiment at my own expense, and I will simply take Chinamen or Chinese boys, who stick to their work after having contracted for it, have no objection to cleaning windows, no taste for hunting, swimming or hoodlumming, and no 4th of July to celebrate. I will do it, and let others experiment on the boys of poor white folks. But I know that to the next editorial headed, "What shall we do with our boys?" I am ready to answer: Give first the boys a good thrashing, and then have the parents fined for the bad habits and too great liberty they allow their children to take. That's all I have to say. FELIX GILLET.

Nevada City, Aug. 7th, 1874.

Sacramento County Items.

EDITORS PRESS:—Farmers have threshed what grain they have and are selling what is necessary to pay expenses—holding on for higher prices. Looking over the fields you see the grain piled up in stacks, till such time as the grower wishes to stow it away or to market it. The straw is gathered and baled, which formerly was burned to get it out of the way. Farmers see the advantage in keeping it, for they can easily get one dollar per bale this winter; besides you provide a good bed for your work horses, and enlarge your manure pile, thereby gaining more work by them in so doing, and enriching your land, which will produce heavier crops—and putting more money in your pocket.

I see the farmers of Oregon are adopting our plan in leaving their grain out in the fields—saving the expense of hauling to the barn as soon as threshed—until they have disposed of the quantity that they wish to sell.

The flush days of the Pacific are past; and we are verging down to the plain every-day life of our Eastern friends. All kinds of business have had their run. The products of our soil that brought a large figure, pay only a fair price to compensate the labor, and expenses are curtailed; still we have plenty of land that lies uncultivated, and California needs the strong arm of the rugged husbandman to till her land, and fill up her waste places. The question of labor is a matter of interest, and should be studied to the interest of the cultivator.

The various products are divided between the white man and Chinaman; both are needed. While some business may justify the employer in paying a higher rate to one than the other, a certain grade should be given accordingly.

Do bees eat grapes?—is the question. I have been troubled by them. I have had whole bunches eaten up. Birds could not pick every berry, therefore I hold that the bees can break through the skin without the aid of the birds.

What is your idea of pruning pears—high or low? A portion of the summer is hot, and on the south side of the tree the sun often burns the bark; by leaving the branches low, the leaves shade it to some extent. The objection rises in working close to them.

The system of farmers co-operating for the benefit of each other is exemplified in a case near at hand, where two live adjoining each other, and engage in fruit and farm produce. To save time each takes his turn in going to market, delivering and attending to each other's business. In this way a day is saved to see to home duties. As each is a Patron, it shows a brotherly affection towards each other.

Already the farmers are breaking up their volunteer land for hay, using the chisel cultivator, which tears up the ground in fine style, leaving a cloud of dust behind. As many were disappointed in getting in crops last season, and as the present is a peculiar one for this latitude, in the way of cool, cloudy weather, it behooves them to be on the alert in taking time by the forelock. Another change I notice, is the early morning dews in midsummer. The early pioneer notes the changes very forcibly, it giving a marked advantage to the ruralist in many respects.

The working of the Grange system is taking root, and spreading its influence in every community. It has awakened the farmer from his lethargy and roused him to action, as well as thinking, gathering new ideas and putting them into practice. In disposing of his products the grower has depended on the middleman for the sale of them, thinking it would be impossible for him to do it, but of late years he is growing wiser; he sees that while he is working thus hard, and getting but little for his labor, the seller of his produce is growing rich by not half the exertion. The Grange has burst the bubble; the producer is now his own middleman; and now from two to three car loads leave the city for various points in the mountains filled from his own orchards, the products of his own labor.

In visiting neighbors, one sees and learns something new. I saw some samples of cotton growing on our red land, that was planted the last of April, by way of experiment. The grower is satisfied that the land will grow good cotton, and expects to prepare a piece of land for cultivation by next year. The plant is growing thriftily, having many bolls already on, and will ripen in a few weeks. He is also experimenting in underground irrigation; using four-inch clay pipes, which he has already laid a large number of feet, some two feet under surface. The water saturates some ten feet from the pipes each way, leaving the ground moist and in fine working order. He has corn, beans and melons in abundance. I think eventually all our surface watering will be done away with, and underground substituted. There is hardly a quarter section in our red land but what is watered for raising vegetables, and large and small fruits, which keeps one throughout the summer turning the water in various channels, from day to day, as it quickly evaporates and has to pass over so often to keep them growing, and in good condition to mature the crop, and keep them from withering. And, by substituting this under process, less water will be required, and less labor to attend it, leaving our ground porous, and not in such baked condition as it now is.

He has a large quantity of young gum trees coming up from seed, and poplars for forest culture; also a number of young orange and lemon trees growing thriftily. There is quite a number of persons experimenting with them. All seem to do well. I have some 15 or 20 of them—seedlings—now bearing. They bear in eight to ten years, having fine fruit, but the flavor is not up to the Los Angeles ones. Still they can be cultivated, and bear the same as any other fruit, without the fear of frost; and an ornament to have mixed in with other fruits and flowers. They bloom in April, and but once a year the fruit turns in color, in October; and is ripe to eat by December. I hardly think they can be raised with profit. The soil is hardly adapted, as it is not deep or sandy enough. I should think the foothills would be a good place to raise them with profit. Another drawback is, that the hot north wind curls the leaf and blackens it. It also has the same effect on the pear—whips off the leaves, and blasts the blossoms. They need a sheltered place—either a lateral one or one shaded by trees. They require a level piece of land for irrigation. The air here is so warm, and sucks the moisture up so fast, that, if not watered daily, or three times a week, the leaves begin to droop. Mine is on a hillside. I notice the change. The water does not penetrate deep enough to keep them moistened; whereas, if on a level, the roots, as they are a mass of feeders, would keep wet longer, and the ground hold more moisture.

Sacramento county, Aug. 1st, 1874. G. R.

["Do bees eat grapes?" This is a question earnestly disputed at present. Numerous parties have declared that they have seen the bee eating grapes, while others assert that they cannot eat them. If we were on the jury in this case, and were charged to bring in a verdict according to the testimony received, we should bring in a verdict of guilty. But at the same time we should recommend him to the mercy of the court; for there are certainly extenuating circumstances. He was probably driven to it by necessity, and the damage, at the highest estimate, is slight compared with the value of the unpaid labor which he performs.

"What is your idea of pruning pears—high or low?" Our idea is that it is better for the tree, in this country, to be trimmed low. And we also think that Eastern fruit-growers are in fault in trimming the lateral branches as high as they do. In the first place, a 20-foot ladder is needed to reach the lowest limbs of the old fashioned standard trees, which renders picking an extremely inconvenient matter. Then the trunk is too much exposed to the rays of the sun. Probably this exposure has a deleterious influence in cracking the bark of the trunk. The damage from wind is also greater.—EDS PRESS.]

A Parasite on Alfalfa.

EDITORS PRESS:—Enclosed I send you a stalk of alfalfa with a parasite attached which seems to be an injury to the plant when growing on it. Please advise me if it is a common thing, and if it can be exterminated by close cutting of the crop or other means. A SUBSCRIBER.

Colfax, July 29, 1874.

[The parasite clinging to the stalk of alfalfa sent by our correspondent is a novelty to all who have examined it. We would like to know more of its history. Is this the first growth of the alfalfa, or is it well rooted in the field, and where was the seed grown? And is this the first season's growth of the parasite? It apparently has a death-grip on the alfalfa stalk. If the parasite is an annual it can undoubtedly be easily eradicated by cutting before the seed matures. If it were an ordinary weed, and the alfalfa could have a fair chance, it would soon grow down the parasite; but the specimen received is so tightly encircled that it would seem as though the growth of the stalk must necessarily cease. Early cutting, however, would be advisable under any circumstances. This *may* kill the parasite and will not hurt the alfalfa. It may possibly require several cuttings to exterminate it. Alfalfa seed imported from Chili—although the best that can be obtained—is extremely foul with the seed of various weeds. These, however, may be eradicated by cutting the alfalfa before the seed of the accompanying weeds have ripened.

We would like to receive further reports from our correspondent, and if any other of our subscribers have been visited by this unwelcome guest they would confer a favor upon the readers of the PRESS by sending us the information. The color of the parasite as it reached us—and we suppose this is its natural color, for that of the alfalfa was unchanged—is a bright yellow. It resembles closely the weed that is known as "Gold thread;" though of a finer fiber; being no larger than coarse sewing thread. The tendrils that strike the stalks of alfalfa nearly envelop them in spots, and cling tightly to them; while numerous other tendrils seem to be sent out on exploring expeditions, showing quite a length of thread which is unattached to anything.—EDS. PRESS.]

Letter from Campo.

EDITORS PRESS:—Not knowing of any correspondent in this part to the RURAL, I will send you occasionally a few items. We have had very heavy rains for the last 20 days, very much to the damage of farmers in this vicinity. They had not got their grain threshed, but had it nearly all stacked, and the stacks had to be all spread again. It rains every day, so it can't get dry. They will probably lose the most of it; a great deal of it is already sprouted. We had some very sharp lightning lately. It struck 14 telegraph poles and killed a cow in one day. A great many trees are literally torn to pieces by lightning. It is feared that a great deal of damage will be done by the thunder showers this summer in this section of the country.

I am very much in need of some cheap and quick method of drying furs, deer skins and goat skins. If you know of any chemicals that will answer please inform me.

L. M. GASKILL.

Campo, San Diego, Co., July 28th.

[Dressing furs, deer skins, etc., is a business requiring experienced labor. Do not rely much on chemicals in this matter.—EDS. PRESS.]

HORTICULTURE.

Weather and Fruit.

EDITORS PRESS:—We have had a few hot days, but as a general thing the season has been a cool one. Fruit of all kinds is at least four weeks later than ordinary seasons, in maturing.

There is considerable complaint among our orchardists of the failure, or apparently small crop of apples; yet from my observation the yield will be a fair one, and the fruit larger and of better quality than ordinarily.

Peach and plum trees are loaded, and indications are that we shall have a bountiful crop of each. The worst thing I have to note in this connection, is that the best quality of peaches and plums were not selected by our orchardists when planted, and but little improvement has since been made in grafting and budding: consequently much of the fruit is small and unsalable and the great expense in pitting and drying small plums and peaches leaves little or no profit to the growers.

Plum Culture

In the foothills is one of the most profitable of the many fruits cultivated, if care be taken in procuring the best quality for drying. Grafted into peach roots the plum will commence bearing the fourth year, and continue so for an indefinite number of years; and at the age of eight or ten years will produce annually, if they have been properly cultivated, from four to eight hundred lbs. per tree. Mr. Miles, of Upper Placerville, informs me that he has some old plum trees that yearly yield eight hundred lbs. of fruit, and when pitted and dried will produce two hundred pounds, worth twenty cents per pound; forty dollars per tree. Miles has a number of old plum trees, and has lately planted about one thousand young ones, which will come into bearing in two or three years.

In Upper Placerville Spencer & Simonton have about forty acres of orchard and vineyard. Foster & Son, about the same. Mr. Hendricks about thirty acres. McCall some twenty acres. The Crockers, Bronson and others have smaller orchards and vineyards in that vicinity.

The Huburd Brothers

Have some fifty acres in orchard and vineyards, including a large amount of small fruits, and berries of several kinds. This firm is one of the most enterprising of our fruit growers. They can and dry most of the fruit they raise. Their canned fruit is of a superior quality; finds a ready sale at better prices than other canned fruit in the market. At first they purchased cans of the tinners, but finding their losses from imperfect cans exceeded their profits, they commenced about three years ago to manufacture their own cans. They have dies and pressers to cut and prepare their tin, doing their can-making in winter, when little out of door work can be attended to. They have a process discovered by themselves (and kept a secret) by which they solder and prepare their cans. Their losses, they informed me, do not now exceed one per cent. from imperfect cans, while the loss from those purchased, before they commenced manufacturing, exceeded fifteen per cent. On the 1st of July, when I visited their place, they had over 20,000 cans of their own manufacture ready for use. They expected to increase that number several thousand this year. Most of their fruit is sent to Nevada. I speak of the doings of this firm to show what a little enterprise and good judgment will do. Those two young men have built up the business of canning and drying fruit within the last four years; their only capital at the start being their hands, backed by energy. They have now an established and profitable business.

Grapes.

Some time ago the RURAL PRESS gave its readers some wholesome advice, urging those who contemplated vine-growing to set out the raisin grape, and those who already had the Mission grape to graft them with the White Muscat of Alexandria, and turn their attention to raisins, which always found a ready sale at remunerative prices; that by so doing they would prevent a great amount of wine drinking and drunkenness. A number of our vine-growers have come to the conclusion then advocated by the PRESS, whether prompted by their own good judgment or by the hint you gave them, it matters not, they are now on the right road; among whom are C. D. Brooks, of Diamond Springs, and Dixon & Bowe, at Coon Hollow. Brooks has grafted his old vines into White Muscat of Alexandria. Mr. B. dried

and cured several tons of raisins last year, a sample of which, I believe, was sent to the editors of the PRESS.

Mr. Brooks declared against wine-making some years ago, saying at the time he would no longer produce that which he believed destroyed both soul and body of his fellow-man. Dixon & Bowe have grafted some 20,000 vines within the last two years. This year they finished grafting the first week in June, having commenced about the middle of March. Mr. Dixon informed me that those grafted the last of March and the first part of April, took much the best, the loss not exceeding three per cent., while in those grafted later the loss was much greater. This firm was offered last year, by a New York merchant, 12½ cents per pound coin for their crop of raisins at their vineyard.

Our hillsides, which look so sear and uninviting at this season of the year, will produce the best of apples, pears, cherries, peaches, plums and all the small fruits, besides hay and grain, if properly cultivated and irrigated, water being the great desideratum. No fear need be entertained for an abundant supply of water for irrigation in this vicinity in future.

El Dorado Water and Deep Gravel Mining Co.

Have nine miles of their new ditch already constructed, and a force of 1,200 men on the works, and are daily sending more. This canal is of sufficient size to float lumber, and will discharge 12,000 inches, miners' measure, on the hills and into the ravines in this vicinity every 24 hours when completed. Several large lakes in the mountains are being converted into reservoirs or catchment basins, to retain water caught up in the winter for use in the dry season. The cry of water! water! give us water! by our people, which has so long been heard, will soon cease, and their thirst satisfied.

Wild Coffee Shrub.

Herewith I send you a bunch of the so-called wild coffee tree. You will find blossoms, berries ripening and ripe berries all upon the same bunch. I am unable to see any of the appearances of coffee about this berry, but as the Placer *Herald* and *Mountain Democrat* have exhausted this subject *pro* and *con*, I forbear any further remarks. E. N. S.

Placerville, Aug. 2d, 1874.

[Mr. S. will please accept our thanks for this interesting letter, and also for the branch of wild coffee shrub which accompanied it. It arrived in good condition, and is the finest sample we have yet seen. Now that the violence of the wild coffee and anti-wild coffee factions has somewhat abated, we hope to see the merits of this shrub fairly and thoroughly tested.—EDS. PRESS.]

Another New Fibre.

EDITORS PRESS:—I take the liberty of sending to you enclosed a small quantity of fibre, which is the product of a plant that is indigenous to this county, and perhaps in other parts of California also. All the dressing it has had was a little rubbing with the hands, its woody matter having been decomposed by being exposed on the ground to last winter's rain. My means of ascertaining or judging correctly the real worth or value of such an article are very limited, but my opinion is that the fibre, if properly dressed, is stronger and more durable than either flax or hemp. An Indian, to whom I showed the fibre, informed me that the Indians make their bowstrings of this fibre. Believing that you feel an interest in the development of the native vegetable products of our State, and have also ample means of forming a very correct opinion with regard to their value, I have sent the fibre to you for your inspection, hoping to learn something from you more definite with regard to its value. I have saved some of the seed of the plant, intending next season to plant and cultivate some, not on account of the fibre, but for the seed, which may yet make its appearance on your tables in San Francisco, as an article of food. I shall not attempt to give a description of the plant until I can learn something more about the fibre.

L. D. BENSON.

San Antonio creek, Calaveras county, Aug. 3.

[The fibre alluded to has been shown by us to various parties, none of whom, however, have been able to arrive at any estimate of its actual value, though all admit that it possesses remarkable strength and evenness. It has been suggested that it would be well for our correspondent to send to some competent botanist samples of the plant in its different stages of growth, in order to ascertain what it really is. People are becoming extremely shy and incredulous in regard to discoveries.

—EDS. PRESS]

Eucalyptus Seed Wanted.

EDITORS PRESS:—I see in your PRESS of July 25th correspondence from, or rather an article copied from the *Post*, written by Charles J. Fox, of San Francisco, on the value of the wood of the eucalyptus tree. Now, can you, or the above-named person tell, through the columns of your RURAL PRESS, where the seed of the jarrah or mahogany of West Australia can be procured, and how it can be told from the other kind of eucalyptus-tree seed? Being desirous of planting a forest of eucalyptus, I should like to procure the right kind. Four years ago I procured some seeds of J. Boles, near Petalnma, from some trees he has growing on his farm; but the seed did not germinate very well. However, some of those that did grow now stand 30 feet high. Since then I bought seed from the same trees, but with no better success than the first time.

G. N. W.

Santa Rosa, Aug. 3d, 1874.

[Our correspondent will find no difficulty in procuring the seed of the above-named varieties of the eucalyptus. Geo. F. Silvester, R. J. Trumbull and S. W. Moore & Co. have the imported seed.—EDS. PRESS.]

THE HORSE.

Over-Training.

The recent assertion that Kentuckians were injuring their young horses by training too early and too severely, brings out a long article by the experienced Kentucky horseman, Dr. L. Herr, from which we make the following extracts:

After many experiments in ascertaining what amount of handling young trotters will stand without injurious effects, and in testing their speed and endurance without high preparation, I am convinced that a weanling—broke to lead, but untrained—can show a half mile (led) at the rate of four minutes to the mile; a yearling can trot a mile in harness, without sweating or drawing, in three minutes; a two-year-old, without high training, can trot in harness in 2:35, or better; a three-year-old can trot in harness, without high process of training, in 2:30; a four-year-old can trot in harness, without abusive training, in 2:24; and a five-year-old can trot in 2:20, or better. I have proven to my entire satisfaction that they can go to the distances at young ages, and do so by nature; and if they have not the capacity at young ages they never will have, and they will show the same difference in proportion to their ages, as matured horses. I never injured one colt by early training while carrying out my investigations. I never forced the sweating process or put them through a thorough preparation; but always have a good coat of flesh and their natural juices or secretions in a sufficient supply to give them good heart and courage, and fresh at all times—never using blankets except they should perspire in their work in hot weather, and then only to cool them off, after which they are kept naked, fresh and unbaked.

The many breakdowns attributed to excessive and abusive training are more frequently the result of accident than overwork. Why is it a horse will have one complaining leg, while the others doing the same amount of work are as sound and clear as flutes? Does it not look reasonable that the complaining leg was started from some accidental cause or violence, which the other limbs escaped? I have known three horses to break their shoulder-blades and forearms at a slow gallop, and two of them on the Lexington track, when it was considered in good and safe condition. While Asteroid's log was strained by accident, his constitutional stamina was, and is now, as good as ever, and also his leg clean and fine.

SPOILING HORSES' FEET.—It is almost impossible to get a horse shod without having the frog cut away. All veterinary surgeons, all horsemen, and all leading blacksmiths agree that the frog should not be pared one particle, nor even trimmed—no matter how pliable and soft the frog is, cut it away smooth on all sides, and in two days it will be dry and hard as a chip. You might as well cut all the leaves of trees and expect them to flourish, as to pare away the frog and have a healthy foot. The rough, spongy part of the frog is to the foot what leaves are to the tree, the lungs. Never have a red-hot shoe put upon the foot, to burn it level. If you can find a blacksmith that is mechanic enough to level the foot without a red-hot iron, employ him. If you do not think so, try the red-hot poker on your finger nail, and see how it will effect the growth of that. There are many other important points in shoeing horses; these two are of more importance than all the rest, and the most disregarded "No frog, no foot; no foot, no horse."—*Western Farm Journal.*

BITTING COLTS.—We do not believe in the virtues of the "Bitting machine" got up to torture colts. There is really no sense in them, or in the persons who use them. Just think of cramping up the neck of a colt into an unnatural position, fasten it there, whack him around a yard in the style of what is called *training*, and then expect him to be amiable! We believe much of the trouble usually encountered in breaking a colt is occasioned by the barbarous handling in the bitting process. What sort of an idea can a colt get of your intentions toward him after such an experience? Colts need first to learn that there is no intention to hurt them, and then they will yield a willing obedience. Kindness and not brutality is the sign by which you may conquer a colt or any other animal. —*Live Stock Journal.*

GRUBS IN HORSES.—A correspondent of the *Rural Messenger* has never known but one remedy for grubs in horses worth publishing, and that one is sage tea. He says as soon as one is satisfied that his horse has the grubs, (which are sure to kill,) he should make a strong sage tea, and drench the animal once or twice, or until a change is effected, But as "an ounce of prevention is worth a pound of cure," it would be well to give the horse a cupful of pulverized sage leaves in some meal or bran once or twice a week.

THE DAIRY.

Fallacies in Cheese Making.

At the last meeting of the American Dairymen's Association, at Utica, N.Y., T. D. Curtis, of Syracuse, N. Y., read a paper on what he termed Fallacies in Cheese Making. He said that one fallacy which had been widely published as true, was that of making cheese in the shape of a cubic cylinder, and expect to have the cheese sell at a profit. Mr. Curtis thought that a cheese made in a square form, exposed more surface to the air, and therefore is more liable to dry up and become tasteless. He has never seen a small cheese of any shape that was as good and as rich as a large one. For good curing, no cheese should be smaller than fifty pounds nor larger than one hundred. In such a cheese there is some rich meat. Square cheeses, if made large, are worse to handle—more like a box of hardware. A large round cheese can be rolled in handling. Another fallacy is the making of skim or half-skim cheese. These are made at creameries, and the manufacturers claim that they are equal in richness and profit to full-milk cheese. Good cheese can be made half-skim, but first rate is the objective standard of all good dairymen. There is a limited demand for half-skim cheese at the south, on account of the less liability to melting or running down in hot weather. He thought that making this cheese deteriorates the reputation of American cheese, and that it is suicidal. Good cheese sells readily at a fair price in any market, while the skim cheese is slow and dull, even at low prices. The human system requires a certain amount of fat in the food, and this fat is mixed in a healthy proportion with casein in milk. Why not eat the butter with the cheese, as nature designed, and do less skimming? If we take the butter out of the cheese, we lessen the quality and do not increase the profits. The cheese is made unhealthy in a hygienic point of view, being harder, not ripening up mellow, and is quite indigestible. Health, profit and national pride all unite in forbidding any taking out of the rich natural oil from the milk before making it into cheese.

In the discussion that followed, Mr. Holdridge, of Otsego county, N. Y., spoke in favor of making small square cheeses, exhibiting a sample made at his factory. This cheese is very dry, will keep anywhere, and when wanted for use, only requires moistening a little. The expense of boxing is as little as for round cheese. He sells such cheese for two and a half to three cents per pound higher than ordinary good cheese, and this more than makes up for extra drying.

Good Points of a Cow.

1. Youth. A cow is in her prime at from four to six years, and the best paying time to buy is just after the birth of her second or third calf.

2. Prominence and fullness of milk veins, and velvety softness of skin. The milk veins run down on either side of the animal toward the udder, and are easily perceptible to the eye, or can readily be found by pressure of the hand, if the animal is not over fat. The skin should be soft and mellow—not hard, rough and "staring."

3. Symmetry, fullness and softness of the udder. It should be broad, well spread out, projecting behind the legs, and also reaching forward under the belly. There should be a softness and thinness to the touch, and an absence of fleshiness and thickness.

4. Perfect number and condition of teats. If one teat is wanting, about one-fourth less milk will be the result. A cow's udder is not, as some suppose, a barrel with four taps, but is divided into four different compartments, termed "milk glands," each of which has its own tap or teat. It is not only important that the full number of teats be present and in working order, but it is desirable that they be well placed, not crowded together, but pretty far and uniformly apart; rather long and tapering; all pointing out and downward, equal in size and even in appearance.

5. Docility and quietness of disposition. These are indicated by large, mild and clear eyes, and an air of contentment generally. A cow that is quiet and contented feeds at ease, chews her cud with entire satisfaction, and will secrete and yield more milk than any restless and turbulent animal having similar milking characteristics in other respects.—*Ex.*

"WHEN THE COWS COME HOME."—Many of our farmers have wasted years of valuable time just because they did not teach their cows to come home at night. And one who has lived or traveled in the country will remember the familiar Co-bos, Co-hos! of the farmer's son or hired man, as he endeavors to coax the cows from the great pasture. We have had a little experience in these matters and well remember how many times we have waded through the brush and bogs looking for the cows, and, boy-like, we thought them dreadfully contrary animals. But we have lived long enough to learn better, and now think the biped was the more contrary animal of the two. Boys, we will tell you a secret that will save you a great deal of trouble, and it is this: Every time the cows are driven up at night or in the morning, give them a good lick of meal or bran, and for it the cows will always be on hand at the milking time.—*American Stock Journal.*

RAISING CALVES FOR MILKERS.—It is not sufficient that we save all the good calves from the knife of the butcher, but we must give them wise and judicious treatment. Having chosen the animals to be raised, it is necessary to feed with generosity, and at the same time with caution, that a well-built frame may be established. A young animal intended for the dairy may be spoiled in the out-set by improper feeding; or one that has been mistakenly selected will take on fat in spite of all care, and may be discarded. It is not fat that we want. We want growth of bone and muscle, and all fattening food must be avoided. Good pasture through the summer, and feed of which wheat or rye-bran and buckwheat meal are the principal constituents are all that are needed besides a regular supply of salt and free access to water. At the season when pasturing is over, the period has arrived which makes or mars the young beast. The cold rains and piercing winds of autumn have arrived, and one exposure to them will give the calf a check which can be overcome only with much care.

STOCK BREEDERS.

Cross between Ayrshire and Jersey.

A correspondent in Wisconsin asks: "Would it do to cross a Jersey bull on a grade Ayrshire heifer? My Jersey bull is getting very fine calves from native cows. The first one of these calves that has bred, is a fine milker, with very rich milk. She calved at 17½ months, and is now giving about 12 quarts (calf three weeks old). The bull is fawn and white in color, and darker about the head, fine horns, and the yellowest skin I ever saw. He is three and a half years old, and weighs about 1,000 pounds; is very quiet and orderly. Out of about 100 cows that he has had, there have been but 15 or 20 bulls. His calves, from deep red or brindle cows, are of a light liver color, with the white ring around the muzzle, and the deer-like limbs of the Jersey. By the way, I notice that the milk of my native cows, which have been served by this bull two or three times, is richer in butter than ever before—so that some of the qualities of the sire must impregnate the dam." There is no reason why a Jersey bull should not be bred to a grade Ayrshire. The better the cow, the better the calf, and there is no better cow to be found for ordinary family use, than a cross between the Jersey and the Ayrshire (pure), therefore, the Ayrshire blood in the cow in question can be only an advantage. How much the bull has to do with determining the sex of the calf is not known. It is perhaps a question of his relative vigor, as compared with that of the cow, some breeders claiming that if the bull is more vigorous, the calf will be a female, and *vice versa*. The fact that the bull is a Jersey, can have nothing to do with the question; the fact that he is a choice animal, and is kept in unusually good condition, may have very much to do with it. The increasing richness of the milk of the native cows, which have been served by this bull, would be sufficiently accounted for by the fact of their increasing age. It is hardly necessary to go so far as to ascribe it to the effect of their having been served by a bull of a richer milking race—which would be very far indeed.—*Am. Agriculturist.*

One of the Values of Pedigree.

Bell's Messenger relates the following curious instance of persistant marking of calves occurring in the herd of an English Short-horn breeder:

Thirty-two or thirty-three years ago, a North Lancashire farmer who bred Short-horns of good quality, but mostly without known pedigree, bought a useful cow of unknown descent, whose ears seemed as if long strips had been cut out of them from the tip towards the root, at an early age. The natural supposition was that she had been marked as a calf or "stirk," to distinguish her from her companions. Among her calves, however, were two or three with ears snipped like her own. They in turn produced offspring, and in each generation, from that time to the present, the snipped ears have been constantly transmitted, in the direct and continuous female line alone, not in the case of every calf, but in one or two instances in each generation.

Whenever the peculiarity is inherited, it is without modification. The snipped ears of 1874 are as deeply snipped as those of 1844, although six or seven generations of bulls with ordinary ears have intervened, and the proportion of the bought dam's blood in her descendants is reduced to one sixty-fourth, or one-hundred and twenty-eighth part, according to the law of geometrical progression, unquestionably applicable to pedigrees, if we credit to each parent one-half the blood of the immediate offspring.

The formation described has never been known to skip a generation and re-appear. When a heifer of the "jimp-eared sort," as their owner calls them, comes with plain ears, she invariably breeds plain-eared calves. The snips, possibly, first appeared in the cow purchased 33 years ago; perhaps they are transmitted from remote antiquity; but when we consider that each "cross" or generation doubles the number of so-called chances against recurrence, and that, while there is no abatement whatever in the examples, there is but little diminution in their proportionate number, we must conclude that the probabilities belonging to proportion of blood may be powerfully overruled.

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

Grangers' Homestead Association.

The Grsngers of California are now making arrangements for the organizstion of a Grangers' Homestead Association. It is estimsted that about 1,000 persons come into the State from the East every week; that a large portion of this number are seeking homes, and that mauy of them are Grangers. In order to purchase lands at the cheapest prices, it is proposed that the associstion shall buy lsrge tracts, wbich may be obtsined at from two dollars to ten dollars per acre, on ten years' time and low rates of interest, this land to be distributed among members of the Homestead Association st cost. The principal place of business of this association will be Santa Barbara, which, of course, will be a grest advantage to this county and Southern Cslifornia.—*Santa Barbara Press, July 30th.*

Here is another important field for usefulness opening out before the Grangers of California, and they are expressly quslified to fill it. The excellent facilities possessed by the Grangers for rapid communication with all parts of the State, whereby iuformation of every kind can be quickly transmitted to headqusrters; the splendidly organized system of transacting business through county agents and with the Stste agent, render the organization peculiisrly fitted to this work. Such an institution, if once started, would work out for itself and the Order grand results.

Almost all Grangers have friends in the Eastern States who talk of coming to Cslifornia. To such persons this organization would be a very grest blessing in assisting them to find good homes at reasonable rates without passing through the hands of speculating landholders. When we consider the very great benefit such an institution would be, with all the facilities which it wonld possess for answering the thousand and one questions which every immigrant will ask, about climate, soil, timber, fruit, water, etc., we see how very beneficial such a society would be. In conversing with a brother from the East to-day on this subject, he spoke in the most esrnest msnner of its importance and of how its want is felt by parties meditsting seeking a home in California. They want information, and they wsut such as may be relied upon. A Grangers' Homestead Association properly managed would meet the want exactly. You are working in a good cause, brothers; work with s will.

The "Star of Hope."—On the 5th instant the "Star of Hope," the first vessel loaded wholly with Grangers' wheat, was towed down from Vallejo to Ssn Francisco, and on Monday last she gave her sails to the breeze outside the Golden Gate. This day marks an era in the history of agriculture on this coast—farmers organized and shipping their own grain. How appropriately named! May she indeed be the star of hope to the toilers in a thousand harvest fields! The language which she plainly, though too silently, speaks is "Emancipation! Liberty to the oppressed and wronged!" Upon her white sails, and in the boldest characters, tho words "*Farmers' Freedom!*" should have been painted. Freedom from a heavy yoke of oppressors. Watch her, ye wheat speculators; and, as her outlines fade away in the dim distance, so let the hope of continued power fade from your minds. Mistake not the hsnd writiug on the wall—"Thy days are numbered!" May propitious winds waft this outward-bound bark to the shores of the old world, and may she be the forernnner of whole fleets of wheat-laden ships chartered by tbe Grangers of California.

What the Grangers will Bring About.—The New York *Times* expresses the following opiniou on this subject: The sudden and brilliant fortunes msde by Western speculation will cease. Wealth must be won by slow and patieut industry, and great csution and judgment. We doubt if, this year, we bave the usual autumn stringency or panic, because of the accumulation of capital here on account of the dread of the Granger movements. In time, of course, this ease of the market and accumulation of money here will lead to speculation again; but for many years, in our opinion, the Grangers will have brought a certain calm to the fevered speculations of our Eastern capitalists. The East will now show a more regular and measured growth.

The Yolo *Mail* says that from the way wheat is being piled up in the new warehouses uow being built by the Grangers' Warehouse Association in that place, it is the opinion that it will have to be enlarged. The wheat is coming in in such plentiful quantities and being stored there, that it will be full before the roof is on.

The Colusa Sun vs. Morgan's Sons.

The Colusa *Sun* takes exception to onr interpretation of au article which appeared in its issue of Jnly 25th, in which we stated that the *Sun* of that date contained an article in which an attempt was msde to show that "E. E. Morgan's Sons, by the course they have pursued in relation to chartering ships the present season, are placing the farmers of California under the necessity of paying higher freights on their wheat shipments than they would have done, if the freigbt market had been left, as heretofore, under the msnipulation of Mr. Friedlander."

The *Sun* claims that the point really msde was—"That E. E. Morgan's Sons, if they were Grange Agents, had not acted squarely with their principals;" and adds, "In this we have not been contrsdicted, and a shuffling around the issue indicates that it is not in the power of their organs to do it."

We are perfectly willing to sccept the *Sun's* own interpretstion of its language, snd have no desire to "shuffle around the issue," as will fully appear from a subsequent article in the Rural Press of last week, in which the precise point, as given above, is fnlly and squarely met, without any prevaricstion or "shnffling." We there asserted and now repeat in the most positive and unequivocal manner, that, so far as our knowledge and belief goes, E. E. Morgan's Sons have st all times and in every case "acted squarely with their principals," snd challenge proof to the contrary.

Down They Go.

Freights and commission on grain are on the tumble. One house after another issues circulars to the farmers snnouncing a great reduction in these particulars. Tempting inducements are offered. "Whst—what's the matter?" What's the cause of all this? They didn't do so in former years. The Grangers are iu the field. "That's what's the matter." Aud they propose to stay in the field. They canuot be deceived by these circulars, issued by different houses, all of which are regulated by one grand central wheat ring. They propose to do their own bnsiness in their own way—to make their own arrangements and follow them out, sly dodges and tempting offers to the contrary notwithstanding; and in this *firm* decision lies their only safety. Sbould they, st this critical stage of the game, allow themselves to be hoodwinked by any of tbe srtful schemes adopted by their adversaries, and lose faith in their own ability to manage their own affairs; should they allow auy of the misrepresentations conceruing their chosen leaders and agents to canse them to hesitste or waver in giving their firm, united support to these their representatives, that moment victory will perch upon the bsnner of the foe, and the defeated farmers will falt back helpless into the hands of their former tyrants. Grangers, stand by those whom you have chosen to act for you. Their actions are all open to your inspection. Should they prove unworthy, the remedy is in your own hands.

Solano County Council.

By invitation the Napa District Council and Yolo County Council met the Solano County Council at Suisun, ou Tuesday, August 11th. Brother Carrington iu the Chair. The meeting was very largely attended; was one of the most interesting and important Grange meetings yet held on the coast. Questions of vital importauce were discussed, the principal one being the shipment of grain. This subject was most thoroughly discussed in all its bearings, and the meeting unanimously endorsed the action of the Executive Committee in its business arrangements with the house of E. E. Morgan's Sons; and the entire audience, with the exception of one vote, expressed, throngh a resolution, their entire confidence in the shipping house of E. E. Morgan's Sons. The meeting was very harmonious, enthusiastic and satisfactory throughout both the morning and evening sessions, and much good will result from it. The calling of the councils together at this time was very opportune, just now when such desperate efforts are being made by the opposition to break down the confidence of the Grangers in tbeir business arrangements. This positive and emphatic endorsement of the Executive Committee by over 100 prominent Grangers, from different parts of the State, will have a most beneficial effect in strengthening the faith of any doubting Thomases who may be among us, and in uniting in a compact and harmonious body the entire brotherhood. We look upon this as the critical period in the history of the Order in California. Our enemies have expressed their determination to break the Grangers and break the house they have chosen to use in the shipments of their grain. Will they do it?

The farmers in the vicinity of Mountain View propose tbat the Grangers and Farmers' club should discuss the question whether smoking in the harvest field should not be made a criminal offence. Probably a petition on the subject will be presented to the Supervisors.

A Flourishing Grange—A Grange Railroad.

Editors Press:—I have been anxiously watching your columns for some time, in the hope that some brother or sister would impart some information concerning Salinas Grange. But as our Patrons are absorbed in harvesting the most bountiful crop known for msny years, I concluded to drop you a few lines myself, just to let our sister Granges know that we are silently but surely performing our part in the good work. Considering that we have only been organized about 12 months, it is surprising how much hss been accomplished. Next month shall see the completion of a narrow gauge railroad from Salinas to Monterey. This is literally a Grangers' rsilroad. The project was first broached, discussed and organized in the Grsnge. The stockholders are nearly all Grangers, the directors are all Grangers but one, and it is nesrly all Grangers' money that has built it, and Grangers are going to patronize it snd send their wheat to Monterey and load it on board a vessel chartered by Grangers, and consign it to the Grangers' sgent at Liverpool, aud get the returns through the Grangers' Bank, of San Frsncisco; and Mr. Friedlander won't be any worse off, while the farmers will be considerably better. But even wth the assistance of this road it will tax the resources of the Southern Pacific and the accommodating proprietor of Moss's landiug to get the crop to market. Our Grange also subscribed for a large number of shares of the Grangers' Bank (700, I believe); but just before the first installment was due, some of our enemies (and we hsve got some, though they are not very open) started various reports thst deterred many from paying up. This will be remedied as time proves their absurdity.

Our first meetings were held wherever we could find a place secluded from observation; now we have a fine hall, beautifully csrpeted and furnished, and have lately added a splendid organ; bnt the greatest cbarm is the socisl reunion, which is looked forward to and enjoyed by those who are able to attend. The labors of the harvest, however, hsve reduced the attendance lately, snd meetings are only held once a fortnight for the present. The members vie with one snother to mske the intercourse pleasant and instructive. The greatest harmony and good feeling prevails. The discussion of the various subjects connected with sgriculture has developed considerable ability, and cannot fail to be productive of much good. We have conferred a degree st every meeting since we bave had a suitable hall, and still there are more signals at the outer gate. We now number about 150 members. Our late efficient Secretary snd worthy Steward, becoming engaged in mercantile pursuits, resigned their positions and withdrew from the Order. Sister Westlake was elected Secretary; brother Lsne was elected Steward; sister Matthews wss elected to fill the place of L. A. S., msde vscant by the withdrawsl of sister Ball; brother Johnsou fills the position formerly occnpied by brother Cassiday as Lecturer. Our W. Chaplin, G. Abbott, is ever at his post, esrnest and efficient; he is one of the features of the Grauge. The W. Master, C. S. Abbott, being Presideut of the Grangers' railrosd, is uecessarily absent most of the time. The duties of the office are discharged by the O. to the best of his ability. I almost forgot to mention our handsome local agent, who is always ou hand to receive orders—he is expected to fill one in the matrimonial line shortly. Whilst brother Treat holds the keys of the treasury every one knows that the funds are safe. Though we are not quite out of debt, we managed to spare $25 to aid our suffering brethren in Louisiana. Altogether, we think we have just cause to be proud of our efforts. With more leisure time we expect to see a renewal of that large attendance and enthusiasm that is displayed whenever a vital or important question is under consideratiou.

Hoping these few hasty lines will prompt some more talented brother or sister to represent our efforts and keep you posted in regard to our progress, is the siucere wish of

Granger.

Salinas, Monterey Couuty, Aug. 6th.

Discussions in the Grange.—Editors Press: Discussions on such subjects as may be deemed of interest and benefit to the members are to form a new feature in the Santa Clara Grange. And as the Rural Press lately recommended such discussions, with the suggestion that they be given to the public, I will send you a synopsis of the discussion of next meeting, on the subject: "What are the best means of recuperating exhausted soils?" A rule established by and for this Grange is, that the person proposing the subject, (which is to be selected at a previous meeting), shall open the discussion; and all who wish to speak are to do so in turn, till the circuit is made. The first time around each speaker is to be limited to 15 minutes, and the second time to five minutes, when the discussion shall elose. I. A. Wilcox, Sec'y.

August 10th, 1874.

The Chico Grange is actively employed in making arrangemeuts for storage and shipment of the farmers' produce.

St Helena Grange—A Pleasant Surprise.

Editors Press:—A new vitality is being infused into our Grange. With a good start we committed errors by which we becsme somewhat demoralized. Our first Worthy Master, chosen by the charter members, about 30 in number, served us till the end of his term. Though then really a farmer, he conceived that he retained too much of the odor of the pill box to justify him in holding a seat of honor which the genius and spirit of the Grauge demanded should be filled by a *bona fide*, hard-fisted, working agriculturist, "to the manor born."

We re-orgsnized once and again, and have now unexceptionsl officers throughout. Bro. Lewelling, the old veteran pioneer fruit grower and farmer, now bsnk director, is our Worthy Master; F. K. Rule, who had been absent on business and resigued his stewardship, bas returned snd been re-elected; Sister Pellet, whose efficiency as an intelligent snd public spirited lady is well known over the country, is our Stewardess, with our Flors, Sister Kate Edwards, whose beautiful reading is fittingly symbolized by gems from the floral kingdom. These have all been duly installed by our Worthy Past Msster, and everything put in good working order. After the ceremony of the installstion, Bro. Lewelling, who is really more used to the pruning knife and spade thsn to speech msking, did make a speech, nevertheless. With a face in which you can read the ten commandments as plainly as you can read the gospel in our young Steward's phiz, he arose, snd thanking us for the honor we conferred on him, promised to take good care of our symbolic farm. He did not seem to believe in the "No Fence Law," but rather that the fences should be what the hoosier defined as a buncom fence, to be horse-high, bull strong and hog tight; by that he meant that all the rnles and laws of our Order should be strictly enforced, and no holes left open for admission of unworthy members, or through which they might hereafter escape "scot free," if found working against the interests of the Order.

No man knows better than he does the importance of topping off worthless, thorny and snagged branches—if they do not break off themselves—in increasing the growth and value of the tree. At 8 o'clock P. M., after the installation, Bro. L. might have been seeu looking through a bay window, down his nearly mile long almond-shaded avenne, at a long dark liue of something approaching. He looks and wonders till his splendid mansion is surrounded by carrisges fult of "brave men and fair women," and was then "surprised" by the whole psrty—fifty-three in number—of those who acknowledged him ss Master in the Grsnge, now passing into his parlors regardless of signals and pass words, wearing neither sash nor pouch. Yes, a complete surprise—a capture made but no enemy taken. The invaders kept possession of the Master's citadel—themselves Masters of tho situation—regaling themselves at the sumptuous board, interchsnging happy thoughts while the young folks "tripped the light fantastic toe," to tbe music of the piano, till the approaching Sabbath morn admonished them that their thoughts should be directed into a more serious channel, when the company dispersed well satisfied with their host, with each other and all the world besides. Granger.

The Friedlander Wheat Monopoly.

Editors Press:—The knowledge of the past is the best instructor for us in the future; and may well excuse us for "bettering the instruction," in declining any dealings with the Friedlsnder wheat monopoly.

Dreading the unity of our movement and the protection of our Grange principles, that crafty combination have had to devise new schemes for its agents over the country to carry into practice. First, in order to check the building of the Grangers' warehouses, they were instructed that it was advissble to offer Grangers storage at one-half the rates they had previously paid. That plan to still retain their hold on us failed, and to-day, in almost every section of California, the farmers have warehouses where their wheat is their own; and every pound that it weighs is their own also. Now they try, by offers of seemingly lower freights, on *short tons*, to induce us to ship by their vessels; but we may well be inclined to look with suspicion and wonder at these men who have taxed all the State for years, and think to get us again into their grip.

We say to the monopolists "Buy your wheat at honest prices for once, for you can neither coax nor intimidate us this year. Your insiuuations have lost their force, and you vainly struggle to maintain a failing system—wasting your gains in a combat against the will of the people, which is useless, for that is supreme. To records of the past will soon be added the sum of this great wrong also. The history of monopolies in all lines is written."

I. G. Gabdner.

San Francisco, Aug. 8th, 1874.

The Catholic Bishop of Wisconsin has decided that all members of that church belonging to the Grangers must withdraw from tho Order or leave that church.

Official Appointments.

Having been assigned to specisl duty in the counties hereafter mentioned, to confer about our business mstters with as msny Grange members as csn possibly meet mo in each county, I beg leave to mske the following appointments:

For Sonoma county—Petalums, Monday, 7 P. M., Angust 17th; Santa Rosa, Tuesday, 7 P. M, Angust 18th; Healdsburg, Wednesday, 11 A. M., August 19th.

For Msrin county—Tomales, Thursday, 2 P. M., Angust 20th.

For Contra Costa county—Antioch, Ssturday, 7 P. M., Augnst 22d; Danville, Monday, 7 P. M., Angust 24th.

It would afford me mnch pleasure to spend more time in each county snd to visit esch Grange sepsrately; bnt considering the small amount of time at my disposal, and the large number of Granges in the counties mentioned, this is impossible, st present. I trust as msny of my fellow Patrons as csn, will mske it convenient to meet me at the times appointed, especially those interested in the success of our varions business enterprises, snch as the Grsngers' Bsnk, Fire Insurance and Life Insursnce Companies. Come prepared to take stock, if possible. Deputies are especially requested to be present. Matters of vitsl importance will be presented. Now is the time to pnsh our enterprises to success. Any commnnication abont ehange of honrs deemed necessary can be sent me to Marysville by August 10th.

J. W. A. WRIGHT,
Lecturer Cal. State Grange.

Borden, July 28th, 1874.

School Books.

Several of the Granges of the State have passed resolntions like this:

Resolved, That it is the sense of this Grange, that the frequent change of text-hooks for the use of common schools, is injudicious, unwise and unjust; that the books we now have are sufficient in uumber and good enough in quality.

The sentiments of the Grsngers in this respect are the sentiments of 99 out of 100 of all other people. One of the heaviest taxes to which parents and guardians have been subjected is that occssioned by the frequent change of text-books in the schools. Of all the "rings" which seek to feed off the people the "Educational Ring"—or "School-Books Publishing Ring"—is decidedly the worst. Its maw for profit is insatiable; its ingenuity in devising new ways and means to wrest money from the pockets of the poople is unparalleled.

There are now in this State 159,719 school children; their nnmbers are constantly increasing. Under existing laws all these mnst be sent to school. To supply those iu existence with school books now required by the rules of the "ring"—many of which are absolutely useless, or worse than useless—will cost on an average at least $7 a year for each child, or the large aggregate sum of $1,118,033 annually!

If not soon stopped, the extortions of this "Educational Ring" will result in destroying our public school system. It is high time for the Grangers and everybody else to wske up to the grave importance of this subject.

What Practical Results Have the Patrons Accomplished?

Let us see. Some months sgo, twenty or thirty plow manufacturers in the North and West took np the erroneons idea that the Patrons were leagued together for the express pnrpose of injnring their business, and as a retaliatory measure, they refused to sell to or to have any direct dealings with the Granges. The resnlt was as might have been expected: the Granges were driven to the necessity of establishing their own plow factories, and now plows that formerly cost $13 can be had for $7.50. The principle extended to other agricultural and household implements, effecting a like reduction, viz:

Fanning Mills from	$ 35 to $ 17
Cultivators from	36 to 18
Wheat Drills from	86 to 60
Wagons from	100 to 64
Threshers from	700 to 530
Sewing Machines fm	75 to 37

But the greatest single achievement was in the pnrchase of the patent of the Warner Harvester by the Iowa State Grange. The enterprise was met with obloquy by the mannfactnrers, and predictions of inglorious failnre were numerous; bnt the result has at once demonstrated snch auguries fallacious, and justified the undertaking. That nsefnl implement, which formerly sold for $300, is now furnished for $140.

In following np the policy of self-reliance forced upon them by the mistaken views of ontside mechanical and other corporations, the Order has become proprietor of the following items:

Grain elevators, Iowa, 9; Minnesota, 5; Illinois, 1; Kansas, 2; Nebraska, 1.

Manufactnring establishments, chiefly agricultnral implements, Iowa, 7; Minnesota, 1; Illinois, 1; Kansas, 2; Nebraska, 1; Wisconsin, 2.

Grist mills, Kansas, 5; Wisconsin, 2; Minnesots, 5; Iowa, 2.

These are a few of the practical results that have already been attained by our noble Order. Still grester ones are even now being worked out to onr own and our country's benefit. —*Home Journal*.

By-Laws of National Grange, P. of H.

[Amended at the Seventh Annual Session, 1874.]

ARTICLE 1. The fourth day of December, the hirthday of the Patrons of Hushandry, shall he celebrated as the anniversary of the Order.

ART. 2. Not less than the represcntation of tweuty States present at any meeting of the National Grange shall constitute a qnorum for the transaction of business.

ART. 3. At the annual meeting of each State Grange it may elect a proxy to represent the State Grange in the National Grange in case of the inahility of the Master to attend, and such proxies shall in all cases he Past-Masters of their State Granges.

ART. 4. Questions of administration and jurisprudence arising in and between State Granges, and appeals from the action and decision thereof, shall he referred to the Master and Executive Committee of the National Grange, whose decision shall he respected and obeyed until overruled by action of the National Grange.

ART. 5. It shall he the duty of the Master to preside at meetings of the National Grange; to see that all officers and members of committees properly perform their respective duties; to see that the Constitution, By-laws and Resolutions of the National Grange and the usages of the Order are observed and obeyed, and generally to perform all duties pertaining to such office.

ART. 6. It shall he the duty of the Secretary to keep a record of all proceedings of the National Grange, to keep a just and true account of all moneys received and deposited hy him in the fiscal agency; to countersign all drafts drawn hy the Treasurer; to conduct the correspondence of the National Grange; and to perform such other duties appertaining to his office as may he required hy the Master and Executive Committee.

It shall be his duty, at least once each week, to deposit with the Fiscal Agency holding the funds of the National Grauge all moneys that may have come into his hands, and forward a duplicate receipt therefor to the Treasurer, and to make a full report of all transactions to the National Grange at each annual session.

It shall bo his further duty to procure a monthly report from the fiscal agency with whom the funds of the National Grange are deposited, of all moneys received and paid out hy them during each month, and send a copy of such report to the Executive Committee and the Master of the National Grange.

He shall give hond in such sum and with such security as may he approved by the Executive Committee.

ART. 7.—SECTION 1. It shall be the duty of the Treasurer to issue all drafts upon the fiscal agency of the Order, said drafts having heen previously approved hy the Master and countersigned hy the Secretary of the National Grange.

SEC. 2. He shall report monthly to the Master of the National Grange a statement of all moneys deposited to his credit in tho fiscal agency, and of all drafts signed hy him during the previous month.

SEC. 3. He shall report to the National Grange at each annual session a statement of all moncys deposited in the fiscal agency, and of all drafts signed hy him since his last annual report.

SEC. 4. It shall he his duty to collect all interest accruing on investments made hy the Executive Committee, and to deposit the same in the fiscal agency.

ART. 8. It shall he the duty of the Lecturer to visit, for the good of the Order, such portions of the United States as the Master or the Executive Committee may direct, for which services he shall rccclve compensation.

ART. 9. It shall he the duty of the Executive Committee to exercise a general supervision of the affairs of the Order during the recess of the National Grange. They shall have authority to act on all matters of interest to the Order, when the National Grange is not in session; shall provide for the welfare of the Order in business matters; and shall report their acts in detail to the National Grange on the first day of its annual meeting.

The Master of the National Grango shall he considered, ex-officio, a member of the Executive Committee.

ART. 10.—SECTION 1. Such compensation for time and service shall he given the Master, Lecturer, Secretary, Treasurer and Executive Committee, as the National Grange may, from time to time, determine.

SEC. 2. Whenever General Deputies are appointed by the Master of the National Grange, said Deputies shall receive such compensation for time and services as may he determined by the Master or the Executive Committee: *Provided*, In no case shall pay from the National Grange be given General Deputies in any State after the formation of its State Grange.

ART. 11.—SECTION 1. The financial reports of Subordinate Granges sball he made on the first day of January, the first day of April, the first day of July and the first day of October.

SEC. 2. State Grangcs shall date their financial existence three months after the first day of January, first day of April, first day of July, and first day of October immediately following their organization.

ART. 12. Each session of the National Gaange shall fix the compensation of its members.

ART. 13. Spccial meetings of the National Grange shall be called hy the Master upon the applicatiou of the Masters of twenty State Granges, one month's notice of such meeting heing given to all members of the National Grange. No alterations or amendments to the By-laws or Ritual shall be made at any special meeting.

ART. 14. Upon the demand of five members, the ayes and noes may he called upon any question, and when so called shall be entered by the Secretary upon his minutes.

ART. 15. Past-Masters are Masters who have been duly elected and installed, and who have served out the term for which they were elected.

ART. 16. Vacancies in office may be filled at any regular meeting of the Grange.

ART. 17. Subordinate Granges may be consolidated in the mode and upon such terms as may be prescribed by the State Granges.

ART. 18. These By-laws may he altered or amended at any annual meeting of the National Grange by a two-thirds vote of the members prescnt.

New Granges.

GRANGE ORGANIZED AT READING.—Millville Grange, with 44 members, was organized Aug. 6th, by J. W. A. Wright, State Lecturer. The following sre its officers: E. Wagoner, M.; J. L. Nichols, O.; Dr. J. S. Winsel, L.; — Chatham, C.; G. W. Welch, Sec'y; Thomas Galt, S.; Lem Benton, A.S.; John Webb, T.; George Penline, G.K.; Mrs. Dr. Winsel, Ceres; Mrs. Thomas Galt, Pomona; Mrs. Kenny, Flora; Mrs. J. L. Nichols, L.A.S. P.O. address, Millville; Exrpess, Reading, Shasta county.

GRANGE ORGANIZATIONS IN SISKIYOU COUNTY. J. W. A. Wright has organized the following new Granges: Mount Bolivar Grange, with 22 charter members. R. M. Hayden, M.; J. A. Cole, Sec'y. P.O. address, Calahan's Ranch, Siskiyou county.

Ætna Grange, with 29 charter members. John McBride. M.; J. McConaughy, Sec'y. P.O. eddress, Ætna, Siskiyou county.

Fort Jones Grange, with 30 charter members. J. S. Mathews, M.; J. W. Tuttle, Sec'y. P.O. address, Fort Jones, Siskiyou county.

Bro. Wright is doing good work in the northern counties of Shasta and Siskiyou. He has organized three Granges in Siskiyou aud one in Shasta, and says there is material for two more in each county. It was a pleasant surprise to him to find so many thrifty farmers in these counties.

The National Grange—How the Farmers are Swindled.

No more specions humbug exists, nor one more unpopnlsr among the farming classes, than what is known as the National Grange. They elected themselves for the term of five yesrs, snd cannot be removed. They are, of course, destroying the efficacy of the organization, and will have absorbed all the mouey by the time their tenure of office expires.

Of conrse, these parties hsve fsttened on the farming community, under the plea thst they were working in their interest. Grsdually, however, their motives are coming to light. —*Washington Chronicle*.

Remarks.

We have rsrely met with a more brszen-faced misrepresentation snd slsnder than the above delectable *morceau* which the Wsshington *Chronicle* publishes to the world as truth! It is really astonishing to see how little discretion —how little common-sense policy is used by those who seem to think it a religious duty to deceive and hood-wink the toiling masses of this grest and glorious republic! We csn sccount for this utter disregard of the principles of ordinary caution only on the hypothesis that to the eyes of many of those in high places, like the Washington *Chronicle* for instance, the bone and sinew of our lsnd, the sturdy farmers upon whose shoulders rests every depsrtment of our grand nationality, appear so ignorant and debssed as to be totally unable to distinguish truth from falsehood, honesty and candor from the most reckless sttempts at perversion and deceit! But to the foolish and wholly untenable position of our Washington contemporary. It says that the Grange movement is the most nnpopular of all humbugs among the farming classes. The Lord help any one who is so deeply steeped in ignorance and folly as to publish such a statement to an intelligent community for trnth! If our friend of the *Chronicle* does not know it, he should just step over to the office of Bro. Kelley and learn the fsct that never before in the history of confederate organizations was the growth so rapid and permanent, or so universally popular among that clsss for whose benefit it was specially designed. Our Order is really only about four or five years old and yet we have Granges established in 43 States, Territories and Provinces, numbering in the aggregate nearly 25,000 Granges with a membership of over one and a half millions. The membership has nearly doubled within the past six months. This does not look much like unpopnlarity among the farmers. And why should it be when, according to a late report of the Agricultural department, it has saved to the members during the past year over $6,000,000?—*Rural Southland*.

GRANGE WORK.—If the western Grangers are not becoming potent in a political way, they certainly exhibit a wonderful activity collectively, in pushing the individual interests of the farmers. This is especially true in Iowa, where the hayseed elements hsve carried the Grange system into more branches of every day needs, than in any other State. The Order has attained immense strength in the State. A recent meeting for business showod that Councils are in operation in each connty, the total membership something like 200,000. Under these, 41 Connty Councils have been organized to attend to the purchasing of snpplies for the different Granges, and to assume the mansgement of the co-operstive stores, mills, manufactories, etc., already begnn. A law was passed at the lsst session of the Legislature, enabling the Councils to organize local fire insurance companies, of which 29 are already doing business. They usually iuclude about four civil townships in each assigned Territory, giving the offices of President and Secretary to some local members, and charge only from one to two mills on the dollar, and as yet there has not been a failure to meet a liability. Several of them are cSrrying from $400,000 to $800,000 each in risks, and the satisfactiou is reported nniversal.—*Nashville Banner*.

THIS wonderful Order is spread from ocean to ocean, and from the northern lakes to the southern gulf. It csrries wherever it goes an atmosphere of socisl refinement, sometimes lacking in the rural districts, but which should have its superlative growth there, and will have as soon as the Order has fully accomplished its mission, and crested a refinement not dependent on wealth and fashion, but based on mental culture, the best social qualities, and a true and pure standard of excellence.—*Willamette Farmer*.

THE GRANGERS of Deer Flat have a big hsrvest this season—larger than usnal, in wheat, barley and hay. Best of all they have a good market in Yosemite valley and along the road. They get a good price for their grain, together with an allowance per pound for freight. No railroad over there to run away with all their profits. The new Yosemite turnpike road gives them a chance to run their produce right into the valley. What a happy people they ought to be—and they are.

GRANGERS' WAREHOUSE. — This immense buildiug, with a capacity of 8,000 tons, is being pushed to completion, and will soon be finished, ten or fifteen carpenters being employed under the efficient superintendence of Mr. Nicholas Wykoff. The weighing, storing aud books are attended to by L. D. Stephens. —*Yolo Democrat*.

THE VINEYARD.

Notes on the Manufacture of Wines.

Many persons suppose that a pure unadulterated wine is merely the juice of the grape, fermented and then bottled. While this is the case in regard to a very few of the wines in commerce, the majority of wines sold nndergo some peculiar process of manufseture to which they owe their flavor, eolor, or amount of alcohol. And in stating this I do not refer to the artificial wines thst are msde from rsisins, burnt sugsr, essentisl oils, snd proof-spirits, but to those which hsve for their basis the juice of the grape,—genuine port, sherry, or chsmpsgne, for instance.

The juice of the grspe when fermented without sny sddition of spirits or sngsr produces what is known as a sour wine. These wines rarely contsin over ten or twelve per cent. of alcohol, and are produced mostly on the Rhine. Claret and Burgundy slso belong to this class.

Port wine is produced in the northern part of Portugsl, and is mostly shipped from Oporto, whence it tskes its name. The grapes sre allowed to hang on the vines for some time after they sre fully ripe, in order that the juice may become as concentrated as possible. Many of the vine-growers make wine themselves, others sell the grapes to the mannfacturers. The grapes are trodden on platforms by men, snd the juice, mixed with the stalks and husks is then placed in large stono vats untill it ferments. When the fermentation has proceeded so far that the hydrometer stsnds at zero in the juice, the fermenting mass is agitated by men who go into the vats naked. This is in order to mix the husks snd juice so thoroughly that all the coloring matter will be extracted from the former. After this mixing the wine is drawn off and plsced in large vessels holding several hundred gallons. In good years the grspes contsin too much sugar in proportion to the alcohol; some brandy is therefore added. If, on the contrary, the wine is deficient in sugsr, this, as well ss alcohol snd coloring matter, must be supplied. Beet root sugar or csne sugar is sdded, or a portion of the juice is concentrated and the syrup produced is returned to the cask. If it is too pale, dried elder berries or a peculiar kind of cherries are added; extract of Brazil wood is occasionally used. The wine is allowed to stay in the large vats nntil cold weather sets in, by which time it has deposited its lees. It is then drawn off into pipes containing 115 gallons; in these it remains until the next spring, when it is sent to Oporto,

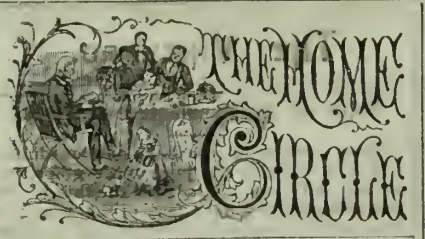
No port wine is sent to Englsnd without the addition of at loast 3 gallons of brandy to each pipe, snd, in the case of the so-called heavy ports, from 15 to 17 gallons; this is independent of what is added after the fermentstion. The use of this brandy is neccssary in order to preserve the wine. If no braudy was added, it would be necessary to keep it at Oporto from 5 to 7 years before it could be shipped. It is impossible to make a natnral port containing over 16 per cent. alcohol, while most of those sold contain trom 20 25 per cent.

Dried elderberries are largely exported from Portugal for the purpose of coloring artificial port. At one time it wss made a felony for a farmer to hsve any elder trees on his land within the limits of the port wine district, but now the elder is generally cultivated.

In close connection with the manufacture of port is the making of an srticle known as *jeropiga*, and also as *vinho mudo*, a sub-variety of this is known as *jeropiga tinta*, and much of it is sent to the United States under the name of pure "juice." It is used for sweetening wines for making artificial port, for doctoring wines of inferior value, or for making negus. It is made in various ways; sometimes by adding 32 per cent. of proof spirit to the fermented must; occasionally by adding braudy to the pure sweet must. Thd *tinta* is produced by coloring the above with elderberries. Sometimes molasses is added to give it greater sweetness.—*Boston Journal of Chemistry*.

THE CATAWBA GRAPE.—On rich bottom lands it is well known that the grape does not produce, the strength of the vine going to wood instead of frnit. The grapes are small, do not ripen and suffer from mildew. George Hood, of this place, has been experimenting for some years on different varieties for the purpose of finding a grape that would thrive and ripen on bottom land. He has upon his place a vine of the Catawba variety trellised on a frame work. It is just seven years from a graft on a native stalk. It covers 1,400 square feet of surface and will bear this season nearly a ton grapes. The frame has given away with the weight. The bunches are lsrge and they ripen thoroughly. No indication of mildew has ever been noticed. Those who have no land suited to the grape cnlture will fiud that a single vine of this variety will supply all the grapes required for table use, and it may be that its growth would be profitable for wine.—*Sonoma Democrat*.

OUR State fair and exposition for 1874 will open September 7th, and continue 30 days. Reception of articles will commence August 20th. Competitiou is invited from all sources. Strenuous efforts, through our efficient Secretary, Alex. Heron, Esq., will make the exposition far exceed any of the preceding ones in the West. The liberal iuducements in the way of premiums, and the accommodations secured, will, without doubt, accomplish everything desired.—*Indianapolis Gazette, July 25th*.



Harvest.

Sweet, sweet, sweet,
Is the wind's song,
Astir in the rippled wheat
All day long.
It hath the brook's wild gayety,
The sorrowful cry of the sea.
Oh, hush and hear!
Sweet, sweet, and clear
Above the locust's whirr,
And hum of bee.
Rises that soft, pathetic harmony.

In the meadow-grass
The innocent white daisies blow;
The dandelion plume doth pass
Vaguely to and fro—
The unquiet spirit of a flower
That hath too brief an hour.

Nor doth a little cloud all white
Or golden bright
Drift down the warm, blue sky;
And now on the horizon line,
Where dusky woodlands lie,
A sunny mist doth shine,
Like to a veil before a holy shrine,
Concealing,
Half-revealing
Things divine.

Sweet, sweet, sweet,
Is the wind's song,
Astir in the rippled wheat
All day long.
That exquisite music calls
The reaper everywhere—
Life and death must share.
The golden harvest falls.

So doth all end—
Honored Philosophy,
Science and Art,
The bloom of the heart;—
Master, Consoler, Friend,
Make Thou the harvest of our days
To fall within Thy ways.

—*Scribner's for August.*

My Friends, the Winnebagos—No. 2.

[Written for the RURAL PRESS by H. B.]

As I Saw Them in Wisconsin.

My first acquaintance with Wisconsin Indians was formed one afternoon in November, 1867, as I was chopping in the woods, a few rods from the main road. It was a bright, warm day; in fact, a little too bright and warm for chopping. With an unusually heavy blow I struck my ax into the white oak log, intending to leave it there a few moments, while I could straighten up and breathe a little. I had heard no sound but that of my ax, and the drumming of a partridge; but on looking around, I saw a tall Indian, about twenty-five years of age, standing within an arm's length of me.

He had evidently intended an agreeable surprise; and when he saw by my looks that he had accomplished his object, his face, which was streaked with scarlet and black paint, grinned with an expression which seemed to say, "Here I am, you see! We Indians are funny fellows—ain't we?" His unshorn and uncombed hair hung dangling about his neck, but a few locks directly in front were tightly braided, that his vision might be unobstructed. He had on a dirty calico shirt, which he wore outside of his pants. The last named garment was of the most economical cut, everything being dispensed with except the legs; these, by mean of a narrow strip of cloth extending up his sides, were fastened to a belt about his waist. His feet were protected by a pair of ill-made moccasins. He had a very good rifle, and to his other hunting equipments was added a small wooden horn, not more than four inches in length, which was hanging over his shoulders. He had observed my curiosity in regard to it, and putting it to his lips produced a plaintive, quavering sound, which, he informed me, was intended to imitate the bleating of the fawn. He assured me that upon hearing this call the older members of the deer family would be thrown off their guard, and in their anxiety for their young would become an easy prey to the hunter.

He said he was of the Winnebago tribe; and that he was of a party who were then on their route to more favorable hunting grounds, about a hundred miles northeast of Sandusky, intending to winter there. I had no suspicion that he intended to take my scalp along with him, as a memorial, but I was well aware that he had some object, beyond a mere complimentary call. His object, expressed in plain Indian, and translated into plain English, was this—he he wanted a chew of tobacco. It was to give me an opportunity to purchase, at so cheap a rate, the everlasting friendship of a real Indian, that he, on hearing the sound of my ax, had left his track, or, more vulgarly speaking, the road to Sandusky, to pay me this visit. On my informing him that I was one of the small minority of the citizens of the above named place who could not afford to indulge in the use of tobacco, he left in disgust.

During the afternoon I saw other members of this party of red emigrants strolling along the road. They led three sickly-looking horses, with baskets and bundles slung across their backs; but the beasts of burden on which they seemed most to rely were the squaws. Large baskets, capable of holding nearly two bushels each, were filled with wigwam-keeping goods, and were hanging down on their shoulders—some held by straps pressing across their foreheads; others had straps drawn over their breasts. From one of these baskets shining little heads were sticking up above other rubbish; little mouths were chattering in subdued tones, and little eyes, that fairly glistened with their blackness, were gazing about in childish curiosity.

The poor squaws, leaning with the weight of their heavy burdens, with a sad and complaining look upon their faces, went toiling along the road as though they were being urged on a rate that was beyond their powers to accomplish; while their lords, with erect forms and careless faces, went by at a comfortable pace, having no labor to perform except leading their horses, and carrying nothing but their hunting equipments.

In the spring following, the same party passed our house on their return from their winter quarters, but for this journey they had procured an old wagon; and by frequent changing about they could all enjoy the luxury of a ride.

In my visits to the surrounding villages, I occasionally met with a few of these painted, calico-shirted warriors, who only come among the pale-faces to supply their urgent wants; the most urgent of which are whisky and tobacco. All the white people here look upon them with distrust; and some with a bitter, unyielding hatred. Among the white hunters are some of the leatherstocking type. They work at farming during the summer, but their winters are wholly devoted to hunting. Between these and the Indians there is an irreconcilable strife. The Indians are not satisfied with killing all the game they want, but do all in their power to exterminate, or drive it off, with a view to frustrate the plan of the white hunters; and also rob and destroy their traps. This very naturally begets a spirit of revenge. I have heard some of these old veterans of the trap and rifle tell of shooting such and such an Indian, and recite a list of others for whom the bullets were moulded.

But how about that last Indian raid upon Sandusky? Well, we were attending a very pleasant party one evening, and among the the guests was one of the defenders of Sandusky in this raid. The subject being incidentally referred to, another of the party asked if this affair did not occur in the days of the Ginseng currency? I, being a greenhorn, asked for some information in regard to this currency. I was informed that about twelve years ago, this country was quite poor. This seemed almost incredible; but I could not doubt the veracity of my neighbors. There was but little land under cultivation here at that time, and there was not enough produce grown to feed the inhabitants. Those emigrants who were possessed of any means had always shunned this locality, there being no attraction here but the cheapness of land; it naturally followed that the majority of the settlers here were those who could not get a foothold anywhere else.

On all sides there was a world of work to do, but on no side was there anything to do with; consequently there was little or nothing done. In older neighborhoods where there are even a few who are able to hire, a little money will find its way into the poorest families, in the way of wages; but here they were all poor alike. They could only pray that

"He who stills the raven's clamorous nest,
And decks the lovely lily in its pride,
Would, in the way that seems to Him the best,
For them and for their little ones provide."

It appears that the way "that seemed to him the best," was to set a lot of enterprising quacks to manufacturing and advertising the Compound Extract of Sarsaparilla! An important ingredient in this compound was Ginseng; pronounced "Gin Shang" by the people here; and this root was found in great abundance in the woods about here. The inhabitants commenced grubbing for it like a drove of wild hogs. It afforded an opportunity for earning some thing, though the wages were small, and no market was within reach from which they could receive cash returns.

They were therefore compelled to adopt a system of exchange. The country merchants were perfectly willing to take "Gin Shang" in exchange for their goods, giving so many ounces of tea, etc., for so many pounds of root.

They, in their turn, could take it to the Western trade emporiums in their semi-annual visits, and purchase with this currency their supply of goods; while the wholesale merchants could send it eastward and obtain cash for it from the manufactures of the great panacea. When debts were paid it was in this currency. Professional men received their salaries and fees in it, and travelers paid their expenses with it. The country bucks took their sweethearts to balls, and other places of amusement, and purchased their tickets with a few pounds of "Gin Shang." We, of the present times, think our own legal currency somewhat bulky, some even declaring that a man needs a pitch-fork to handle it in transacting any amount of business, but those who have carried around this root of all evil in bags and baskets, declare that we have no cause of complaint.

I have indulged in this disgression on the subject of the "Gin Shang" currency, not that it was in any way connected with the last Indian raid upon Sandusky, but because the latter was spoken of by one of our party as having occurred when this currency was in circulation.

A young fellow, more celebrated for his prudence than his bravery, in returning from mill one afternoon in autumn, had passed, two or three miles below the village, a few families of Indians, who had lighted their watch-fires, and were setting up their rude tents by the roadside. There being no enemy within their reach, and probably having no wish to encounter any, and being possessed of all the confidence that numbers inspire, and having drawn further inspiration from their bottles (this was in the good old times of cheap whisky), their grotesque movements, their faces streaked with scarlet and black paint, their war implements, consisting of a few old muskets and bows and arrows, their idiotic jollity, interspersed with warlike yells, very naturally excited alarm in the peaceful breast of the young white man, as he came slowly along the road, with his bushel and a half of corn meal slung across the back of his father's mare. The steed partook of the fear of its rider, and made, what was considered in those days good time. But, notwithstanding their anxiety to get into safe quarters, they stopped long enough at every house to give an exaggerated account of the impending danger. The terrible ball increased in volume as it rolled along, and the war resources of Sandusky were immediately canvassed, and promply brought forth. I enquired of the storekeeper who was narrating the affair what these resources were?

"Oh," said he, "in such settlements as these there is always one gun at least hanging upon the walls of every house; then there were pitchforks, axes, flails, jack-knives and clubs. But I," continued he, "was best provided of all. This was not owing to any foresight on my part; on the contrary, it was owing to a lack of foresight in business that I was now so well prepared for a defensive war. I had, some seasons preceding this raid, purchased two dozen corn-cutters at what I considered a good bargain.

"But I was too ardent in my calculations concerning the wants of the inhabitants in this line, and their means for purchasing; for the area of corn land did not increase as I had anticipated, and the farmers, instead of coming to purchase my corn knives, substituted bungling tools, which they themselves constructed out of old scythes. But I now consider the dull sale of my corn cutters the most fortunate incident in my commercial life.

"As soon as we were informed of the probable attack of the Indian army, we drove the wedge tighter than ever over our door latch, nailed down our windows, and every one of my family who could wield a corn cutter was armed for the defence; and we resolved that, should Fortune favor us so much as to enable us to take the offensive, we would give no quarter.

"The afternoon passed away, and the dark night came on according to order; but the dark warriors did not come up to time. Still our fears were increasing; for we were all well aware that Indians are among the doers of evil who choose darkness rather than light."

I interrupted him with the remark, that I supposed he slept upon his arms that night?

"No, sir;" said he, "I slept on my wife's arms."

Pretty good, I thought, for a country storekeeper.

"Well," continued he, "when we were at length tired and worn out with watching and waiting, we gathered the whole family together in one room, placed our corn knives under the bed, so that we could be ready at a moment's warning, and laid down upon bed-blankets, horse-blankets, or anything else that we could place between us and the floor, and, one by one, all of us forgot our duty and our danger, and fell asleep.

"A short time after the bright sun came up over the eastern bluffs, the dark sons of the forest came slowly up the north road; but no one, on seeing them, could any longer have any fears for the safety of his scalp." They proved to be just such a migrating party as I have previously described, only more numerous. There were, as among the preceding party, spiritless horses, led by sulky, shirking Indians, with bare heads, painted faces, calico shirts, pantaloon legs and moccasined feet; while the squaws, with short skirts, and pantalettes of blue woolen cloth, were carrying in huge baskets, or tied up in heavy blankets, pappooses of various sizes, with great quantities of other valuable goods. The sneaking sullenness, characteristic of the Indians, seemed to be increased in this party by the reaction of their last night's debauch; and instead of inspiring fear by their appearance, they seemed themselves to be in fear of a kick or a blow from every passer by. Even their ill-fed dogs seemed to skulk along as though they were impatient to get out of sight, and beyond the sound of the voices of civilized dogs.

"None of my neighbors," continued the storekeeper, "could laugh at me for my extensive preparations for war, for we were all alike in this. A few chickens were supposed to have been carried off by the Indians, the skunks, or some other disagreeable animals, but no other serious consequences followed the last Indian raid upon Pea Ridge, vulgarly called Sandusky."

"WHO," says the *Saturday Review*, "can enjoy a chat with a man who always talks of women as females, and of a man as an individual; with whom things are never like, but similar; who never begins a thing, but always commences it; who does not choose, but elects; who does not help, but facilitates; who does not supply, but caters; nor buy but always purchases; who calls a beggar a mendicant; with whom a servant is always a domestic, where he is not a menial; who does not say anything, but states it; and does not end, but terminates it; who calls a house, a residence, in which he does not live, but resides; with whom place is a locality, and things do not happen, but transpire."

"Only a Laboring Man."

[Written for the PRESS by MRS. ELISA E. ANTHONY.]

"The idea of Mr.—— having the impudence to ask me if I would accompany him to the surprise-party last evening. Why, he is only a laboring man! And to-day, Lucy—— told me that two-thirds of the people who were there, belonged to the laboring class; and when I asked her if she was not mortified at being in such company, she laughed in my face, saying they were as good as any one else, and a trade was fully as honorable as a profession. Such nonsense; why, I'd rather be an old maid forever, than marry a laboring man. Ma has pride enough not to allow me to be seen with that class of people, and she is perfectly right. There must be a line drawn somewhere," said a gaudily dressed, sickly-looking young girl of about twenty summers, to her companion, a girl in her teens, the other evening. They were walking in front of me, and as I could not pass, heard their conversation, and took a mental note of it.

Yes, it is a wonder that an intelligent man like Mr. —— would stoop to ask *your* company, but we do not think he will ever ask you again; one lesson was sufficient.

If you knew how little you were missed at that happy gathering of "the laboring class" and how mortified some refined girls would have felt had you been there with your rudeness and haughty manners, you would not curl your lip or toss your empty head so often.

"Only a laboring man," and pray what is your father? We know that he has a profession, but because he toils with his brain, is he one whit better than he that labors with his strong hands? What is the difference, if they both earn their money honestly, if the one has hands soft and white, and the other shows his hard and brown with his daily toil? We confess our inability to discover why a laboring man is considered inferior to one who has a profession, or to a millionaire. How long would the physician, the dentist, the lawyer or the editor hold his position if it were not for the laboring man? The sturdy farmer is a laboring man, but if he considered it degrading to work, and lolled in his chair all day, how would the world get along without him? The miner is also a laboring man, and if he, and every other man who earns his bread by the sweat of his brow, would learn a profession, because *that* alone was respectable, what would we do? The professions are overcrowded now, and the majority of the people would soon find it to their interest to have the laboring class at their usual avocations again; don't you think so?

Abraham Lincoln was not born with a silver spoon in his mouth, or in a palatial home; on the contrary, he opened his eyes in a log-cabin; and during his early manhood was not above splitting rails, chopping wood and farming, as many of our most distinguished and intelligent men have done, and instead of seeking, he was sought after; courted and flattered by hundreds, he still retained integrity of character, and purity of thought and language. And many a girl who would have "lived an old maid forever, rather than marry a laboring man," in after years would have felt highly honored at the offer of his hand. The laboring man of to-day may be in the highest position in the land, ten years from now, and tho foolish pride of shoddy aristocracy had better note that fact, and not sneer and flout at one who is "only a laboring man," as such pride will surely have a fall some day.

San José, Aug. 6th, 1874.

NEWS ITEMS BY MAIL.—Mark Twain announces that he and one Barnum have lessed the comet, and propose to fit it up with 1,000,000 state-rooms in the tail (with hot and cold water, gas, looking-glass, parachute, umbrellas, etc., in each), to make a grand excursion among the stars. It will travel at the rate of 20,000,000 miles and upwards per day, according to the weather. Every arrangement is to be made for the comfort of passengers, and stops will be made at interesting points on the way. The fare is to be $2 for every 50,000,000 miles of travel, and the comet starts on the 20th, and will return on the 14th of December, 1991, which is "at least forty years quicker than any other comet can do it in." Complimentary round-trip tickets have been tendered to General Butler, Mr. Shepard, Mr. Richardson and other eminent gentlemen, whose public services have entitled them to the rest and relaxation of a voyage of this kind.

POSSIBLY there may be some anxious and aimless ones in this neighborhood to whom this advertisement of a Florida affinity may offer encouragement: "Any gal what's got a cow, a good feather bed, with comfortable linens, $500 in good, genuine, slap-up greenbacks, that has had the small-pox, measles, and understands tending children, can find a customer, for life by ritin a small william ducky, addressed X. Y. Z., and stick in a crack of Uncle Billy Smith's barn, jinin' the pig-pen, where Harrison Reed is now planning for future operations."

A DISTINGUISHED professor was in Edinburg one wet Sunday, and desiring to go to church, he hired a cab. On reaching the church-door he tendered a shilling—the legal fare—to cabby, and was somewhat surprised to hear the cabman say, "Twa shullin', sir." The professor, fixing his eagle eyes on the extortioner, demanded why he charged two shillings, upon which the cabman dryly answered, "We wish to discourage traveling on the Sawbath as much as possible, sir."

Margaret Fuller.

Sitting on the girls' benches, conspicuons among the school-girls of nnlettered origin by that look which rarely fails to betray hereditary and congenial cultnre, was a young person very nearly of my own age. She came with the reputation of being "smart," as we should have called it—clever as we say now-a-days. This was Margaret Fuller, the only one among us who, like Jean Panl, like the Duke, like Bettina, has slipped the cable of the more distinctive name to which she was anchored, and floats on the waves of Margaret. Her air to her schoolmates was marked by a certain stateliness and distance, as if she had other thonghts than theirs, and was not of them. She was a great student, and a great reader of what she nsed to call "nawvels." I remember her so well as she appeared at school and later that I regret that she had not been faithfully given to canvas or marble in the day of her best looks. Nono know her aspect who have not seen her living.

Margaret, as I remember her at school and afterward, was tall, fair complexioned, with a watery, aqua-marine lnster in her light eyes, which she used to make small, as oue does who looks at the sunshine. A remarkable point about her was that long, flexible neck, arching and undnlating in sinuous movements, which one who loved her would compare to those of a swan, and one who loved her not to those of the ophidian who tempted our common mother. Her talk was fluent, magisterial, some would say enphnistic, but surpassing the talk of women in breadth and audacity. Her face kindled and reddened and dilated in every feature as she spoke, and as I once saw her in a fine storm of indignation at the supposed ill-treatment of a relative, showed itself capable of something resembling what Milton calls the virngonian aspect.

Little incidents bear telling when they recall anything of such a celebrity as Margaret. I remember being greatly awed once, in our school-days, with the maturity of one of her expressions. Some themes were brought homc from the school for examination by my father, among them one of hers. I took it up with a certain emulous interest, (for I fancied at that day that I, too, had drawn a prize, say a five dollar one, at least, in the great intellectual life-lottery) and read the first words: "It is a trite remark," she began. I stopped. Alas! I did not know what trite meant. How could I ever jndge Margaret fairly after snch a crushing discovery of her superiority? I doubt if I ever did; yet oh, how pleasant it would have been, at about the age, say, of three-score and ten, to rake over these ashes for cinders with her—she in a snowy cap, and I in a decent peruke!—*Oliver Wendell Holmes.*

An Anxious Mother.

A correspondent of the Mercer (Penn.) *Dispatch* relates the following, told to him about the early home of Goveruor Bigler:

At the time I visited the plaee the father of the family was dead, and none of the children were at home, exeept a daughter, who was married to a Mr. Mitchell, who worked the farm. It was a cold, raw day when I came, and the old lady was sitting before a big fire reading a uewspaper. She was rather heavy, and there was something motherly about her.

"Well, Mr. Peddler," said she, "have you heard the election returns?"

I told her I had heard nothing but the retnrns from a few neighboring townships and counties—yon know railroads and telegraphs were not so numerous then as now.

"I assure you, sir," said she, "I feel a little uneasy about our Bill and our John. Bill is rnnning for governor of this State, and John is running for governor of California."

I tell you the scene was worthy of a picture—the good old lady reading her paper by the fire in her hnmble log cabin, and her two sons running for governors of the two richest States in the Union; and both were elected.

THEN AND NOW.—Dr. Franklin desoribed the farmer's condition in 1776, as follows:

"Farmer at the plow,
Wife milking cow;
Daughter spinning yarn,
Sons threshing in the barn—
All happy to a charm."

Another writer gives the account of 1874, as follows, applicable, at least, to some latitudes:

"The farmer gone to see a show,
His daughter at the piano;
Madam gaily dressed in satin;
All the boys are learning Latin—
With a mortgage on the farm!"

VITALITY OF LIQUOR DEALERS.—In a paper in the 56th volume of the London Medico-Chirurgical Transactions, recently published, Dr. Dickinson says: Persons who trade in liqnor drink on an average more than those who do not, and their morbid peenliarities are mainly due to that excess. Estimating the effects of alcohol on this basis, by means of comparison between the class described and persons similarly situated save in relation to liquor, the following conclusions have beeu reached: Alcohol shortens life; to trade in liqnor costs three and a half years. Reviewing the morbid results which the examination of each organ have revealed, they present a consistency which is in some sort their warrant. Alcohol canses fatty infiltration and fibroid encroachment; it engenders tnbercle, enconrages suppuration, and retards healing; it produces nntimely atheroma, invites hemorrhage, and anticipates age,

YOUNG FOLKS' COLUMN.

Wash-Day.

We's hang'n' out our wash'n',
Don't you see our teenty lines?
The shoestring one is Birdie's,
The other one is mine.
We allers wash on Monday,
'Cause gran'ma allers does;
And the goodest ways to housekeep
I guess our gran'ma knows

We've got a teenty washboard,
And a cunnin' little tub,
I does 'most all the rins'n',
'Cause Birdie loves to rub.
I tell you she piles soap on
Most more than Bridget does
To do a dreat, big wash'n';
But Bridget never knows.

She'd scold us worse than fifty
If she should find it out;
But we's gen'ally pretty quiet,
And she don't know what we're 'bout.
If mamma'd come and see us,
I spect she'd scold some more,
'Cause we've wettcd up our sashes,
And slopped the pantry floor.

We've crinkled up our fingers
Till they look as gran'ma's do;
And Birdie slopped some soapsuds
Right on my new blue shoe.
We set it in the oven—
I guess it'll dry right soon,
There, we've done this dreat big wash'n'
And hung it out 'fore noon.

—*Youth's Companion.*

A Petty Prince.

Poor "Sharkey" is dead. Trne, he was only a bootblack; yet he filled his niche in the world with exceeding honor. The gamin tribe respected him, for he was the benefactor of all boys poorer and smaller than himself. He was called in to settle their disputes, and his decision was law. If a little fellow was unlucky and had not enough money to pay his way into the pit or gallery when he wanted badly to go, Sharkey helped him to that extent. He was willing to divide his cash with any of his fellows who were unfortunate enough to want bread. Thus he built up a bright reputation, and won the deep respect of all his associates. It was with surprise that they missed him from his acoustomed coruer one day. It was with deep sorrow they heard that he was very ill. Sharkey lived with his annt, aud the little bootblacks washed their hands and faces and went by twos and threes to see him, and were admitted to his bedside. The boy was really dying. He whispered a word or two to each, and they went ont of the house to give the newcomers a place in the small room beside the little bed. They all noiselessly came and went, but still lingered on the steps and about the pavement in front of the house. Presently one of the boys bronght out the word that he was dead. And still they lingered with swollen eyes and quivering lips, and refused to be comforted. The passers-by inquired the cause and learned that a bootblack had died. No member of the Exchange, dying, could have wrung so many honest tears from his friends as honored the memory of poor little Sharkey. And so everywhere in this wide world does true merit meet with just appreciatiou.

TRY THE CRACKER FIRST.—Ralph Wells describes in a recent letter to the teachers of Grace Mission, how he met in the Alps a huge shepherd dog. It illustrates very pleasantly the gentle way of doing things, and it will apply just as well in our dwellings with rough girls and boys: "We had hardly started, when a shepherd dog, seeing one abroad at so early an hour, concludes that something is wrong, and blocks the way, the only way, and a very narrow one at that. Now it is known that we are very fond of dogs; bnt to see that Swiss dog's hair rise, and those Swiss teeth shown, and to hear the low, resolute growl that implies 'no passage here,' is too much for Yankee pluck, even on the Fourth of July! Two ways suggested themselves ont of the difficulty. The first is a stone; the second a cracker. The latter is first tried. 'Doggie want a cracker?' Presto, change! down goes the hair, in go the teeth, wag goes the tail, and with a sweet smile on his face, doggie goes off to eat his cracker. Try the cracker first, teacher."

TABLE TALK.—You will find a great deal of character is imparted and received at the table. Parents too often forget this; and therefore, instead of swallowing their food in sullen silence, instead of brooding over yonr busiuess, instead of severely talking about others, let the conversation at the table be genial, kind, social, and cheering. Don't bring disagreeable things to the table in your conversation, any more than you would to your dishes. For this reason, too, the more good company you have at your table, the botter for your children. Every conversation at your table is an edncator of the family. Hence, the intelligence and the refinement and the appropriate behaviour of a family which is given to hospitality. Never feel that intelligent visitors can be anything but a blessing to you and yours. How few have fully gotten hold of the fact that company and conversation at the table are no small part of eduoation?—*Science of Health.*

A LITTLE four-year-old Watertown girl went running into the house the other day, exclaiming, "Mamma, I've seen Jack Frost! I've seen Jack Frost!" "Where did you see him, my darling?" queried the mother. "Oh, I saw the tip of his tail hanging over the eaves." She had seen an icicle.

GOOD HEALTH.

The Human Frame.

No. 10—The Circulation.

The circulatory system of the human body is the great net-work of rivers and canals by means of which all parts receive their nccessary cell food and send away refnse or woru out material. When we reflect that we cannot insert a fine cambric needle into our flesh without ruptnring some tiny little aqueduct, and causing the blood to exude, we must be impressed with the magnitude and intricacy of this system. In a man of one hundred and fifty pounds, about 18 ponnds of blood are moving all the time, up and down, in and out and through and through his tissues. These little streams never tire, never stop for a single instant during onr lives.

The circulation of blood as viewed under a good microscope—in the web of a frog's foot—looks not unlike the rushing of water through a miner's sluice, which is bearing rapidly along an immense number of round boulders. Only there are millions of these sluices of different sizes and with cnrrents of different velocities moving aronnd, among, across and in opposite directions to each other, makiug a perfect labyrinth of confnsed regularity. The "bonlders" are the blood cells; little disk-like bodies of only from one two thousand five-hundreth to one four-thousandth of an inch in diameter. They often move through capillary tubes of a less diameter than their own, and may be seen rolling, turning and impingiug against the sides of the capillary walls.

But the blood is only a portion of the circulation of the body; a still larger amount of fluids passing directly through the tissues by means of secretion and re-absorption. These are the saliva, gastric juice, iutestinal and pancreatic juices, and the bile. Thus in a man of the above weight there would be secreted by glands at one point and taken up by absorbents at another, of saliva, about three pounds; of gastric juice, fourteen pounds; of intestinal and pancreatic jnices, one third pound; and of bile, two and one-half pounds; making a grand total of nearly twenty pounds of fluids which appear where needed aud disappear when their services are no longer required, with a mysterious readiness that far excels all the wonders of magic.

Yet even this does not constitute the whole of our circulatory system. Place certaiu substances, either upou or under the skin and they will he very quickly seized by myriads of "police" glands, called lymphatics, and transferred to another portion of our circulatory apparatus known as the lymphatic system. The food after being digested is also taken up by one division of these glands, and with the secretions of those all over the body—which are continually occupied in tearing down and absorbing decaying tissues—is poured into the thoracic dnct, and from thence into the superior vena cavæ and mingles with the blood. How infinite the power that has thus formed a fluid which contains at the same time life and death—which hurries through the system guided by a far greater than human intelligence; depositing brain food here, muscle or bone food there; receiving the products of decay at still another place to snrrender them again at the natural ontlets of the body; doing, as it were, millions of different commercial transactions at millions of different points, yet never committing a single error! When shall we ever completely understand onr mysterions bodies?

THE SPHYGMOGRAPH.—People can no more be cured by the sphygmograph than by feeling their pulse or looking at their tongue. If it does them good, it is their own imagination. The sphygmograph is simply an instrument which registers the beating of the pulse in regard to velocity, intensity, regularity, etc., on a strip of paper moved hy clockwork, similar to some telegraph machines. If applied to a dead man, the pencil would mark a straight line, while a living pulse will cause in the line waves of different distances, hight aud shape, all in accordance with the nature of the impulse given by the heart to the circnlation. The nature of the heart's action and circulation in disease, and after the use of certain medicines, may thus not only be studied, but even recorded. Life insurance companies should order their medical examiners to enter the recorded indication of the pulse of applioants for insurance, so as to have surer data to go by than is at present the case.—*Artisan.*

SPONGE RETAINED IN STUMP AFTER AMPUTATION. — *Le Mouvement Medicale* mentions the case of a man who entered a hospital in Paris with a large granulating ulcer on the stump of his leg, consequent on amputation four months previously, in the reign of the Commune. On examination, a sponge was found in the granulations. It had been applied as a hemostatic in the amputation and carelessly left there.

TIN CAPSULES.—Wittstein finds that capsules used for covering wine, liquor, etc., bottles contain from 90 to 99.4 per cent. of lead; on this account they are objectionable, especially if used repeatedly, as they are liable to come in contact with the contents of the bottles, drops of which may adhere to the outside of the bottle and dissolve some lead.

Germ Theory of Disease.

Dr. Barnard, in a recent paper on the germ theory of disease, said: About 40 years ago the yeast plant was discovered by Caguiard de la Tour, and almost simultaneously by Schwann. Till that discovery, the chemical theory of disease had a strong snpport in the imagined analogy of fermentation. To the suggestion, after the discovery, that fermentation is probably a consequence of the rapid growth of the plant, there was at first a very general and rapid dissent; but, when, in 1843, Helmholtz made a direct experimental test of the question, by placing a fermenting liquid side by side with one of the same kind not fermenting, both being coutained in the same vessel but separated by a membrane which permitted the mingling of the liquids, but prevented the passage of the plant, that aualogy lost its force, for the fermenting liquid continued to ferment, while the quiescent liquid remained quiescent. The case of fermentation assumed new significanco quite the contrary of that which it had before seemed to possess, and it began to be claimed quite as conclusive in favor of the germ theory, as it had beforo in favor of the chemical. This theory, however, though among its advocates have been, and continue to be, counted many of the most distinguished physicians and physiologists of the past and present generation, has never met with universal acceptance. Serious difficulties present themselves, which it fails to explain, among which are the objections strongly put by Dr. Bastian, that the theory demands a belief in the existence of about 20 different kinds of organisms never known in their mature state, and whose existence is not demonstrated, but simply postulated; and that these germs, if they exist, are not the germs of any known organisms, because such germs have been experimentally shown to be incapable of producing the particular diseases these are assumed to cause. Moreover, feeding on putrid flesh, as is habitual among the Kalmucks, is followed by no injurious consequeuces, though such flesh swarm with bacteria, and, as the author just referred to affirms, the organisms of ordinary putrefactions may be introduced even into the blood of men and animals without produeing auy of these specific diseases. The same writer asserts that in sheep pox the blood and the secretions are uot infective, though the disease is allied to, and even more virulently contagious than human small pox.

COCOA NUT TREPANNING.—There is a well known trick performed by the clowns in pantomimes, to the mystification of the jnvenile portion of the audience, which consists in shooting a hole in a man's head, and then artistically plugging up the orifice with a carrot, thus completely curing the apparently assassinated individual. While this is, of course, very ridiculous, it is no more so than a somewhat similar operation practiced by the inhabitants of Uvea, an island in the Loyalty group. These queer people have a uotion that when a person gets a headache his skull is cracked, or that the bone is pressing down on the brain. Consequently they proceed to cnre the trouble by cutting open the scalp, and scraping a hole in the cranium with a bit of glass, and theu stopping the aperture with a piece of cocoanut shell rubbed smooth. Sometimes the surgeon scrapes too far and injures the *pia mater*, when the patient is killed; bnt ordinarily the boring proceeds to the *dura mater*, leaving a hole in the skull. It seems that few adnlts are without perforated heads, and that the cocoa nut patch is common.—*Scientific American.*

POISONED AT A CHEMICAL LECTURE.—A very tragic occurrence lately took place at Bucharest. Dr. Beruath, the principal of a public laboratory, in that city, was giving a popular lecture on chemistry. Among his hearers was a Madame Davila. The lady was taken ill in the course of the lecture, and the doctor prepared a draught for her, in which he intended to mix some quinine, but by accident used strychnine iustead. The unfortunate victim was taken out into the street, and died almost instautly.

TREATMENT OF BURNS.—The New York *Medical Record* states that at the Roosevelt hospital white-lead paint has been found, after trying almost every plan of treatmeut hitherto proposed, to be the best and cleanest application. Mix as for painting, hut considerably thicker, and apply with a brush. A very neat and satisfactory dressing in superficial burns consists in coating the surface with mucilage, aud then covering it with powdered lycopodium.

GLAZIER'S PUTTY AS A SURGICAL DRESSING. According to the *Medical Press and Circular*, ordinary mixed putty has been found by Mr. Couvall to be the softest and most applicable means of treating excrescences or tumors of various kinds where compression is desired, as it moulds itself so neatly to the skin. He believes it to he superior to dextrine, silicato of soda, or plaster bandages. It is cheap, and always attainable.

CHLORAL HYDRATE AND CAMPHOR IN NEURALGIA.—It is said that the intimato mixture of equal parts of hydrate and camphor will produce a clear fluid which is of the greatest value as a local application in neuralgia.

THE USE OF OXYGEN IN CONSUMPTION.—This is of doubtful efficacy as a permanent remedy. It may give some relief. It is not to be lost sight of, and is worthy of trial.—*Hutchins.*

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SAN FRANCISCO:

Saturday, August 15, 1874.

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Mulberry Leaves.

Mr. Felix Gillet, of Nevada City, sends us samples of two varieties of mulberry leaves, the japonica and the grafted roso-leafed. Both varieties are well represented by the samples sent; being large, shapely, clean and heavy. The six japonica leaves weigh one ounce. There are four of the grafted rose-leafed, three of which weigh one ounce. The size and beauty of these leaves remind us of the splendid late strawberries sent to the PRESS office a few weeks since by Mr. Gillet. If the gold of Nevada county did not dazzle people's eyes, they would see that to those who wish to embark in certain classes of agricultural labor, or to those who can live without labor, the foot-hills there offer agreeable and substantial attractions. For pleasantness the climate can scarcely be surpassed by any locality in the State; and for healthfulness it can hardly be equalled by any in the world.

Mr. Gillet has pledged himself to contribute something on silk culture to the RURAL PRESS at no distant day, and in a postscript he alludes as follows to an inquiry of a correspondent in last week's issue of the PRESS:

I noticed in your last issue that a correspondent is inquiring about the Thomery system of fruit growing. I have a work on it, and when at more leisure, I might give the desired information.

THE Buffalo and Quebec people are quarreling very bitterly over the respective merits of the St. Lawrence and Erie canals, as outlets for the northwestern grain trade.

THE melon crop in Florida is said to be very profitable this year.

The Raisin Movement.

Among the notable incidents connected with California horticulture in the present season, the raisin movement will probably be conspicuous. Enough has been done in former years to inspire confidence, and even to create assurance, that this is to become one of our prominent standard products. No doubts remain as to our ability to produce a first-class raisin, the limited product of two or three seasons having already achieved popularity for California raisins, for dessert and for cooking purposes.

The only want at present is a more expeditious method of curing. Even with the curing facilities at present available the raisin product of 1874 will undoubtedly be a large one. Some of the Alden fruit-drying houses are making extensive preparations for raisin-curing. The one at Sonoma is expected to go largely into the raisin business; and that at Vacaville will give a large share of its attention to raisins and figs. Those at San Lorenzo, Centervillo and San José will probably give a portion of their attention to raisin-curing.

But we expect to see the products of these establishments, extensive as they are, far exceeded in amount by the individual efforts in our grape-growing districts. The production of raisins is a subject that has of late absorbed much of the attention of fruit growers. Among those who own, and are planting graperies, are a good many who from conscientious scruples desire to abstain from wine-making. Others are withdrawing from this business, or are deterred from embarking in it, by objections of a more business-like character. The alleged internal revenue oppressions on distillation, the high price of casks, and the ominous tendency to centralization supposed to be indicated in the wine business, have caused a partial diversion from wine making to producing raisins. This is influencing, perceptibly, the choice of varieties in planting; and a good deal of grafting is being done with this object in view; putting in cions of the white Muscat, the Huasco and other raisin varieties, to take the place of those grown more especially for wine. It is expected that quite a large amount of raisins will be made from the white Muscat during the present season. The Peruvian Huasco is, comparatively, a stranger in California; but a good many cuttings are said to have been ordered by parties acquainted with its value as a raisin grape. Raisins made from this grape have a strong, peculiar and pleasant flavor. It is expected to become a rival of the white Muscat.

While grape growers have been trimming their sails—or their grape vines—to suit the current of public taste, they have also given due attention to the subject of drying. We have heard of various methods adopted by different parties, and have no doubt the experiments of the present season will develop points that will expedite and cheapen raisin curing. Will those who are thus experimenting, and those also who are practicing tested methods, give the public through the columns of the RURAL PRESS the desired information? It is to be hoped that different methods will be perfected, adaptable to the various scales of grape-growing, in order to escape as far as possible monopoly and centralization. Raisin-curing, it seems to us, is as essentially a home matter as grape-growing. The fruit should be taken at a particular stage of ripening; handling and transportation should be avoided as far as possible, and the character of the labor attending the curing and packing is such as to make it desirable to retain it at home. If the grape-grower is to sell to the grape-drier, then there will be a continual dread of rings. The grower must sell at a certain time; but the drier can hold on until the market assumes the proper degree of hardness, and the advantages of transportation are in favor of the latter. But cured raisins of a prime quality would be one of the safest, if not the safest, products that a farmer could hold on to until the market comes around, while the shrinkage in bulk and weight by the curing and packing processes, places the advantage of transportation within the hands of the producer. We hope, therefore, to see our producers of cured raisins and figs working—not sitting—beneath their own vine and fig tree, with no monopolist to molest or make them afraid.

We also hope that when we have secured processes of curing that, in cheapness and expedition, are in keeping with the prolific yield of our vines, we shall be able to put California raisins upon the market at prices that will place them within the reach of all classes. There is not one-quarter the amount of raisins consumed in the Atlantic States that there would be if prices were lower. This healthful and delicious fruit should become one of the staples of American housekeeping. At present it is almost excluded from the tables of the poor, and is only admitted as a luxury on those of the middle classes.

SEVEN reapers and fifty hands, including water-carriers, assembled at the residence of the late Welborn Healy, in Indiana, just after his funeral, and put the entire crop of wheat—twenty-four acres—into shock, before sundown.

WE are going to have a short tobacco crop. Missouri, Southern Illinois, Indiana, Ohio, Kentucky, Tennessee, the Virginias, Maryland and Connecticut are all complaining.

The Dismissal of Professor Carr.

The action of the Board of Regents on Thursday last, in the unceremonious dismissal of Professor Carr from the college of Agriculture, will, we fear, be fraught with results of much evil to the State University. The impression has gone abroad, whether justified or not, that the Regents are disinclined to give the Colleges of Agriculture and Mechanic Arts that prominence which the "Organic Act," establishing the University, designed they should occupy, and which it is the desire of a large majority of the people should be fully and honestly carried out. This impression has long been gaining strength, by reason of what may be considered, at least, as tardy action in providing facilities for agricultural and technical education, and now, by the culminating and unjustifiable act of dismissing the agricultural professor, without the assignment of any but general cause, and against the earnest entreaty of a large and respectable minority of the Board, for particular specification of reasons, and investigation into the justice of such action. It is of the *manner* in which it was done, rather than of the act, that the people complain. We do not hold that Professor Carr is the only person competent to fill the chair of special Professor of Agriculture in the University; but we do hold that under the circumstances, and in common justice, even, the Board should have acted in a more conciliatory manner.

The Board of Regents owes its very existence to the will of the people, and even the University itself is the creation of law, and is dependent for success and maintenance upon public opinion. But from the action of the Board we are reasonably led to infer that the "supremacy of the people" is entirely ignored in their plans—indeed, that they have resolved to carry out in *fact* what was merely the *suggestion* of a late writer in the *Atlantic Monthly*, that our University should throw off State interference altogether and, to use a homely but expressive phrase—paddle its own canoe. That we may not be misunderstood, we will quote the precise language—"Many persons wonder why the friends of the University of California prefer State aid *plus* State interference, rather than private generosity *minus* State interference." It would seem from the action of Tuesday that some member of the Board must have been the author of the article in question, and at the same time the ruling spirit in the Board.

The singular and arbitrary action of the Board may possibly admit of some justification; if so they ought to make such explanation as will set them right before the people. The present is not the time nor this the place where any body of men, however high and honorable, and acting for the people, may with impunity wrap themselves up in their dignity and defy public opinion. If such action is persisted in they may find, ere long, that they have elevated their victim to the post of martyr, from which he may some day, as the head of the State Board of Education, come suddenly in to confound them in the very midst of their deliberations. This is all the more probable from the fact that no member of the College Faculty stands higher to-day before the people at large than Professor Carr—and that, too, notwithstanding the recent action of the Board of Regents. He has lectured extensively throughout the State, and wherever he has been he has secured friends for both himself and the University. We have frequently met him on such occasions, and speak of that which we know. We presume that the *people* will still find work for him to do in California, in the cause of popular education, although their servants at the State University have decided to dispense with his services there.

We are unwilling to believe that the Regents, in his removal, have intended the abolition of the Chair of Agriculture altogether; although we can scarcely realize that any man who possesses any respect for himself can accept of a chair from which he may be unceremoniously removed, without the assignment of particular cause, at the will or caprice of a body of men who pay but little deference to public opinion, and who appear to hold in very light esteem common justice and propriety between man and man.

We are far from joining in the wholesale denunciation in which some of our contemporaries of the press and many of our citizens and public bodies have indulged as to the earlier motives and acts of the Board of Regents, in regard to the Agriculture and Mechanic Arts Colleges. We do not hold that they have "totally ignored" those departments, or that they have given them only *one* professor or instructor out of the nineteen connected with the University. We fully recognize the valuable aid rendered in that direction by a majority of the professors and tutors. We freely recognize that important steps have been taken to secure the benefit of practical instruction in agriculture, in accordance with the suggestions of the very professor who has been dismissed—important, but tardy. We are aware that measures were also set on foot to secure a practical school of mechanic arts, and that those measures failed only by reason of the unfortunate and injudicious action and language of some of the honest friends of that measure—a sad result, which should teach the importance of magnanimity, and the necessity of the avoidance of hasty conclusions and hot words on either side.

We have never joined in the general denunciations of the management, by the Regents, of the agricultural lands donated by Congress to this State for the benefit of the University. We believe they have been honestly and advantageously disposed of, and their proceeds as properly invested.

We are fully aware of the difficulties encountered elsewhere in the solution of the problem of technical, and especially of agricultural education; of the disappointments, the changes and the discouragements which have been so generally met with in other parts of the Union; and we fully recognize the necessity of caution in our own case. But, with all that has been done, we fail to witness that manifestation of earnestness and interest in that direction, by the Board of Regents, which the people have a right to expect of them, considering the important position which those departments of the University are made to assume in the "Organic Act," which was, and still is, the will of the people who furnish the means, and who have elected these men to carry out their intents. So marked has been this lukewarmness that many of the University students have been emboldened to write and speak in most unmanly and unmannerly terms of efforts made on the part of the people to secure a proper recognition of practical education at the University. They have not only written and spoken, but have actually been allowed to print and circulate matter and language in relation to that subject, which one would expect to find only in journals of the lowest class in metropolitan centers—and that, so far as the public know, without reprimand from either Faculty or Regents. Such is the effect of bad example set by superiors over those who have been placed in their charge. We refer, more especially, to an article published in one of the college papers of November last, under the head of "State University Investigation." We would not like to pollute our columns with a reprint of the article.

Whatever may be the equities of the case of Prof. Carr, certain it is, that under all circumstances, the people will not fail to regard the manner of the act of Tuesday last as the culmination of a "squabble," which has for a long time existed between the Regents and themselves, and which, in its manner of finality, partakes rather of personal than public considerations. In common with thousands of the more conservative portions of the masses of the people, we sincerely regret this whole matter, and believe that there has been a great wrong done to an individual and to the cause of education.

It is greatly to be feared that some of the Regents do not, and perhaps have not the leisure to devote that time to their duties in the Board which the importance of the position demands, and hence may allow themselves to be unwittingly misled by others. But we hope and trust the majority mean well; and that if they would manifest a little more candor and a reasonable consideration for public opinion and the true interests of the University, we believe they would be met more than half way by the people, in the path of reconciliation and good feeling. But if they continue to stand on their dignity, and to ignore the power that created them, the people of California will, most assuredly, have something decisive to say about the management of the University, through the next Legislature.

To Correspondents.

A very readable communication has been received from "E. F. C.," but which we decline publishing on account of its controversial character. This is not the first time that we have been under the necessity of tightening the reins on our racy correspondents.

Political issues are apparently worked out, and religious controversy seems to have taken its place among the "lost arts;" but the disputations mind must have something to exercise itself on. The new pastures in which disputing minds are now refreshing themselves, lie about half way between politics and religion, being the wide field of social life. Woman's presence has lent a charm to the discussion of these social topics, as it does to every occasion, from a bull fight to a church festival, and the din of wordy battle is louder than ever before. Moral and intellectual advancement, and the good of all, is what all are striving for; and, being urged on by these promptings, they can scarcely conceive how any can refuse to lend an oar—or a newspaper column—to the discussion of these topics. But if an agricultural or family paper is a proper place to discuss these subjects, we have failed to see it.

Our friend, "E. F. C.," after laying down the weapon of social warfare, gives us some practical information, for which he has our special thanks. He says:

I must give you something to satisfy your appetite for facts, by describing the working of a tree-lifter and transplanter, the invention of Mr. Carroll, of this town, patented, I believe, through the office of Dewey & Co. The value of the invention chiefly consists in the perfect manner in which it removes trees without injury or exposing to the air the young roots, coupled with the fact that it saves one-half the labor and time of taking out and resetting. No nurseryman can afford to be without a set—for they are made of different sizes, to suit the ages of trees. In fact, no one who handles young trees can afford to do without one, for in additiou to the above advantages, it renders the moving of five or six-year old evergreens perfectly safe, and saves the necessity for immediate watering. The smaller sizes are applicable to the transplanting of herbaceous plants started in beds, such as tobacco, cabbage, tomatoes, etc.

Too Much of a Good Thing.

The question, "Is salt beneficial to trees?" has been settled—to the satisfaction of the tree experimented on—by a Professor of Agriculture in some Western University, who ponred a barrel of old brine abont the roots of a slender tamarack tree in the grounds belonging to the institntion. The worthy professor decided that salt was *not* beneficial to trees; and the young tamarack arrived at the same conclusion, for it "np and died." The rule, founded upon this test is, that trees and vegetation generally shonld abstain entirely from the nse of salt, and even the waste water from the house, if it has imbibed any of the saline property duriug its course of usefulness, must not be throwu into the garden. This is the law as expounded by this learned professor.

The needs and capacity of the farm in regard to salt are as yet nnknown; but any one who has any considerable amount of experience in vegetable and fruit gardening, will, we think, declare in favor of the moderate nse of salt in many cases. In many instances it is quite essential, and in a few absolutely indispensable. Plants, bnshes and trees that are at home near the sea coast, or salt marshes, need au occasional application of salt when transplanted far inland. We have tried this and know whereof we speak. The quince belongs to this class. We have grown this bnsh, principally for ornament, two hundred miles inland, where the winters were extremely rigid, and althongh it withstood the inclemencies of the season, growing luxuriantly and blossoming profusely, it never produced any fruit, nntil, by the advice of one who knew the wants of the qnince, we salted the earth about the bushes, when they at once began to bear as perfect specimens of this fruit as we have ever seen. Gooseberries and other fruits that are inclined to mildew, have also been benefited by salting. Asparagns is recognized as one of the garden vegetables that need the application of salt. Many that are as yet not known to staud in need of this treatment would probably be beuefited in the same way; but experiments in this treatment shonld be condncted with care, and the material used sparingly. Notwithstanding the decision of the worthy professor, who tested the digestive capacity of the delicate tamarack tree with a barrel of old beef-brine, there are experienced gardeners who will still continue to treat their growing vegetables to a liberal dose of waste water from the dish-pans and wash tubs. The greasy and alkaline properties imparted to this water by soap are both healthful and nntritious to vegetation; the dirt washed from the clothes is also a strong fertilizer; and the saline quality which the water has received from the dishes and pots of the kitchen will be relished by all vegetables, bushes and trees to which it is offered. Of course no one possessing any practical sense would apply to a bed of vegetables, or to the roots of a tree, a bucket of water in which salt fish or meat had been soaked. Only scientists commit such follies.

Short-horn Cow, "Hope 22d."

We give in to-day's RURAL PRESS the portrait of another member of Carr & Chapmau's celebrated Gabilan herd of Short-horns.

The accompanying cut is a portrait of the Short-horn cow, "Hope 22d," at the age of three years. She was calved, Nov. 10th, 1870; got by Baron of Geneva, 7538; dam Hope 3d, by Perfection, 2019. Her color is red. She was bred by C. R. Ward, Le Roy, Genessee connty, N. Y. She is a grand heifer, as well as being a very well bred one; hair like a rabbit's fur; an nncommonly good toncher, with the cleanest head and neck of any in the herd; a neck-vein and brisket that are as near perfection as can be produced; with back ribs that are extremely beantiful. She is an excellent milker, and promises to be a steady breeder, being now in calf to Sixth Lord Oxford. Her pedigree, traced back from her dam and sire—given above—is as follows:

"2d dam, Hope, by Imp. Usurper (13928); 3d dam, Imp. Hopeless, by Horatio (10335); 4th dam, Lady Elizabeth, by Earl Essex (6955); 5th dam, White Rose, by Senator (2610); 6th dam, Red Rose, by Columella (904); 7th dam, by Shakspeare (1429); 8th dam, by Blythe Comet (85); 9th dam, by Neswick (1266); 10th dam, by R. Colling's Son of Favorite (1053)."



"HOPE 22D." (At the age of three years.)

Six hundred and fifty-one tons of fruit and vegetables were shipped from Sacramento during the last week, for the markets the other side of the Sierras and the East. There is every indication that the shipments will be much larger during the present week, and continue to increase rapidly throughout the season.

Stock Breeders' Directory.

In no part of the United States has the improvement of stock received more attention of late than in the States and Territories of the Pacific Coast. The RURAL PRESS has thus far nsed its influence and power towards bringing abont this most desirable object. We now propose, as a means by which breeders and pnrchasers of choice stock may be brought nearer together, the weekly publication in the PACIFIC RURAL PRESS of a STOCK BREEDERS' DIRECTORY. In this the breeder of horses, cattle, sheep, goats, swine, poultry, etc., can advertise his stock; and those who desire to purchase in any of these departments can turn to this and learn the address of reliable parties of whom they can procure what they want. Something of this kind has heretofore been greatly needed on this coast, and we are confident of receiving the co-operation of stock breeders in this undertaking. A directory sueh as we propose to publish will, besides being of great convenience to the dealers and purchasers of this coast, assist materially in the interchange of choice stock which is continually occurring between the Pacific and Atlantic States and between this and foreign countries. This interchange is indispensable in retaining the purity and healthfulness of stock; and even under the present isolated condition of California stock-breeding, the sales of onr choice stock that have been made within the past year to purchasers in foreign countries wonld astouish the public, if they were pnblished. Anything that will tend to increase aud systematize this important business cannot fail to receive the encouragement of those who have at heart the immediate and substantial advancement of worthy objects; and with the low rates at which we propose to insert the names, addresses and special business of stock breeders, we are confident that they will consider it to their interest to secure a space in this directory.

We have conferred with a large number of the stock breeders of California on the subject, and are pleased to be able to state that our plan meets with their approval. One firm writes us as follows: "Your Directory appears in the right place and at the right time. It will have virtne, no doubt." Another writes: "I am mnch pleased with yonr idea of the Stock Breeders' Directory, and will continue the advertisement after the three months are up." Chapman & Carr, in a note just received, say in reference to our Stock Directory: "We are well pleased to have our cards inserted in it."

We wonld state here, in proof of the growth of the live stock business in California, that one of the firms alluded to above informs us that their sales of pure-blooded stock within the last 100 days have amonnted to over $27,000.

We commence the publication of the Stock Breeders' Directory in the present issue of the RURAL PRESS, and shall continue it weekly hereafter.

DRIED FRUIT.—Mr. E. D. Waters, of Stockton, called at our offiee, last week, and exhibited some fine specimens of dried apples, apricots and figs aud candied apricots and currants. These fruits were dried in the kiln of Mr. Waters and Mr. G. W. Swan's construction. The entire expense of the kiln is less than $100, aud it will dry 50 lbs. per day. Specimens of the frnit will be ou exhibition at the Mechanics' Fair. We are glad to note that this important snbject is at last receiving the attentiou due it, and that there is a general waking up to the fact that this is the proper solntion of the fruit question.

Meeting of the University Board of Regents.

The Regents of the University held a special meeting on Tuesday last to take into consideration the question of Professor Carr's further incnmbency of the Agricultural Chair. Nearly all the Regents were present—a fact doubtless due to the importance of the action proposed. A resolution was offered wherein the Secretary of the Board was instrncted to notify the Professor that his services would be hereafter dispensed with on the general ground of unfitness. Some discussion followed by Regents Felton, Dwinelle, Hamilton, Estee, Hallidie and others. During this discussion Regent Hamilton submitted the resolutions of a Joint Committee of the State Grange, Mechanics' State Council and Mechanics' Deliberative Assembly, which were read and referred to the Advisory Committee to reply to.

Resolution of Inquiry Defeated.

Mr. Hallidie offered the following substitute for the first resolution:

Resolved, That the Advisory Committee is hereby requested to examine into and report to this Board any irregularities, insufficiencies or incompetencies that may exist, or may have existed in the administration of any department of instrnction in the University, and if in its opinion any changes should be made. The committee is empowered to add to itself any additional members of the Board; to hold its sessions with open doors, or otherwise, and to adopt such measures to fnrther the public interest, as their judgement may dictate or suggest, and report the facts to the Board.

The substitute was lost by a tie vote.

Prof. Carr Removed.

The original resolution was then carried by the following vote:

Ayes—Regents, Booth, Mills, Winans, Stebbins, Archer, Martiu, McKee, Swift, Moss, Ralston and Haight.

Noes—Regents Estee, Hallidie, Dwinelle, Sachs, Felton and Hamilton.

Excused—Regent Hager. Absent—Regents Pacheco, Bolander, Carey, Bowie and Gilman.

A resolution was then offered that a committee of three be appointed to consider and recommend the name of a suitable person to fill the chair of Professor of Agriculture. The chairman appointed Regents Stebbins, Hamilton and Haight to this committee.

After some further minor busiuess the Board adjourned. Some editorial comments on the remarkable action of this meeting will be found in another column.

THE ANTICIPATED WINE PRODUCT.—There is a wide variance between the estimates formed of the wine that California will produce the present season. Some put the ostimate as high as 10,000,000 gallons, while others bring it down to 6,000,000. It is generally conceded that there are grapes enough now growing to make 15,000,000 gallons of wine; but the demand will not warrant the making of this amouut. A large amonut of the grape yield of the present soason must, unavoidably, go to waste, after the wine vats, the raisiu boxes and the fruit dishes of the country have been supplied to their fullest capacity or demands. Those who are engaged in wine-making are, like all California producers, striving for excellence. The native grape is being rapidly replaced by foreign varieties, both by planting and grafting; and no efforts are being spared to establish a world-wide reputation for California wine.

A "Growing" Evil.

The natnral history of the hoodlum is receiving at the present time a large share of the attention of the press. Outside of newspaperdom, however, there are points and phases of the subject discussed which may never find their way into print.

It is declared in these retired gronps that unfairness has been manifested in the attempt to depict hoodlumism as it exists; and also in the endeavor to localize it too exclusively in San Francisco. Some declare that "the boy of the period" is no worse a character than was the father in his youthful days—or, possibly, worse than the father is at the present day; and we think candor will prompt the man who has left his own boyhood 40 years behind on the road of life, to confess that the hoodlum of to-day is no worse a character than the "bad boy" of his day, or the "rowdy" of 15 years ago. The prevalent habit of contrasting the youth of *our* period with those of "*the* period," over-painting the merits of the former and the vices of the latter, is unjust; and no good can come of it.

It is equally unfair to "shonlder" hoodlumism exclusively upon San Francisco. We do not dispute the claims of this city to having originated the name by which this class is known; but the condition of hoodlumism has been recognized in the cities of the East as far back as the history of boys can be traced. If the press of San Francisco would hurl back a few of the stones that have been thrown at us from other cities, we should find that many of our neighbors are living in glass houses. Hoodlumism is also rampaut in onr mining camps and in our agricultnral villages and settlements, idling away the day and making the night hideous with their carousals.

But we are not at prescut disposed to visit our neighbors for the purpose of writing "sloven" upon their dnst-covered furniture. It is apparent that we have quite enough to do to put our own house in order. It mnst be confessed that there are some peculiarities of San Francisco life that are particularly favorable to the growth of hoodlumism. We will only point out one here; and this is more of a necessity than a fault. It is the habit that keeps the men so much of their time from their homes. We hear a good deal about woman being "the angel in the house;" but man's presence is quite as essential to the purity of home as is that of woman. When he takes his lunch away from home, departing in the morning and returning at night, he becomes, in a degree, alienated from home; and the woman and children of the household have an excess of spare time and too mnch liberty. If the mother were in the habit of spending her spare time at patch-work, knitting, or auy fancy work, as in former years, there would be less danger of mis-spending some of the many hours between morning and evening; but as it is she has only to send her children forth into the street—the school of hoodlumism—aud she is unencumbered with labor, care aud responsibility, aud has time to fit herself for her position as the maternal guide of the growing hoodlum.

There is no panacea by which this social ailing can be cured. It is, at the best, chronic; possibly organic. Probably a thorough diagnosis of the case would justify us in declaring that hoodlumism is in reality only a symptom of the disease of the social body. This is not a pleasant picture to contemplate. But is it not correct? And will it do any good to burn these evils in effigy?

A NOVELTY AMONG ORANGES.—A gentleman returning from a recent trip to Los Angeles, informs us that a new variety of oranges is talked about by parties in that locality, with a view to introdnce it there. It is an Australian variety, and is called the "Navel orange"—so named from resembling in shape the human navel. Those who are acquainted with this orange as grown in Australia, are of the opinion that it would be a desirable acquisition to the orange-growers of California.

HOW ABOUT JUTE?—Will some of our friends who are experimenting in growing jute the present season, favor the RURAL PRESS with a report of the crop up to time of writing? It is known that jute seed has been sown by a good many farmers, though perhaps not in large quantities, and considerable interest is manifested concerning its record for the season. We hope our producers will co-operate with us in the endeavor to gratify the public curiosity in this and all other novelties.

A RAIN in Southern Ohio has saved the corn crop and insured a bonntiful peach crop.

Miscellaneous.

How Thermometers are Made.

A writer in the Polytechnic *Bulletin* gives the following description of the method of making thermometers at a manufactnring establishmeut in Chester, Pa.:

The glass tubes, as received, are about a yard long. A boy picks them with a hard steel knife, and breaks them into the lengths required. The bores, which are flat, are compared by means of a lens with those of ten staudard sizes, and the tubes assorted accordingly. They are then passed to the blow pipe table. Each glass blower has a foot bellows, aud nses an oil lamp. Melting the glass at one eud of the tube, he blows it into a bulb by pressing the sides of a hollow india rubber ball attached at the other, proportioning the size of his bulb to the bore of his tnhe, and ascertaining the size by using a pair of callipers. While the bulb is hot the tuhe is iuverted in mercury, which, as the bulb cools, partially fills it. The tube is then withdrawu aud a short India rubber tube attached at its open end. Into thie mercury is ponred; that in the bnlb is boiled to expel the air, which rises np through the mercury in the India rnbber tube aud an atmosphere of the vapor of mercury uow fills the glass tube and hulb. As this condenees, the mercury in the India rubber tuhe takes its place, when this tnbe, with any mercury remaiuing in it, is removed. The tnbe is uow warmed, and the opeu end of the glass tube is hermetically sealed.

The bulb and a portion of tube are immersed in melting ice, and the hight of the mercury marked; they are then transferred to a bath at 62° Fahrenheit, aud the hight marked; next, to a hath of 92° aud the hight marked again. The length of the three spaces of 30° each are uow carefully measured. If they are exactly equal, the bore of the tube is supposed to he nniform, and the degrees laid off on the hrass scale of the thermometer are all made of the same leugth. If the space of 30° each are uot fouud to be exactly equal, then, by means of a highly ingenioue dividing cugine, the degrees on the scale are made to increase in length as the caliber of the tuhe diminishes. When the plate has been divided and the figuree aud letters pnnched in, it is passed, laterally, betweeu two rollers, to remove the burr left by the toole. Were it rolled lengthwise the accuracy of the dividing would be impaired. The plate is then silvered and lscquered, the glass tube attached, and the whole slidden into the well known japanned tin case.

Sun Spots.

In the course of a lecture on the snu, Mr. Proctor etate that it had been found that the spots gradually increase and diminish in number uutil they disappear, and the period during which they thus waxed and waued was 11 years. After that it was noticed that the magnetic influences of the earth waxed and waned in intensity. The magnetic needle was exposed during the course of every day to the swaying motion by which it eeemed to try to follow the sun—a very slight influence indeed. That change uuderwent variation, sometimes greater and eometimes lees, and it was resolved to watch that progress and the period in which it took place, and the result showed that in a period of eleven years that slight swaying of the magnetic needle uuderwent a change, aud that change correeponded with the number of epots upon the euu. When the spots on the euu were most numeroue it ewayed greatest; and when they were not eo numerous it swayed less.

There is an intimate connectiou between the epots aud condition of the snu and these seemingly terrestrial influences, The subject had been receiving much attention, and suddenly, in the year 1859, on the surface of the sun a bright epot made its appearance, and it was found that the magnetic needle at Kew had made certain changes. The whole surface of the earth had beeu affected by magnetic tremhles, aud everything proved that the sun had at that momeut spread maguetic infinences not alone over the earth, but over the entire planets. A new bond of harmouy had beeu found within the solar system. What were these surfaces in the snu; were they clouds, were they mountains iu the moon, or ruddy mountaius of flames? During the eclipse of 1868 that qnestion was answered, and it was fouud that they were no monntains, nor clonds, nor flames, hut a mass of glowing hydrogen. This discovery wae made hy the spectroscope

Practical Science as a Trainer.—Professor Williams. in an interesting article in *Nature*, relating to the practical achievemente of Count Rumford, says: The main interest of the career of this wonderful man appears to me to lie is this, that it affords a magnificent demonstratiou of the practical valne of scientific trainiug, and the methodical application of scientific processes to the business of life. I have long maintained that every father who is able and willing to qualify his son to attain a high degree of euccess, either as a man of business, a soldier, a sailor, a lawyer, a statesman, or in any respousihle departmeut of life, shonld primarily place him in a lahoratory, where he will not merely learn the elements of science, but be well trained in carrying out original physical research, such trainiug being the best of all known means of affording that discipline of the intellectnal powers npou which all practical success depends.

The Welding of Iron.

When two pieces of ice are rubbed against each other, fusion takes plaoe hetween the snrfaces of contact, at a temperatnre below zero. As soon as the pressnre ceases, solidification is agaiu prodnced and the pieces are welded together.

It seems to me that the welding of iron is a phenomenon exactly similar. The two pieces of iron are bronght to a white heat, that is to ssy, more or lese near to the fueing point. The repeated blowe of the hammer, or the pressure of the rolls, lowers the point of fnsion and causee a superficial liquification of tho parts in contact, and thus welds the masses together; and this, because, like water, iron dilates in passing from the liquid to the solid state. Many other metals are similarly endowed; they all therefore may be welded like iron, if other conditions do not come in to oppose the manifestation of this property. Platinum welds easily at a white heat, because its non-oxidizable snrface, like ice, takes ou a superficial fusion. To weld iron successfnlly, it is necessary that its eurface should be clean, that is, free from oxide Iron contsining phosphorns welds more easily than pure iron, because its point of fueion is lower. Steel, which is more fusible still, welds at a lower temperature than irou, but the process is a more delicate one. Silver, too, like iron and platinum, has the property of expanding when it solidifies; but as it melts at a cherry red heat, it ie essier to form by casting thau by welding. Bismuth aud zinc are always included in the same class; but they are so very brittle near the fusing points that no one would think of attempting to weld them by hammering or pressure. Iron, in welding, therefore, ouly follows the example of water.

The fibrous state of iron is not a mornal and regular one. All crystalline iron, if the crystale are not too hard, breaks with a fibrous etructure, if time be given in the breaking, for these cryetals to be drawn out into fihers. Iron which is fibroue is only iron in which the primitive cryetals, surrounded by very thin films of slag—and thns eeparated from each other—have not been welded together during the rolling, hut have been elongated into wires. A bar of such iron resembles a bnndle of wire in its resistauce to fracture, but it breake with a grannlar fracture when exposed to a transverse blow, suddenly applied.—*M. Jordan.*

Nitrogen and Plants.—In a uotice of Deherain's work on agricultural chemistry, recently published, the importaut qnestion is raised—In what form is nitrogen assimilated by plants? Kuhlmann maintaine that nitratee are not taken up until reduction has taken place, and their nitrogen has entered into an ammouical combinatiou. On the other hand, Cloez holds that ammonical ealts are inactive till their nitrogen has paseed into a nitro-compound. Neither of these views hae as yet beeu demonstrated. M. Deheraiu combats the view of M. Ville that plante can assimilate directly the free nitrogeu of the atmosphere; bnt he holds that in soils containing decompoeing orgauic matter, the nitrogen of the air forme ammouia in the abseuce of oxygen. Carbonic acid ie formed and uascent hydrogen unites with the atmospheric uitrogen to form ammonia.—*Chemical News.*

Brick-making Machine. — An English exchauge, *Iron*, speaks of a brick-making machine which compresses 1,500 bricks per honr, bnt which is capable of producing, if reqnired, a much greater quautity. On a revolving horizontal table are fixed six dies for compreesing the clay. On one side of the table stands a man who fille each die with clay, and a man ou the other eide removes the clsy after it hae been compressed. Each die is fitted with a hinged lid and a slidiug bottom, and as the table revolves the die passee nnder a fixed plate which compresses the clay. The clay is delivered in a column down au iucline from the pug-mill, and is cut iuto blocks of the reqnired eize hy a very simple apparatus worked by a man who fills the dies.

Fossils of the Departed.—A German inventor, Dr. Von Steinfels, eeems to have hit a happy medinm for disposing of the dead, which is at least free from the objections urged agaiust hurial, while it does uo violence to the feeliugs which natnrally shrink from destroying by fire the corpse of a beloved friend. It is propoeed to place the body in a saroophagus made of etone, and to pack around the corpse artificial stone or cement in a plastio state. The latter being allowed to harden, the remaius become like a fossil embedded in the solid rock, and, if ueed he, the deceased finds hie grave and his monumeut in one and the same mass —*Scientific American.*

M. Alvergnat has devised an iugenious apparatus which shows that an electric current will not pass equally well in two directions. Two glase tubes are conuected together at the ends by arched pieces, and in one the points of a uumber of small glass pipes are turned in the opposite directiou from those in the other tube. The current instantly paeses through the tube in which the points are apex toward the uegative poles. The tubes are filled with hydrogen, showing the oscillation of the luminoue zoues with great cle irness.

Glue, if kept for some time after being dissolved iu water, decomposee aud loses much of its etrengtn. Those who use glne occasionally shonld melt no more than they nced at once. Glne is also greatly weakened by being burned or too highly heated.—*Technologist.*

Bleaching Bones.

The curators of the anatomical museum of the Jardin des Plantes in Paris have fonnd that spirits of tnrpentine is very efficacious in removing the disagreeable odor and fatty emanations of boues or ivory, while it leaves them beautifully bleached. The articles shonld be exposed in the fluid for three or four days iu the sun, or a little longer if in the ehade. They shonld rest on strips of zinc, so as to be a fraction of an iuch above the hottom of the glass vessel employed. The turpeutine acts as au oxidizing agent, and the product of the combnstion is an acid liquor which siuks to the bottom, and strongly attacks the bones if they be allowed to touch it. The action of the turpentine is uot coufined to bones and ivory, but extends to wood of various varieties, especially beech, maple, elm aud cork.

If there is any authority on the subject of preparing skulls, it would seem that if only in accordauce with the exterual fitness of things the *Phrenological Journal* should be posted. We notice that in answer to a correspondent the editor of that jonrnal says: The best possible way of cleaning small eknlls, such as those of birds and small auimals, whose skulle are very thin and not nnited very firmly by sutures, or cartilage, is to place them by an ant heap, one of the large ouee, and in 24 hours the skeleton of a squirrel or emall bird would be thoronghly cleaned of the flesh, the ants eatiug it entirely away. In thie case, if it he not allowed to remain too long, the skeleton will be eutire, the cartilages holding the hones in place while the soft parts will he all gone.

Human skulls, or eknlls of large auimals, may be put iu a loose sack, or netting, and placed in a running stream in warm weather, and the flesh will be removed; and then the skulls may be bleached on the top of a house by the sun. Some boil the flesh off from both large and emall skulls. The best, the only complete way to clean sknlls entirely from all oily matter, without injuring the bone, is to eubmerge them in a bath of ether, contained in a glass vessel with an air-tight cover. The finest preparatione are made in this way. Lime, or alkali in auy form, takes all the auimal matter out of bones, making them dry, brittle aud chslky. A little eoda, or other alkaline snbstance, may be applied, iu solution, to skulls without scriously injuring them.

Spontaneous Combustion.—We question very much, except nnder the moet extraordinary circumstances, whether either silk or sheep's wool ie liable to spontaneous combnstion, even in the presence of abundance of any kind of oil. On the contrary, cotton, jute, all kinds of hemp and flsx, mixed with oil, have an invariably tendency to spontaneone combustion at summer heat. All chemists well know that vegetable snbstancee are more readily decomposed in any way than animal substauces. Of couree this arises from the more ready oxidation of the ternary vegetable compouuds (containing only carbon, hydrogen and oxygen) than the quaternary animal compounds, coneisting of the same elements combined witn nitrogen. Hair, for example, will withstand decompoeition for centuries, while woody fiber, even of the oak or other tree, will rarely last more than a few years if exposed to air and moisture, simply owing to the rapid oxidatiou of woody fiber. It is oommon in many of the marsh lands of England to eee the pith of a willow tree catch fire spontaneously in snmmer time. The only apparent remedy eeems that of maintaining constaut ventilation in all wastes, etc., containiug oil. Frequeut turning is essential, and we have tried euccessfully the sprinkling of such waste with waste leye or lime water. It is remarkable that jute warehouses are peculiarly liable to catch fire, in fact sll members of the hemp and flax family are to be more feared than varietiee of cotton. —*Engineering.*

New Refractory Material.—A scientific correspondent of an Eastern paper communicatee the resulte of some experiments made hy him with silica and alumiua, in which he claims to have discovered a more perfect refractory compound than any heretofore known. The mineral is reduced to an impalpable powder, aud moulded and shaped by the aid of white clay. A set of stove linings was made from these mineral powders, in equal proportions with white clay, which resisted the strongest heat. A eample of the material wae placed in a gas retort at Schenectady, where the heat wae uniformly 3,300 degrees, and kept there for 35 cousecutive days. When taken out the eample was iutact, even the sharp edges ehowiug uo sign of disintegratiou. This is a most important discovery. If it can be practically applied, it will prove of almost incalculable valne in the manufacture of iron, aud in the use of stoves, furnaces and many other direotions. We should like to hear how thie material compares with the wonderful Pancake rock, of whose merits there is no doubt.

The *Federation Artistique* says that a Venetian founder, named Giordiui, has diecovered a new process of casting, hy the operation of which and at a eingle flow of the liquid metal, not only large statues, but groups of the most elaborate complexity, can at once he produced, and with so fine a finish that uo supplemental chiseling is reqnired.

Red Coloaing Matter of the Blood.—M. Béchamp has isolated the red coloring matter of blood, which shows the presence of iron.

To Remove Ink Staine.—Pyrophosphate of soda may be used for this purpose.

Black Leading of Iron.

Mr. W. M. Williams, in a recent paper on iron, says: In these days of general diffusion of chemical knowledge, it is scarcely necessary to state that the "black lead" or "plnmbago" of commerce is not lesd at all, or any compound of lead, thst it iucludes no lead whatever in its compositiou. Neither is it a carbnret of iron, as is sometimes stated. It is simply carbon; pure plumhago is pure carbou, impnre plumbago is impnre carbon. Its proper name is graphite, that is, writing stone. I may ventnre to describe it as the softest of all solids, and have often pondered wonderingly npon the apparently nunoticed, but very curious, chemico-mechanical paradox that the hardest and softest of all the solids existing npon this earth are, chemically speakiug, the same substauce: graphite and the diamoud, being both carbon.

It is this wouderful softness, combined with persistent solidity, that enables us to smear it over any other solid surface, and thus obtain a solid paint, all body and no medium. For the class of castings to which it is commouly applied, where its application cau be readily repeated, and where it is not exposed to the direct action of water, it is unrivaled as a protecting film to irou. Ite chemical action, so far as it does act when cold, is reducing or anti-oxidising. Ite color and tone are so similar to irou thst Mr. Rnskin himself conld scarcely make any æsthetic objectious to its nse, and the film ie eo marvelously thiu that it obliterates notbing. I have never met with auy attempt to estimate the thickness of a well brnshed film of graphite, bnt I euspect that, if a hnndred strata of snch films could be piled in contact with each other, their combined thicknesss wonld fall ehort of that of the thinnest gold leaf.

To Soften Hard Putty.—It ie well known that common putty becomee exceedingly hard with age, which reuders the removal of glass from sashes pecnliarly difficult. A practical man tells ns that he thinke himself lncky if he can take ont one pane ont of three without breakage. It is stated, however, that the pntty may be softened by using a paete of cauetic potassa, easily prepared by mixing the caustic alkali, or even carbouate of potash or eoda, with equal parte of freshly burnt qniok-lime, which has previously been epriukled with water, so as to canse it to fall into powder. This is then mixed with water to a paste, and is spread on the pntty to he eoftened. Where one application is uot sufficieut, it is repeated. Iu order to prevent the paste from drying too quickly, it is well to mix it with lese water, adding some eoft soap instead.—*Boston Journal of Chemistry.*

To Coin Collectors.—Old coine, iu which letters or datee have become illegible through wear or corroeion, may oftentimes he deciphered by polishing the surface with a wheelbrush and fine emery. The reflected lmage, in eome caees—particnlarly with bronze coins—will then ehow the fignres distinctly. Iu a stamped coin these are darker than the rest of the disc, because the raieed portions were less oondeneed. Numismatists have long been aware that when there hae been a difficnlty iu deciphering a coin almost obliterated, they can frequently determine its date and character by heatiug it in the dark to a red heat sufficiently to make it eelf-luminous; the figures, thongh worn to the snrface, having a different density, throw off more or lees light, and can thus be distinguished.

To Transfer Pictures to Glass.—Engravings sud lithographs may be transferred to glass as follows: Give the glase a coat of copsl varnieh and pnt aside till uesrly dry, and ouly slightly tacky; apply the eugraving face downwards on the varnish, and dsmp the paper with a wet sponge in order to get it to lie close to the varnish in every part; it must be again laid aside till the paper is perfectly dry; agaiu damped with the eponge, and the whole of the paper rubbed off with the points of the fingers; washed in pleuty of water to remove the particles of paper; allowed to dry hard, and finished by the application of a coat of copal varnish.

Chloral as a Preservative Agency.—M. Cnvellier lately exhibited to the Société de de Biologie, in Paris, the carcass of a dog which, after 55 days, exhibited no trace of pntrefactiou, althongh it had been kept iu a laboratory in which there was a fire. The dog had been injected by the carotid with a eolntion of 100 grammee of chloral in a litre of water. The brain, placed in the same mixture, was also well preserved, so that it conld be easily demonstrated, not having nndergone the slightest appreciable alteration.

Composition for the Destruction of Buos and their Eggs, Fleas, Etc.—This mixtnre, which hae beeu patented iu France, consists of 80 parts of bisulphide of carbou aud 20 parts of essence of petroleum.

To free gas from naphthalin, coal tar, ammoniacal ealts, particles of eolid matter, etc., it ie washed by passing it through water or chemical solntions iu the form of bnbbles or in continnous currents.

Skim-Milk Cheese.—A skim-milk cheese contains but 6 per cent. of fat, while eome rich English cheesee contain 30 per cent.

Common experience has ehown that the swallowing of ice instead of ice water, in hot weather, is perfectly safe.

The Apiary.

The Queen Bee.

Mr. P. O. Peterson, the inventor and patentee of the hive illustrated in the Press of last week, has just published a pamphlet on the subject of bee-keeping, from which we take the following extracts :

How the Queen is Recognized.

As a general rule, the color of the queen bee's body is brown; it is a little lighter on the under part and on the legs. But sometimes (especially as long as the hairy covering remains), there are very light queens, being occasionally yellow, and bearing a resemblance to the Italian bee queens. These are, however, when gennine, often an orauge-yellow, but in size are very different. At the time of the year when she is most busily engaged in laying eggs she is about an inch long. The laying of eggs stops dnring the eold season ; the hind part of the body consequently becomes thinner, and during that period the queen again is enabled to fly, which she oannot do when her body is heavy with eggs. When dead she shrinks very much, so that a person not acquaiuted with bee onlture would easily mistake the body for that of a working bee. The queen's body differs from that of a working bee; more especially in the long legs and the downward bent stinger; the wings, however, are not larger that those of the working bee, although when in an unimpregnated state her flight is much faster. Her legs being more developed and longer she is also livelier in her movements, and it is therefore generally easy to recognize her, even if she is in the middle of the crowd in a honey comb. As she grows older her movements become slower and sometimes she oan be seen, when very old, so stiff and worn that she can hardly crawl abont. When it is added that the queen's tongue is a trifle smaller, and that the facilities for preparing the food for digestion are not developed in proportion to the size of her body, and that she does not produce wax, there is no material difference between her and the working bee. She, however, through a vibratory movement of her wings is able to produce a peculiar souud, which she can even do before leaving the cell in which she was born. Wheu, for instance, shortly before the swarm leaves the hive, there are more young queens in the same hive, one can distinctly hear them at regular intervals call to and answer each other by this sound; and when it is heard jarring, as it were, it indicates that the qneen who produces it has not yet left her cell, but when it sounds clear, resembling the far distant sound of a trumpet, it is a proof that she has crept out of the cell, and conseqnently has it in her power to move her wings more freely. This calling and answering is, furthermore, a proof the bees do not lack hearing. The old, impreguated queen, however, seems not to possess this qualification nnder all circumstances, as it is only heard when an "after-swarm" is expected.

The queen has a peculiar spicy odor about her which is perceptible wheu taken in the hand. This odor seems, however, to be quite different in every one of them, and also necessary to enable the bees to know and distinguish the choseu queen from the others, otherwise it would undoubtedly cause confusion and disorder in the hive, when strange queens could slip iu unperceived. It seems as if this odor of the young, nnimpregnated queens differs very much from that of the impregnated ones, for which reason, if an unimpregnated one succeeds in entering the hive in which a queen has been impregnated, she will undonbtedly be killed.

The Queen's Productiveness.

The queen is only impregnated once in her life and this is sufficient for the impregnation of the multitude of eggs that she lays. After the time when she has commenced to lay eggs no reliable person has ever seen her voluntarily fly out, except with a swarm. Thus, wheu a queen who has been productive for a long time is taken out of the hive and permitted to fly, she oannot find her way back because she is not accustomed to such excursions. It is as if she feels that her life is valuable, and that she has got nothing to do outside the hive, and for that reason does not expose herself to danger without necessity; but the other queens, however, can be seen to fly out daily until impregnated.

The queen remains productive about four years, and towards the end of her lifetime she often becomes what is called a "drone-mother," that is to say, that out of all her eggs only male bees are hatched, even if she deposits them in small cells, because the semen is now consumed, and there are no more productive infusoria in the bladder. This teaches us a very important fact, viz.: that the queen should never be allowed to live more than two or, at the very longest, three years."

Her Destiny.

The queen's destiny is very different from that of the working bees. The entire welfare of the hive depends upon her, and her death is often necessary for the existence of a colony. For this reason it is always her first endeavor to avoid danger, so she hides herself in the thickest crowd among the bees. She never uses her sting, either against man or against other bees, as she might risk losing it and thus lose her life, but she is very courageous, and defends her dominion in the most heroic manner.

Jealousy in the Hive.

Two or more queens who meet in the same hive always attack each other and engage in mortal combat, if the bees do not interfere and kill the superfluous ones. Such fights can be started when, for instance, two queens are pnt nnder a glass. The memory of the bee is perceptible in the queen as well as in the working bee, by the facility with which they find their way back to their hive, although the first named only flies out a couple times dnring the first period of her life to copulate; but in case she makes a mistake, and in retnrning enters the wrong hole or a strange hive, she will immediately be surrounded and killed by the bees.

The Eggs of the Bee.

The eggs consist of the yolk, the white and the shell (chorion), and they seem to be a little fuller in the end that first appears thau in the other, which has the so-called *microphyle*. This *microphyle* is destined to receive the semen, which, through this, works itself into the yolk, and thus impregnates the same. All the queeu eggs are produced in the same way as before mentioned, and are uniform as regards shape, color, size, and interior and exterior construction. They are also all provided with the *microphyle*, and are thus all to be considered real eggs, and not as bud-formations, or anything similar.

Diver's Outfit.

Reports of experiments made in England, to test a new apparatus, are at hand. Hitherto an insuperable difficulty has been experienced by divers, in being unable to communicate verbally with the attendants above, the principle usually adopted by divers being to give preconstructed signals by so many pulls on a signal line. This, however, appears to have been at length overcome. In the trials just completed in Chatham harbor, an experienced diver equipped in an improved diving apparatns, made the descent, and during the whole time he was under water was enabled by means of the new apparatus to converse freely with those above, every word spokeu by him being distinctly heard and understood. It is stated that tho invention would be further improved upon, so as to facilitate its use in all diving operations connected with the harbor works, and for laying stone blocks, etc., in connection with subaqueous operations. The diver signals the attendant, who plaoes his ear to a small cone at the top of the tube, whence a message can be distinctly heard. The diver has the apparatus completely under his control, and by placing his mouth to the mouthpiece, inside the helmet, and then turning a cock on the outside, can communicate instantly with the attendant. The apparatus can, it is stated, be easily app ied to any description of diving dress. The value of the invention will be readily understood and appreciated by every one interested in the science of diving, from the simple fact of the great confidence a diver will gain from being in his isolated position enabled to speak directly to those iu whose hands his life for the time being is literally placed.

Don't Sell the Best Stock.—Wo are satisfied that good stock is of the first importance to farmers. Stock may well be regarded as the standard of agriculture. Where stock is scrawny and poor, agriculture is correspondingly low and unprofitable; where it is fine and fair, agriculture is improved and lucrative. The stock of a country determines the condition of its agriculture. Hence, we say to farmers, don't sell your best stock. Keep that to breed from, to use and perpetuate in their progeny. Your best sheep, cows and hogs are the ones you want most. They grow best on the same food. They yield you the best profits. If you keep a breeding mare, you want a good one; the better she is, the more salable will he her colts. It is the plan of some farmers to sell their best stock because it will bring the best price. It is a suicidal course. Do not fatten the best young stock for the shambles. If you have a scrawny creature, get that off as soon as convenient; if you have a good one, keep that. Bring your best stock to maturity before you part with even that which is designed for beef. It is bad policy to slaughter young stock. When it is growing fastest it is the most profitable. The quality of the stock kept on the farm is a very important matter.—*Rural World.*

Microscopic.—The *World of Wonder* records the following: In the twentieth year of Queen Elizabeth, a blacksmith, named Mark Scaliot, made a lock consisting of eleven pieces of iron, steel and brass, all of which, together with a key, weighed but one grain. He also made a chain of gold, consisting of 43 links, and having fastened to this the before mentioned lock and key, he put the chain about the neck of a flea which drew them all with ease. All these together—lock and key, chaiu and flea—weighed only one grain and a half. Oswaldus Nothingerus, who was more famous than Scaliot for his minute contrivauoes, is said to have made 1,600 dishes of turned ivory, all perfect and complete in every part, yet so small, thin and slender, that all of them were included in a cup turned out of a peppercorn of the common size. Johnnes Shad, of Meiteband, carried this wonderful work with him to Rome, and showed it to Pope Paul V., who saw and counted them all by the help of a pair of spectacles. They were so small as to be almost invisible to the eye.

Miscellaneous.

Writing Machine.

A medal has been given by the Emperor of Austria to Rev. Malleny Hanson for an ingenious apparatus known as "the writing ball," which is described as follows: The instrument consists of a half sphere of gun metal, pierced with radial apertures to the nnmber of 52, all converging to the center. The half-sphere rests on a frame firmly fixed to a bed plate. Each of the holes in the half sphere or ball has a piston ground off horizontally at its bottom, upon which is engraved a letter or figure. When a piston has been pressed in, a spiral spring raises it when it has been released. These pistons, when pressed down, impinge upon a level writing plate, which can be moved through the center of the writing ball. This table has four wheels running upon rails, which rails again are fixed to another movable frame. The plane of the movement of the lower frame is at right angles to that of the npper one. Upon the writing table is arranged a kind of tympan to hold a sheet of white paper by its edges. Upon the white paper is laid a sheet of carbouized paper. On pressing one of the knobs the lower end of the piston impresses a type on the paper; the kneb then tonches the spring under it, whereby electrical contact is established. The pistons corresponding to the letter to be printed are depressed in their order, and the letters appear on the paper in a line vertical to the operator. Speed is considerably augmented by the arrangement of the knobs or pistons into groups, oasily covered by the whole of the 10 fingers.

After some practice the pistons can be worked at the rate of 10 per second, or three or five times qnicker than ordinary writing with a pen. All kinds of paper can be employed, and of any thickness, by means of a vertical adjustment of the writing ball. If 10 layers of thin paper are employed, with interposed layers of carbonized paper, all 10 pieces receive the same impression. By passing these 10 impressions with interposed tissue paper throngh rollers, double the nnmber of copies are obtained.

Fecundity of the Lower Animals.

The lower an animal stands in the scale of organized beings, the more it is subject to destructive agencies, which would soon canse the race to become extinct were it not that nature has compensated this by provisions for the most prodigious fecundity. This is forcibly illustrated in the case of fishes, which produce so many eggs that if vast numbers of eggs and fish were not continually being destroyed, they would at last fill up all the waters. For instance, man alone takes abont 60,000,000 or 70,000,000 codfish firom the sea annually around the shores of Newfoundland. But even that quantity seems small when we consider that each cod yields something like 4,500,000 eggs each season, and that even 8,000,000 have been found in the roe of a single cod. Suppose the 60,000,000 cod canght on the coast of Newfoundland were left to breed, the 30,000,000 females producing each 5,000,000 eggs every year, it would give a yearly addition of 150,000,000,000,000 young cods. Other fish, thongh not equalling the cod, are wonderfully productive. A herring six or seven ounces in weight is provided with about 30,000 ova. After making all reasonable allowances for the destruction of eggs and of the young, it has been calculated that in three years a single pair of herrings would produce 154,000,000, and Buffon calculated that if a pair of herrings could be left to breed and multiply undisturbed for a period of 20 years, they would yield an amount of fish in bulk equal to the globe on which we live.—*Manufacturer and Builder.*

Wood Books.—Iu the museum at Cassel, Germany, is a library made from five hundred European trees. The back of each volume is formed of the bark of a tree, the sides of the perfect wood, the top of young wood, and the bottom of old. When opeued, the book is found to he a box, containing the flower, seed, fruit and leaves of the tree, either dried or imitated in wax. At the Melbourne Intercolonial Exhibition, of 1866, Colonel Clamp oxhibited specimens of Victorian wood converted into small boxes of book form, according to a design snggested by that gentleman at the Victorian Exhibition of 1851, and theu suggested by Baron Ferd. Mueller. Nothing could be more convenient and more interesting than a library (to speak allegorically) of such imitation books, representing the different timber of various countries, which conld be systematically, or alphabetically, or geographically arranged. Australia alone could furnish of such a collection more than a thousand volumes. At the Paris Exhibition of 1867, Russia showed a similar collection of wooden books, cleverly designed, showing the bark as the back binding, and lettered with the popular and scientific uames of the wood. Each book contained samples of the leaves and fruit of the tree, and a section and shaving, or veneer of the wood. —*Jour. of Ap. Sci.*

Advertising.—There is a man in Massachusetts who has exploded the popular fallacy that a man has to advertise to succeed in business. He commenced business forty-seven years ago, with a capital of $800; he hasn't spent a cent in advertising since, and is now worth $805.

Cloud-Bursts and Water-Spouts.

The Gold Hill *News* makes the following very correct distinction between these two classes of phenomena : Many of our contemporaries seem to be under the impression that cloud-hursts and water-spouts are one and the same thing. Our own observation and experience of them during several years' residence in this State, as well as comparing notes in the experience of others, induces the belief that, although the phenomonal effects of each are very similar, yet there is a decided difference in their source and formation. Water-spouts are met with on the ocean or on broad surfaces of water, whose huge moving columns of water are whirled up from the sea to the clouds, and whenever this column of water breaks, whether on land or upon some unfortunate ship, it desceuds in a body overwhelming all beneath it. A cloud-burst is simply a most extraordinary shower or pouring dowu of rain—an overladen cloud snddenly letting go its contents by the run. The heavy, portentous cloud may pass along over the earth, showering down its watery contents generously as it gees along, and were it to meet no obstacle or changing circumstance, nothing unusual might come of it. At or about the heads of gulches or cañons among the monntain teps is where the clond-burst occurs. The cause may be looked for in sudden electrical disturbances, the electricity of the earth and the clond coming into contact or conjunction, or perhaps a huge current of cold air met with at that point may produce the result. Be that as it may, the observer will simply notice a sudden and furiously copious shower or pouring down of rain, and no definite body or column of water as in the case of a water-spont. The steep hillsides will be directly covered with flowing sheets of water rushing from all directions into the bed of the ravine, forming a great flood which sweeps along logs, brush, rocks and every loose thing it can gather in its conrse, and thus driving along a huge front wall, as it were, of all sorts of debris seething with angrily foaming water, sweeping everything movable before it, and spreading ruin and devastation in its course. The flood-gates of the upper regions seem to open and the rain descends more in actnal streams than drops. The watery composition of the cloud seems to condense all at once, and the name of "cloud-burst" is peculiarly applicable.

Expansion.—Prof. Guthrie says: As a rule, gases expand more than liquids and liquids more than solids for the same increase of temperature, and so, according to the well-known law of mechanics, we shonld expect to find the force of expansion of solids greater than that of gases. Accordingly the force exercised by expanding solids is almost irresistible. Iron rods are bent or snapped when their centers are pulled by contracting motals. A semi-solid mass, as of glass, suddenly cooled, becomes brittle. A drop of hot glass cooled in water becomes solid and rigid on its outside; then the inside cools and shrinks so that the whole, when cool, is in a condition of internal strain or unstable equilibrinm. Distnrbed in one place, the whole crnmbles to pieces in its endeavor to assume the proper size dne to its temperature. The process of annealing depends npon the so gradual cooling of a soft body that the parts get to their proper distances. The bursting of pipes in winter time proves two things: first, that ice is lighter than water; and second, that ice is almost incompressible. Water frozen in a bomb-shell two inches thick will burst it.

The East River Bridge.—Work upon the great suspension bridge between Brooklyn and New York, which has been temporarily suspended, is now resumed. The Brooklyn tower has reached an elevation of 222 feet above high water mark, leaving 40 feet of masonry yet to be laid. The workmen are engaged upon the arches, several courses of which are in position. The keystones will weigh 10 tons each, and constitute the heaviest blocks in the structure, the ordinary stones weighing about three tons. It is expected that before winter the "saddles" or castings over which the cables pass will be iu position. The New York tower is now 123 feet high, and will probably reach 200 feet during the present season. The anchorage on the Brooklyn side is six feet high, and contains 8,334 feet of masonry. Its total elevation will be 66 feet. On the New York anchorage or on the approaches, work has not yet been begun.

The Laughing Plant.—Iu Palgrave's works on Central and Eastern Arabia we read of a plant whose seeds produce effects similar to those of laughing gas. It is a native of Arabia. The seed pods are soft and woolly in texture, and contain two or three black seeds of the size and shape of a Freneh bean. These seeds when pulverized and taken in small doses operate upon a person in a most peculiar manner. He begins to laugh loudly, boisterously; then he sings, dances and outs all manner of fantastic capers. The effect continues for about an hour, and the patient is uproariously comical. When the excitement ceases, the exhausted exhibitor for an hour or more sleeps, and when he awakes he is utterly unconcsions that any such demonstrations have been enacted by him.

The first vessels constructed of iron were built for the canals of Great Britain. There is extant a published drawing of one, dated July 28th, 1787, and a description written in Birmingham, England.

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degree of certainty, that the cost of labor and dredging will not exceed 10 cents per cubic yard.

The pertinent query will naturally arise in the minds of many, why the material from the river alone, raised by the dredge and deposited on the foundation belt, without the admixture of peaty substance, would not answer as well or better than the method proposed? The answer is:

First—That the peaty material in a levee will not be cut by the passage of water over it, while clayey material cuts rapidly. The two combined however, we think, will answer a better purpose than either alone.

Second—That the material found in the bed of Old river, which will be used for levee building, is, for many feet in depth—in fact, to the thin stratum of blue clay overlying the so-called hard pan—of such a pasty and semi-fluid consistency that, when dropped by the dredge into place, would flow or run like mortar. If time could be taken, which would be considerable, and doubtful as to the extent, to dry the material, with the daily action of the tides upon it, the thing might with great difficulty and at heavy expense be done; but when done, it would probably be little if any better than a levee made by the plan here recommended. Besides, it will hardly be claimed that the portion of the claycy levee which settles under the tide-level and land-surface, while being built, —to say nothing of its situation in soft, low, wet ground, or in subterraneous passages, where the work would be subject to constant saturation and hydrostatic pressure—would dry or solidify sufficiently to resist that pressure, or exclude the water from the land for any definite period, if at all. T. R. Scowden, C. E.

Agricultural Notes.

California.

ALAMEDA.

Wool Business.—Livermore *Enterprise*, Aug. 8: On Monday last Mr. Doctor shipped eight bales of fine lambs' wool to San Francisco. We understand that this is the first shipment of this class of wool made this season. The sheep men think that the fall clip will be very heavy, and that their sheep were never in better condition.

From Haywood.—The wheat in this vicinity is much shrunken, and our farmers are disappointed in their crops. The barley yield is large and of good quality. Mr. Rice's "straw-burner engine" has proved highly successful in this vicinity, and is the means of considerable saving in fuel, etc.

From Sunol.—The grain crop in this section is turning out much better than was anticipated, and already our new warehouse covers a large amount on storage.

ALPINE.

Harvesting.—Alpine *Chronicle*, Aug. 1: Our farmers are busy gathering their hay and grain crops, which we believe have turned out well. Our citizens will soon receive their regular supply of fresh garden "sass" from the ranches in the northern part of the county.

CALAVERAS.

The Grain Crop in Calaveras.—Calaveras *Chronicle*, Aug. 8: We have been informed by J. Hubarty, who has been employed in threshing grain in this county, that the crops will average over 25 bushels per acre. And still we hear people say that this county can not be farmed profitably.

COLUSA.

Fine Yield.—Colusa *Sun*, Aug. 8: We are informed that Joseph Billon, of St. Johns, one of the prosperous farmers of Colusa county, recently threshed out his wheat from a field of 300 acres, which yielded 44 bushels to the acre. It was of the club variety. This may be considered very satisfactory grain growing.

CONTRA COSTA.

An Insect Depredator.—Contra Costa *Gazette*, August 8: Mr. Lafayette Fish brought to our office this week a lot of bright looking wheat straw, in which, near every joint, a small white worm is found ensconced. Neither the straw or wheat had seemed to suffer from the presence of the worm, nor is there any external perforation or mark on the straw by which it might have entered. It would seem certain, however, that with time to feed and grow, the insect would cause damage to the grain; but maturing before its eating abilities were developed to any considerable extent, no injury seems to have resulted from the presence of the worm.

EL DORADO.

Hemp Trees.—El Dorado *Republican*, Aug. 6: Hosea Turman is trying the experiment, on a small scale, of cultivating hemp, and on Tuesday showed us a sample. One stalk—that is what he called it; we call it a tree—measures nine feet and seven inches in length and two and one-fourth inches in circumference, and is not full grown. We think this will prove a profitable article to raise, for if it will not pay for the fibre, it will certainly be profitable for fine wood. This was raised in Spanish ravine, east of this city. Mr. Turman also tells us that he has a fine crop of timothy hay, some of the heads of which measure 10½ inches in length.

INYO.

Matters at Bishop.—Inyo *Independent*, Aug. 1: A friend writes us that the farmers of Bishop have mostly finished cutting their small grain, and that corn, potatoes and other standing crops are coming along finely, notwithstanding the set back received from the late cold weather of the spring, which likewise doubles up the work, bringing harvest and corn cultivation in right together. The Bishop Grange is in full operation, having regular meetings and a fair attendance.

LAKE.

Wild Coffee.—Lake county *Bee*, Aug. 6: Mr. John O'Shea has been on a visit to Coppinger's ranch again, and brought over several branches of the wild coffee tree growing there, two of which he has left at our office. The leaves are dark green, of oval shape, and about two and a half inches long by an inch in width. The berries grow in clusters at the root of the leaves, close to the branches, as on the cultivated tree, and each berry contains two grains of coffee. These berries are now of a reddish color, and about the size of the manzanita berry. The grains found beneath the rind are exactly like the coffee of commerce in appearance, though only about half its size. Capt. Luke, who has resided in Central America where coffee is cultivated, pronounces this to be a genuine specimen of wild coffee.

MENDOCINO.

Cool Summer, Fruit, Etc.—Mendocino *Democrat*, Aug. 1: We have had a decidedly cool summer thus far, the nights and early mornings at many times almost coming under the head of quite cold. The farmers have been peculiarly favored, and the general crops, including fruit, are all that could be desired. More attention is being paid to raising vegetables hereabouts, especially potatoes, the rule heretofore seeming to have been to give such crop little or no attention. Fruit too—peaches, apples, plums, pears, and berries—are becoming a feature of home supply, and appearances indicate that the fruit peddlers from abroad are not to continue to have "so good a thing of it" in making their periodical visits to Ukiah and other parts of Mendocino county.

MERCED.

Storing Grain.—Merced *Tribune*, Aug. 8: Large quantities of grain are daily arriving at Huffman's warehouse and the Grange warehouse for storage. The shipments from this point are light compared with last season, the farmers having evidently come to the conclusion not to sell their grain at ruling prices. The Grange warehouse is rapidly approaching completion, and most of the space, we are informed, is already secured.

MONTEREY.

Average Prices of Stock.—Hollister *Enterprise*, Aug. 8: Henry Houghton sold a large lot of horned stock at auction, last Saturday. Beef cattle, two and three years old, averaged $25; dairy cows, $25; and calves, $8.

NEVADA.

Alfalfa.—Foothill *Tidings*, Aug. 8: Alfalfa should receive more attention at the hands of our foothill farmers. Mr. Dawson Nichols, who lives down near Spenceville in this county, tells us he obtained some seed last spring and sowed it on various kinds of soil and situation. Some of it was put in too early and while yet young was nipped by frost, but even on the dryest land it seems to keep on growing when all other grasses are dried up and dead. He thinks it should be sowed on fallow ground when the first rains come in the Fall, when it will have obtained a good root-hold before any danger from frost is apprehended. Every land owner should experiment with this clover on different parts of his place, and if he can find even a few acres adapted to it, will be worth more to him than ten times the area of oat land.

PLACER.

Cork Tree.—Placer *Herald*, Aug. 8: The cork tree is found mostly in the southern part of Europe and northern Africa. It is said by some to be an aristocratic tree, as it thrives well and contentedly only in the most favored climes. The last proposition we admit, but in doing so must concede this to be one of the fair, balmy, delightful and altogether lovely regions, for here it is proven the cork tree thrives to perfection. There are trees in Auburn, only three or four years old, the bark of which is now almost thick enough for ordinary sized corks, while it is stated that in its native country the bark is not thick enough for corks until the tree is from fifteen to twenty years old. A small grove of these trees might, in a few years, prove quite a fortune to its possessors.

SANTA BARBARA.

How is That for High?—Santa Barbara *Press*, Aug. 7: A farmer, three miles from this city, says that his corn crop, planted the 20th of last May, stands over eleven feet in hight. He is a tall man but he cannot reach the top of the stalks. Three and four ears are perfecting themselves on these lofty stalks, many of which are larger at the base than a man's wrist. Egypt (Southern Illinois) is a great corn land, but California out-ranks it.

SANTA CLARA.

Hops.—San José *Mercury*, Aug. 8: The first bale of hops for this State this season, was shipped East from Sacramento on Thursday. Hop picking for this county will not commence until about the first of next month. The crop is very forward and promises a large yield If the Eastern market holds up, our hop growers will make a nice thing this season. In this connection we would say that when picking begins there will be about three weeks' work for a large number of children at Bird's and on Coe's old ranch. The little ones can earn a few dollars in a healthy employment.

From Gilroy.—Mr. Maloney, of the Bolsa Rancho, had his dwelling house and some 200 sacks of grain destroyed by fire. The fire broke out in the upper story of the house, and it was only by the most strenuous exertions of the neighbors that it was prevented from spreading to the grain fields, as the wind was blowing very hard at the time. Had it got into the grain it would have devastated the whole plain.

SAN DIEGO.

Storing.—San Diego *World*, Aug. 8: The several warehouses in the city are receiving large quantities of grain for storage and shipment.

TEHAMA.

Finishing.—Tehama *Independent*, Aug. 8: Farmers on the east side of the river, in this county, have nearly all finished their threshing, and the threshing machines belonging to R. H. Blossom, John Gimmell and A. J. Logan have crossed the river to assist the farmers on this side. It is expected that all of our farmers will finish threshing during the present month. As far as we have learned, every farmer has more grain than he had last year. We have heard of no sales.

TUOLUMNE.

The Peach Crop.—Tuolumne *Independent*, Aug. 8: Peaches last year that grew as large as an adult's fist, this year are not bigger than an infant's two months old. Extreme cold weather in the early part of the season, and at the present time, is the cause. Thinning out the overloaded trees is the best remedy, which few have the wisdom and courage to do.

State Industrial Fairs.—The Ohio State Fair will be held at Columbus, September 7. The Northern Ohio Fair, at Cleveland, will be held a week later, partaking more of the character of an industrial exposition. An effort is being made to organize a Southern Ohio Fair Association, to hold a fair at Dayton. The Indiana State Fair and Exposition will open at Indianapolis September 7, and hold thirty days. The Illinois State Fair will be held at Peoria, September 14 to 19. Iowa, at Keokuk, September 21 to 26. Kansas, at Leavenworth, September 7 to 11. Wisconsin, at Milwaukee, September 7 to 12. Wisconsin Industrial Association, at Mineral Point, September 1 to 4. Minnesota, at St. Paul, September 8 to 12. Nebraska, at Omaha, September 29 to October 2. Colorado, at Denver, September 22 to 26. California, at Sacramento, September 21 to 26. Michigan, at East Saginaw, September 14 to 19. The Industrial Exposition at Chicago will open September 9 and continue one month.

The chartering of a ship, to be loaded at Antioch with grain for Europe, is a notable event in the progress of the State, as the beginning of grain exportation from the south side of Suisun bay. Whether the chief port for shipping in that neighborhood will remain at Antioch, is doubtful. That place is the natural head of ocean navigation for that side of the bay, but it is not accessible by rail, and it is at present the outlet of a very small district; the grain east of the San Joaquin and south of the railroad coming to San Francisco, or Oakland, in preference. The railroad from Bantas to Oakland, by way of Martinez, will doubtless be built within a few years, with a branch to Antioch, and then a large portion of the wheat of the San Joaquin valley will be shipped before it reaches San Francisco bay.—*Alta California.*

The salmon fisheries of the Columbia have been very successful this season, (which has closed for canning), and a large increase is anticipated in 1875. The business of canning has been established on a secure basis, and the product has gained an excellent reputation. About 750,000 fish, the least weighing 15 pounds, were caught, making 13,000,000 pounds in all, and canned, the gross wholesale price being $2,000,000. The salmon are caught in nets at night, the meshes being so large that fish under 15 pounds pass through. The fisheries are below the month of the Willamette, and this year numbered thirteen; and there is room for a hundred more, though fears are entertained that if the business should increase much beyond the present limits the stock of fish will decrease.—*Alta California.*

The Approaching Grand Industrial Fair. It is expected that the horticultural display at the approaching exhibition will be an exceedingly fine one, the Bay District Horticultural Society having combined with the Mechanics' Institute in getting up the fair. This will undoubtedly excel all industrial expositions that have hitherto been given on this Coast. Science and art, mechanism and horticulture will here be enabled to exhibit themselves to the best advantage. The managerial machinery is running effectively, but noiselessly, and exhibitors are busy with their preparations. The fair opens on Tuesday of next week, and in the next issue of the Rural Press we shall probably be able to give our readers a general idea of the exhibition.

Our Paper this Week.—We consider ourselves particularly fortunate in having the material placed in our hands which forms the reading matter of the Press of this week. Our correspondence department is especially interesting and varied, embracing an extended field of observation, and forming of itself a large amount of useful and pleasant reading. Other portions of our paper contain their usual amount of carefully prepared matter; and on the whole we are willing to have this go forth as a sample number of what is acknowledged to be one of the very best of weekly papers.

Fruit and Vegetables in Market.

The fruit and vegetable markets of San Francisco are well known and extensively talked about by Eastern people; and those who visit this city express extreme satisfaction, and even astonishment, at the exhibitions in our special markets, and at such fruit and vegetable depots as Sansome street, between Washington and Commercial streets.

In a climate like this, where vegetation is scarcely checked by winter, the display does not vary with the varying seasons, as in less genial climes. Cabbages, turnips, carrots and other classic vegetables never assume the "sere and yellow leaf." Every season pours forth its abundance, or rather, sends in its wagon loads of nearly everything in the vegetable line. They are always fresh, clean and cheap; and if the people of San Francisco lived at home there would probably be about four times the amount used that is now eaten.

Fresh fruits, too, we have always with us; and the markets and stands display at the present time about as large and tempting a variety of fruits as we can reasonably look for at any season. Blackberries, apricots and currants still remain on the shelves; nothing, in fact, but strawberries, raspberries and cherries have left us entirely. In their places we have some of the finer varieties of peaches, pears, apples and plums. Melons are also coming along in great abundance. They are, however, picked a little too early. They are "deprived of the fostering," etc., too soon for their own good or for the good of those who eat them.

We clip the following from the *Chronicle* of Aug. 10, in relation to thoroughbred shorthorns for California: We have been here 15 days, attending the annual auction sales of Kentucky thoroughbred shorthorns. Seven hundred and thirty-three head have been sold of all ages, amounting to $232,624—an average of $317.50 each. Buyers from all parts of the world have been here. We have purchased 109 head extra choice bulls and heifers, and leave to-night for *God's country* (California).

Yours, Rollin P. Saxe & Bro.

Paris (Kentucky), August 1, 1874.

Hops to be Shipped.—To-day J. R. Merkeley, of Sutterville, in this county, will ship to Louisville, Kentucky, a cargo of California hops, the first that has ever been sent from this State. They are a fine article, and it is believed that as soon as it is ascertained what we can raise in this line a large demand will be created for California hops in the older States.

San Francisco's New Engineer.—Mr. T. R. Scowden, who has recently been elected engineer for the city and county of San Francisco, is a new-comer here, but brings with him, not only a clean record, but a reputation for marked ability in his profession. He will have ample opportunity to display his abilities here.

The American Fruit Dryer. — We are requested to call attention to a change in the reading matter of the advertisement of this machine, which will be found on page 110.

The Louisiana corn crop is almost a total failure for want of rain.

The growing potato crop in Wisconsin promises an enormous yield.

Send in Your Subscriptions for the Press.

Farm Laborers, Engineers, Teamsters, Blacksmiths, Milkers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description sent at the shortest notice to the country by Zehandelaar's employment agency, (formerly Secretary of California Labor Exchange) 715 Montgomery street, corner New Montgomery Avenue and Washington street, San Francisco, California. (Orders per letter promptly and carefully attended to.

We guarantee satisfaction. ag15-1t

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Aug. 11th, 1874.

For Week Ending July 28th, 1874.

Movable Dam.—Barzillar Cottle, S. F., Cal.

Apparatus for Condensing Quicksilver.—Ferdinand Fiedler and Jas. B. Raudol, New Almaden, Cal.

Stove-Lid Lifter and Stand.—Samuel Hill, S. F., Cal.

Clip for Whiffletrees.—Willard N. Santee, Dalles, Oregon.

Derrick.—Elias O. Long, Farmington, Cal.

Process of Manufacturing Hard Sugar.—Claus Spreckels, S. F., Cal.

——The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, August 12th, 1874.

The aspect of the general Produce market has not changed since our last issue. There has been no rise of importance in any of the more important staples; and those who looked for a speedy rise in Grain will have to bear their disappointment. Trade in Produce, as a whole, cannot be said to be very active. The market in some respects resembles that of mining stocks, in that it requires some startling development to excite a fair amount of activity. The prospects for the next few months are a matter of greater interest to the producers and dealers in Grain that the existing state of the market. We notice that the general opinion, and in such cases the prevailing sentiment is trustworthy, tends to a belief in a gradual and well-sustained improvement, without very extreme, speculative valuations. As time wears on the grounds for this belief become more evident.

Even in the present dullness, the general market cannot be termed an unfavorable one for the farmer. In only a few articles are prices very low. Hops, fresh Fruits and Vegetables, and Poultry are depressed; but these are not the main reliance of the State, though their slowness of sale affects the individual producer. The heavier crops do not promise so badly after all, and premature croakings will have to be amended.

Receipts of State Produce at this port were as follows, for the week: Flour, 10,220 barrels; Wheat, 182,300 centals; Barley, 7,380 centals; Oats, 2,130 centals; Corn, 1,126 centals; Rye, 4,744 centals; Beans, 380 sacks; Mustard Seed, 20 sacks; Flax Seed, 412 sacks; Potatoes, 12,334 sacks; Sweet Potatoes, 650 sacks; Onions, 930 sacks; Hides, 3,856; Wool, 490 bales; Hops, 15 bales; Hay, 1,860 tons; Straw, 85 tons; Wine, 50,175 gallons. The receipts of Rye and Potatoes are unusually large. Wheat is not coming forward very freely as yet. Wool is sent in slowly, the bulk of the spring clip having been already marketed. Hops will soon be received in large quantities; the movement will begin in a very few days. At this time last year receipts of the Cereals were larger, as prices then offered were accepted readily; this season the hold-off policy seems to prevail.

Barley—Is somewhat stronger than last week. Receipts for the week were moderately large. There is still some old crop Brewing on hand, and this commands very good rates, running as high as $1.72 ℔ cental.

Beans—Are lower for small White and Pea.

Beeswax—Remains quiet at 25@27½c. ℔ lb.

Broom Corn—Nothing doing, and quotations nominal. Broom Corn cannot be brought, however, lower than $100 ℔ ton for ordinarily poor specimens. A dead lock exists till the new crop makes it appearance.

Cotton—Quotable at 20c. ℔ lb for last year's product of State growth.

Dairy Produce—Butter is very firm at noted rates. Still another decline has taken place in California Cheese. Such as can be bought for 7½c ℔ lb, of course, very inferior skim-milk Cheese. Eastern Cheese does not sell quite as well, either.

Eggs—Are extremely high, though it is not expected that the quotations given will hold. To-day, however, 40c. is no uncommon price. Eastern and Oregon are selling better, owing to the rise in California. There has also been an advance in Ducks' Eggs.

Feed—Is steady at last week's prices, with a good demand for Bran and Middlings.

Flour—No improvement is noticeable. Flour made from new Wheat sells at $4.50 for Superfine, and $5.25 (extreme) for Extra. The range given in our table is for old Wheat Flour.

Fresh Meat—Is generally higher. First quality Beef has reached 9c. ℔ lb. All kinds of Meats have advanced, with the exception of Pork.

Honey—Market overstocked. Quotations lower.

Hops—It is difficult to obtain quotations. Business in new crop has not yet commenced, and the trade is in a state of uncertainty. Sales have been too few to establish quotations with any degree of accuracy, and the range is wide. Prices for new will probably be quite low. A New York telegram reads as follows: The market is firm, with some speculative feeling, based on reports from England of a probable short crop. On the other hand, advices from the Continent are favorable, and probabilities point to a crop sufficiently large to supply England's deficiency. A lot of 74 bales of California, crop of 1873, sold at 25c. for cash.

Nuts—No change to report.

Oats—Stocks full. There are no changes in quotations, and the market is dull.

Onions—Weak, at low prices.

Potatoes—Have declined considerably. Sweet are in better supply and a trifle lower.

Poultry—Chickens have improved somewhat from last week's rates. The present price is very low indeed.

Provisions—Are buoyant. Prices are expected to rise still higher.

Seeds—Market quiet. No changes whatever.

Wheat—Looks a little better this week. No advance has yet been made, however. The New York market is reported strong.

Wool—Very little being done at present. The Eastern Wool markets, whither most of our spring clip has been forwarded, showed considerable activity during the week. Local quotations are a shade lighter.

PLAINFIELD, July 4th, 1874.

MESSRS. DEWEY & CO.—*Dear Sirs:* I acknowledge receipt of yours of 2d inst., inclosing my Letters Patent. I thank you for the interest you have taken in obtaining the same. Yours truly, M. W. COON.

DOMESTIC PRODUCE.

WEDNESDAY M., August 12, 1874.

BEANS.			
Beans, sm'l wh. ℔	5	@	—
do, butter	7	@	7½
do, large, do	6	@	7
do, bayo	2¾	@	2½
oo, pink	1½	@	2
do, pea	6	@	—
do, Lima	5¾	@	6½
BROOM CORN.			
Per ton	$100	@	200
COTTON.			
Cal. 1873, ℔ lb	—	@	20
DAIRY PRODUCE			
Butter, Cal. choice			
℔ lb	32½	@	35
do, good	30	@	32½
do, inferior	25	@	30
do, firkin	27	@	30
do, pickled	30	@	32½
Cheese, Cal. new	7½	@	14
do, Eastern	12	@	13½
EGGS.			
Eggs, Cal. fresh ℔ doz		@	40
do, Oregon	23	@	28
do, Eastern	22	@	26
do, Ducks'	—	@	30
FEED.			
Bran, per ton	17 00	@	18 00
Middlings	27 50	@	28 50
Hay	9 00	@	14 00
Straw, ℔ oale	70	@	75
Oil cake meal	—	@	32 50
Corn Meal	42 00	@	43 00
FLOUR.			
Extra	5 25	@	5 75
Superfine	4 25	@	5 25
FRESH MEAT.			
Beef, fr quality, ℔ lb	8½	@	9
oo, second do	6	@	8½
do, third do	4½	@	6
Veal	4½	@	6
Mutton	5½	@	6
Lamb	5½	@	6
Pork, undressed	6½	@	6¾
do, dressed	9	@	9½
GRAIN, ETC.			
Wheat, old	1 50	@	1 70
do new	1 45	@	1 55
Barley, old	1 50	@	1 75
do new	1 05	@	1 20
Oats, choice	1 45	@	1 55
do common	1 30	@	1 35
Corn, White	—	@	1 90
do, Yellow	—	@	1 95
Buckwheat	2 75	@	3 00
Rye	1 10	@	1 20
HOPS.			
California, 1873	15	@	20
East'rn, '73 ch'ice	30	@	40
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey in comb	12½	@	20
do Strained	7½	@	10
Pulu	9	@	10½
Onions	60	@	80
NUTS—JOBBING.			
Cal. Walnuts	13	@	14
Peanuts per lb	6	@	7
Chile Walnuts	16	@	17
Pecan nuts	13	@	15
Brazil do	12½	@	14
Coc'anuts, ℔ 100	9 00	@	10 —
Alm'ds h'rd shell	10	@	12½
do, soft	18	@	24
Filberts	18	@	—
POTATOES.			
Sweet, per cwt	2 50	@	3 00
Cuffee Cove	—	@	—
H. M. Bay	90	@	1 10
Pigeon Pt	—	@	—
Humboldt	—	@	—
Petaluma	—	@	—
Mission	90	@	1 15
Salinas	90	@	1 10
Bodega	—	@	—
Sac. River	70	@	1 00
POULTRY & GAME.			
Live Turkeys, hens per lb	18	@	20
do gobblers	16	@	18
Hens, per dz	5 50	@	7 00
Roosters, young, large	5 00	@	6 00
Broilers, small	2 50	@	3 50
do large	3 50	@	4 50
Ducks, tame, doz	4 50	@	5 50
Geese, per pair	1 50	@	2 00
Hare, per doz	2 50	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	—	@	—
Mallard Ducks	—	@	—
do small	—	@	—
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	1 00	@	1 25
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 50	@	2 00
do tame	4 00	@	5 00
Venison, per lb	8	@	10
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medium	—	@	13
do Heavy	—	@	12½
Eastern do	13½	@	14
Hams, Cal	15	@	15½
do Whittakers	—	@	17
do Duffield, ch	—	@	16
do Plankton & Armeur	—	@	15
do Boyd's	—	@	15½
do Stewart's	—	@	15½
Eastern Shonld's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard	13	@	14
SEEDS.			
Alfalfa	13	@	15
Canary	5	@	6
Flaxseed	5	@	6
Ky. Blue Grass	40	@	50
Millet	12	@	15
Mustard, white	2	@	3
do, Brown	3	@	4
Italian Rye	25	@	30
Perennial do	30	@	35
Timothy	13	@	15
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Clover Red	—	@	20
do White	60	@	75
Alsike	—	@	—
Esparto Grass in Packets	—	@	1 00
WOOL, ETC.			
Spring, short, lb	22½	@	25
do choice Nort	25	@	30
Medium grades	18	@	22
Fall clip	—	@	—
Burry	14	@	18
Hides, dry	18	@	19
do wet salted	8	@	9
Tallow, Crude	6½	@	7
do Refined	7½	@	9

FRUITS AND VEGETABLES.

WEDNESDAY M., August 12, 1874.

Pears are coming forward much more freely; Bartlett have fallen to $1.25@1.50 ℔ box, Pears of inferior quality, suitable only for cooking purposes, will go as low as 75c ℔ box. Figs are scarcer and higher. Muscat Grapes are now in market. We now have nearly all kinds, except Tokay and Morocco. Melons are more plenty.

There have been few changes in Vegetables; the most notable being the decline in fresh Lima Beans, which have fallen to 4@5c.

FRUIT MARKET.			
Tahati, Or. ℔ M	35 00	@	40 00
Lorita, do	—	@	—
Cal. do	—	@	—
Limes, ℔ M	—	@	15 00
Cal. Lemons, ℔ M	—	@	40 00
Australian do .50	00	@	—
do per box	7 00	@	8 00
do Sicily ℔ b'x	15 00	@	16 00
Bananas, ℔ bunch	3 50	@	5 00
Cocoanuts, ℔ 100	9 00	@	10 00
Pineapples, ℔ dz	7 00	@	9 00
Apples	2½	@	5
Cherries	—	@	—
Blackberries	6	@	8
do wild	—	@	—
Huckleberries	—	@	18
Strawberries ℔ lb	8	@	12
Gooseberries	—	@	—
Raspberries	12½	@	15
Currants	1	@	3
do black	—	@	18
Apricots	1½	@	2
Plums	2	@	15
Peaches, ℔ lb	—	@	10
Pears, Eating	1 00	@	1 50
do Cooking	75	@	1 00
do, Bartlett	1 25	@	1 50
Crab Apples	5	@	6
Nectarines	3	@	4
Wat'rmel's ℔ 100	15 00	@	20 00
Cantelo's ℔ 100	6 00	@	15 00
Pomegran'e, ℔ 1006	00	@	7 00
Figs	12½	@	15
Grapes, Bl'k H'g	5	@	6
do Muscat	6	@	8
do Malavo'e	6	@	8
do Sweetw'r	5	@	6
do Mission	3	@	3½
do Rose of Peru	—	@	8
do Tokay	—	@	—
do Morocco	—	@	—
do St. Peter	4	@	—

DRIED FRUIT.			
Apples, ℔ lb	6¾	@	8½
Pears, ℔ lb	10	@	12½
Peaches, ℔ lb	12	@	12½
Apricots, ℔ lb	—	@	12½
Plums, ℔ lb	8	@	10
Pitted, do ℔ lb	15	@	20
do Extra, ℔ lb	—	@	—
Raisins, ℔ lb	5½	@	12½
Black Figs, ℔ lb	8	@	10
White, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	30	@	35
Zante Currants	8¾	@	8½
Dates	12½	@	14

VEGETABLES.			
Asparagus	7	@	8
Beets	—	@	1
Cabbage, ℔ 100 lbs	—	@	2 00
do new, doz	50	@	60
Carrots, ℔ 100 lbs	1 00	@	1 25
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ℔ lb	6	@	8
Green Peas	3½	@	4
Green Corn ℔ doz	15	@	18
Sum'r Squash, lb	4	@	5
Marro'fat Sq'sh, tn	60	00	@ —
Artichokes, ℔ doz	15	@	25
String Beans, ℔ lb	—	@	5
Lima Beans	4	@	5
Parsnips	12½	@	15
Shell Beans	2	@	6
Peppers, ℔ lb	12½	@	20
Okra ℔ lb	25	@	30
Okra, Green	6	@	8
Cucumbers, doz	6	@	8
Tomatoes	3	@	5
Egg Plant ℔ lb	4	@	6
Rhubarb	2½	@	3
Lettuce	12½	@	20

LEATHER.

WEDNESDAY M., August 12, 1874.

Leather is quiet. There is some inquiry for skirting kinds, but heavy domestics are dull.

City Tanned Leather, ℔ lb			25@29
Santa Cruz Leather, ℔ lb			25@29
Country Leather, ℔ lb			24@28
Stockton Leather, ℔ lb			25@29
Jodot, 8 Kil., per doz	$50	00@	54 00
Jodot, 11 to 19 Kil., per doz	66	00@	90 00
Jodot, second choice, 11 to 16 Kil. ℔ doz.	55	00@	72 00
Cornellian, 12 to 16 Ko	57	00@	67 00
Cornellian Femalas, 12 to 13	60	00@	64 00
Cornellian Females, 14 to 16 Kil	66	00@	74 00
Beaumorville, 15 Kil	80	00@	— —
Simon, 18 Kil. ℔ doz	61	00@	63 00
Simon, 20 Kil. ℔ doz	65	00@	67 00
Simon, 24 Kil. ℔ doz	72	00@	74 00
Robert Calf, 7 and 9 Kil	35	00@	40 00
French Kips, ℔ lb	1	00@	1 15
California Kip, ℔ doz	40	00@	8 00
French Sheep, all colors, ℔ doz	8	00@	15 00
Eastern Calf for Backs, ℔ lb	1	00@	1 25
Shaep Roana for Topping, all colors, ℔ doz	9	00@	13 00
Sheep Roane for Linings, ℔ doz	5	50@	10 50
California Russett Sheep Linings	1	75@	4 50
Best Jodot Calf Boot Legs, ℔ pair	5	00@	5 25
Good French Calf Boot Legs, ℔ pair	4	00@	4 75
French Calf Boot Legs, ℔ pair	4	00@	—
Harness Leather, ℔ lb		30@	37½
Fair Bridle Leather, ℔ doz	48	00@	72 00
Skirting Leather, ℔ lb		34@	37½
Welt Leather, ℔ doz	30	00@	50 00
Buff Leather, ℔ foot		18@	21
Wax Side Leather, ℔ foot		17@	19
astern Wax Leather		—@	— —

GENERAL MERCHANDISE.

WEDNESDAY M., August 12, 1874.

The active demand for Bags continues. Coffees are much weaker; quotations remain about the same, but are shaky. The same may be said of Coal. Kerosene is very low indeed, while China Nut and Lard Oils have advanced Tobacco is very buoyant.

BAGS.			
Eng. Stand Wht	—14	@	14¼
Detrick's Machine Sewed, 22x36 E	—	—	@13½
do 22x36, do E W	—	—	@14
do 20x40, do A	—	—	@14¾
Flour Sacks ½s	10½	—	@12½
" " ¼s	6½	—	@ 7¾
Stand. Gunnies, double seam	—15	—	@16
single seam	—13	—	@13
" Wool Sacks	63	—	@—
Barley Bags 24x36	—	—	@15¼
do 23x40	—	—	@15½
do 24x40	—	—	@16¾
do 28x36	—	—	@17
Oat Bags, 24x40	16	@	16½
do 28x36	—	—	@17
Hessian 40-in. gds	9½	—	@10
do 45	10½	—	@11
do 60	—	—	@15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ lb cans	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl	—	@	3 50
Sardines, qr hoxi	75	@	—
do hf boxes	3 00	@	—
COAL—Jobbing.			
Australian, ℔ ton	10 00	@	—
Coos Bay	—	—	@10 00
Sellingham Bay	—	—	@ 8 50
Seattle	—	—	@11
Cumberl'd, cks	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	—	@19 00
Liverpool	11 00	@	12 —
West Hartley	12 50	@	— —
Scotch	9 50	@	10 00
Scranton	15 00	@	17 50
Vancouver's Isl	11 00	@	11 50
Charcoal, ℔ sk	75	@	—
Coke, ℔ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	22	@	23
Costa Rica per lb	23½	@	24
Guatemala	21	@	22
Java	28½	@	30
Manilla	22	@	—
Ground in cs	—	@	30
Chicory	10	@	—
FISH.			
Pac. Dry Cod, new	5	@	6
cases	6	@	7
do boneless	11	@	12
Eastern Cod	7	@	8
Salmon in bbls	8 00	@	—
do ½ bbls	4 50	@	—
do 2½ lb cans	—	@	3 00
do 2lb cans	2 65	@	2 75
oo 1lb cans	1 75	@	—
Do Col. R. ½ lb	—	@	—
Pick. Cod. bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mess.	3 00	@	3 50
" Ex mess. ½ bs	—	@	12 00
Sm'k Herr'g, bx	50	@	55
NAILS.			
Assorted size, lb	4¾	@	7
OILS.			
Pacific Glue Co. Neat F't No. 1	—	@	1 00
Pure	1 25	@	—
Castor Oil, No. 1	—	@	1 75
do do No. 2	—	@	1 60
Cocoannt	45	@	50
Olive Plagniol	5 00	@	—
do Possel	4 45	@	—
Palm	9	@	—
do Bagicalupi	—	@	—
Linseed, raw	—	@	1 02
do boiled	—	@	1 07
China nut in cs	—	—	@ 95
do bulk	75	@	80
Sperm, crude	—	@	1 40
do bleached	—	@	2 20
Coast Whales	35	@	40
Polar, refined	50	@	55
Sperm	1 40	@	1 50
Lard	1 00	@	1 10
Coal, refined Pet	37½	@	40
Oleophine	—	@	34
Devoe's Bril't	25	@	28
Long Island	—	@	34
Enreka	37½	@	40
Devoe's Petro'm	26	@	29
Barrel kerosene	20	@	25
Olive	4 00	@	9 50
Downer Kerose'e	35	@	40
Gas Light Oil	—	@	34
PAINTS.			
Atlan. W. Lead	7½	@	12½
Whiting	—	@	2
Putty	4	@	4½
Chalk	—	@	1½
Paris White	2¾	@	—
Ochre	—	@	3½
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	1 00	@	1 25
RICE.			
China No. 1, ℔ lb	6½	@	6¾
do 2, do	5½	@	5¾
Japan	5½	@	6
Siam Cleaned	7	@	—
Patna	—	@	6¼
Hawaiian	7	@	7¾
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	20 00	@	23 00
do coarse	15 00	@	20 00
SOAP.			
Castile ℔ lb	10	@	11
Local brands	5	@	8
SPICES.			
Allspice, per lb	15	@	16
Cloves	45	@	47½
Cassia	22½	@	25
Citron	—	@	30
Nutmeg	—	@	07½
Whole Pepper	17	@	17½
Pimento	—	@	15½
Gr'nd Allsp'rdz	—	@	1 00
do Cassia do	—	@	1 50
do Cloves do	—	@	1 50
do Mustard do	—	@	2 25
do Ginger do	—	@	1 00
do Pepper do	—	@	1 00
do Mace do	—	@	1 60
SUGAR, ETC.			
Cal. Cube per lb	11½	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12¼
Circle A crushed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	—	@	10½
California Beet	—	@	11½
Golden C	—	@	10½
do Rey'g grade	—	@	6½
Cal. Syrup in bls	—	@	5½
do in ½ bls	—	@	55
do in kegs	—	@	60
Hawaiian Molasses	10	@	20
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@	1 00
Gunpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@	1 25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	45	@	55
Dwarf Twist	57	@	62½
12 inch do	57	@	62½
Light Pressed	65	@	75
Hard do	60	@	70
Coun. Wrap'r	40	@	50
Penn. Wrapper	20	@	30
Ohio do	7	@	15
Virgi'a Smok'g	60	@	95
Fine cut ohew-ing, buc'ts	75	@	90
Fine cut ohewing, buc'ts	75	@	90
Banner fine cut	—	@	90 00
Eureka Cala	8 75	@	9 00
TURPENTINE.			
Eastern	60	@	65

METALS.

WEDNESDAY M., August 12, 1874.

Quicksilver is very firm at $1.45 ℔ lb. An editorial in a daily contemporary commenting on the advance to $1.60 was therefore premature, the local price not having changed. It is possible that there may be still another rise, as certain dealers hold the avowed intention of driving it up to $1.50; but from the encouraging outlook for future supplies, there does not seem any ground for the fear that it will go beyond, if it touches that figure—at least for a long time. Trade is quiet in other Metals, and in Lead is dull.

American Pig Iron, ℔ ton	—	—	@ 40 00
Scotch Pig Iron, ℔ ton	—	—	@ 40 00
White Pig, ℔ ton	—	—	@ 50 00
Refined Bar, bad assortment, ℔ lb	—	—	@ — 3½
Refined Bar, good assortment, ℔ lb	—	—	@ — 4
Boiler, No. 1 to 4	—	—	@ — 5½
Plate, No. 5 to 9	—	—	@ — 5½
Sheet, No. 10 to 13	—	—	@ — 5¾
Sheet, No. 14 to 20	—	—	@ — 5¾
Sheet, No. 24 to 27	—	08	@ — 09
Horse Shoes, per keg	—	7 50	@ 8 00
Nail Rod	—	9½	@ —
Norway Iron	—	8	@ —
Rolled Iron	—	6	@ —
Other Irons for Blacksmiths, Miners, etc.	—	—	@ — 4½
COPPER.—			
Braziers'	—	31	@ — 32
Copper Tin'd	—	45	@ — —
O. Nicl's Pat	—	50	@ — —
Sheathing, ℔ lb	—	—	@ — 24
Sheathing, Yellow	—	—	@ — 25
Sheathing, Old Yellow	—	—	@ — 12½
Composition Nails	—	24	@ — —
Composition Bolts	—	24	@ — —
TIN PLATES.—			
Plates, Charcoal, IX ℔ box	—	—	@ 16 00
Plates, I C Charcoal	—	14 00	@ 14 50
Roofing Plates	—	12 50	@ 15 00
Banca Tin, Slabs, ℔ lb	—	33	@ — 37
SEEL.—English Cast, ℔ lb	—	20	@ — 25
Anderson & Woods' American Cast	—	10	@ — 17
Drill	—	18	@ — 22
Flat Bar	—	18	@ — 22
Plough Points	—	16	@ — 17
Zinc	—	—	@ — 11
Zinc, Sheet	—	—	@ — 11½
NAILS—Assorted sizes	—	5¾	@ — 8
LEAD.—			
Pig, ℔ lb	—	5¾	@ — 6
Bar	—	6½	@ — 7
Sheet	—	—	@ — 9
Pipe	—	—	@ — 8½
QUICKSILVER, per lb	—	—	@ — 1 45

AGENTS WANTED to canvass every town on the Pacific Coast for the MINING AND SCIENTIFIC PRESS, PACIFIC RURAL PRESS, and the ILLUSTRATED PRESS. Experienced canvassers preferred. Good men can make large wages, besides learning much and improving their talents.

LUMBER.

WEDNESDAY M., August 12, 1874.

Lumber is rather dull at present. The prospects for the trade, however, are very good. No changes in the quotations.

CARGO PRICES OF REDWOOD.			
Rough, ℔ M	$16	00	
Rough refuse, ℔ M	12	00	
Rough clear, ℔ M	32	50	
Rough clear refuse, M	22	50	
Rustic, ℔ M	30	00	
Rustic, refuse, ℔ M	24	00	
Surfaced, ℔ M	26	00	
Surfaced refuse, ℔ M	16	00	
Flooring, ℔ M	30	00	
Flooring, refuse, ℔ M	20	00	
Beaded flooring, ℔ M	32	50	
Beaded floor, refuse, M	22	50	
Half-inch Siding, M	22	50	
Half-inch siding, ref. M	16	00	
Half-inch, Surfaced, M	25	00	
Half-inch Surf. ref., M	18	00	
Half-inch Battens, M	22	50	
Pickets, rough, ℔ M	13	00	
Pickets, rough, p'ntd	16	00	
Pickets, fancy, p'ntd	25	00	
Shingles, ℔ M	2	25	

CARGO PRICES OF PUGET SOUND PINE —Retail Price.			
Rough, ℔ M	20	00	
Fencing and Stepping, M	37	50	
Fencing, 2d quality, ℔ M	30	00	
Fencing, ℔ lineal foot		1c	
Flooring and Step, ℔ M	30	00	
Flooring, narrow, ℔ M	32	50	
Flooring, 2d quality, M	25	00	
Laths, ℔ M	3	25	
Barring, ℔ lineal ft		¾	
REDWOOD—Retail.			
Rough, ℔ M	20	00	
Rough refuse, ℔ M	16	00	
Rough Pickets, ℔ M	18	00	
Rough Pickets, p'd, M	20	00	
Fancy Pickets, ℔ M	30	00	
Siding, ℔ M	25	00	
Tongued and Grooved, surfaced, ℔ M	32	50	
Do do refuse, ℔ M	22	50	
Half-inch surfaced, M	40	00	
Rustic, ℔ M	35	00	
Battens, ℔ lineal foot		¾	
Shingles ℔ M	2	50	

S. F. RETAIL MARKET RATES.

WEDNESDAY M., August 12, 1874.

POULTRY, GAME, FISH, MEATS, ETC.			
Spring Chickens	50	@	75
Hens	62½	@	75
Eggs	45	@	50
do Ducks'	—	@	35
do Farallones	—	@	30
Turkeys, ℔ lb	25	@	30
Ducks, Can Bk, pr	—	@	—
do Mallard, pr	—	@	—
Tame, do	1 50	@	2 00
Teal, ℔ doz	—	@	—
Geese, wild, palr	—	@	—
Tame, ℔ pair	3 00	@	4 00
Snipe, ℔ doz	—	@	—
Quail, per dozen	—	@	—
Prairie Ch'k's, ea	—	@	—
Pigeons, dom. dz	—	@	1 00
Wild, do	—	@	2 00
Squabs	—	@	4 50
Hares, each	37½	@	50
Rabbits, tame, pr	75	@	1 00
Wild, do, ℔ dz	2 00	@	—
Squirrels do	15	@	20
Beef, tend, ℔ lb	—	@	20
Corned, ℔ lb	8	@	10
Smoked, ℔ lb	—	@	15
Porter House St'k	—	@	20
Sirloin do	12	@	15
Round

Stock Notices.



SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,
eow El Dorado, El Dorado County, Cal.



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

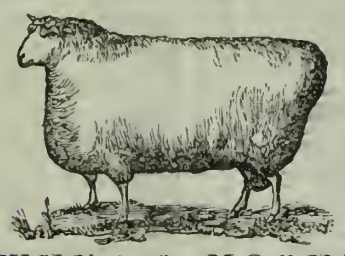
LANDRUM & RODGERS,
13v7-eow-tf Watsonville, Cal.



A. G. STONESIFER,
BREEDER OF
Pure Blooded French Merino Sheep,

Has for sale a choice lot of Rams and Ewes, on the Orlstimba Ranch, six miles west of Hill's Ferry, Stanislaus County, Cal. 22v7-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,
COMMISSION MERCHANTS,
DEALERS IN
WOOL, HIDES, PELTS AND GRAIN.
Office—405 Front street, S. F. 14v7-3m

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

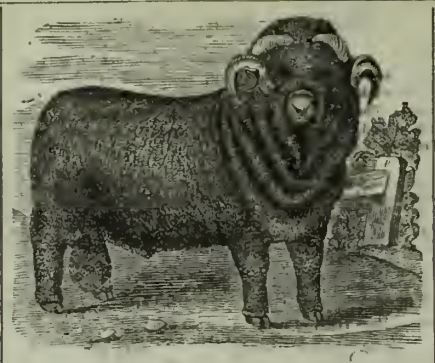
Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and well sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.



300 Head Pure Blooded French Merino Rams and Ewes.

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

U. S. LIVE STOCK EXCHANGE,

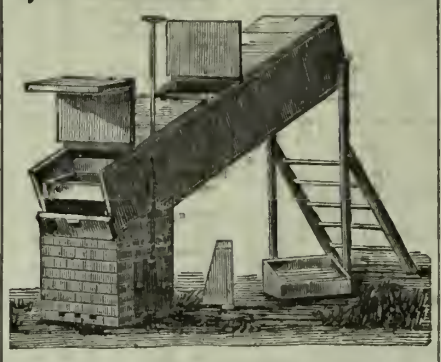


S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT P. S.—*Special rates to members of the Grange.*

Ryder's American Fruit Drier.



It is claimed no Drier can equal, and it is guaranteed no Drier can excel the AMERICAN in the excellence of its work. We suit this Drier to the wants of Farm and Factory. We make one series, Nos. 1, 2 and 3; one line of trays, capacity, say of apples, 8, 12 and 20 bushels per day of 12 hours; prices, $100, $125, $150. Factory Series, Nos, 1, 2 and 3; capacity, 25, 40 and 60 bushels per day. Again we make a Double Factory over one Furnace with capacity over 100 bushels per day. Two of these Driers should turn off at least 1,200 pounds, or over half a ton per day. The prices given include the right and every item of expense to commence work, and are all constructed to be portable. Every variety of Fruits, Vegetables, Cereals or Meats can be cured on this Drier for the home or foreign markets. The company have established depots in all the principal Eastern cities for the sale of Fruits, etc., prepared for the market on this Drier, and prices will from time to time be given to parties interested. This Drier took the first premium and silver medal at the Fair of the Maryland Institute, held at Baltimore in 1873. Send for Circulars. Farm, County and State Rights, and Driers complete with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

THE CELEBRATED

SLUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

J. M. KEELER & CO.,
Commission and Forwarding Merchants.

Agents for Eastern Manufacturers, 306 California street, San Francisco.

H. K. CUMMINGS. 1858. H. H. RALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

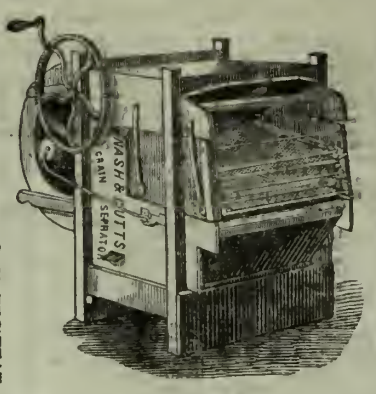
ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the producer 4v23-1y

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT GRAIN SEPARATOR AND FAN MILL.



THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars address

NASH, MILLER & CO.,
No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

GEO. H. TAY & CO.,

614, 616 and 618 Battery St., S. F.,

OFFER FOR SALE

IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

RUBBER HOSE, ETC.

STOVES and RANGES,

THE RICHMOND RANGE,

THE HENRY CLAY,

THE EMPIRE CITY,

THE ALVARADO.

THE MONITOR, wrought iron body, cast iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

MILK PAILS, PANS, CHEESE HOOPS, ETC.

BABBIT METAL.

Wire for Fencing and Baling.

ALSO, METALS, HOUSE FURNISHING HARDWARE, JAPANNED GOODS, ETC., ETC.

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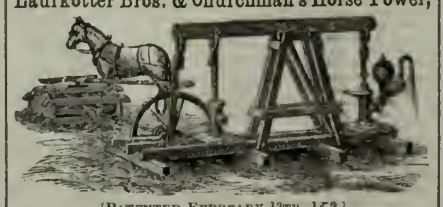
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
2v7-2m-3m Cor. J and 10th Sts., Sacramento.

Agricultural Articles.

O. CREGO. S. O. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET..... .....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

O. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
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IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware.

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

☞ Send for price list.

ALSO AGENTS FOR

Woolsey's Patent Wheels,

The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has the metallic-shouldered band; and it can be repaired as easily as the common wood wheel.

☞ Send for illustrated circular. Address

WATERHOUSE & LESTER,
122 and 124 Market street, and 19 and 21 California street, } SAN FRANCISCO.
17, 19 and 21 Seventh street, - - SACRAMENTO.
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MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



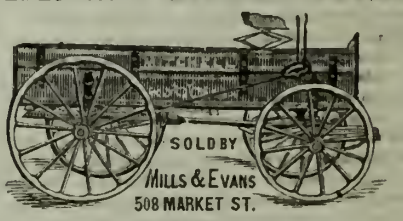
Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

THE

CELEBRATED MITCHELL WAGON



15v7-3m

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

H. C. SHAW,

STOCKTON, CAL.

Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
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FARMERS' LINE.

THE SPLENDID IRON SHIP,

CITY OF YORK,

1255 Tons. A 1.

AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co. RODGERS, MEYER & CO., aug15-tf 212 Battery street.

IMPORTANT TO FARMERS!

X Line to Liverpool.

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The New A 1 Clipper Ship

FRIEDLANDER.....1,638 tons registe

Is intended to sail with dispatch.

Freight taken in lots to suit shippers.

Apply to E. E. MORGAN'S SONS,

320 California Street,
San Francisco.

THE CELEBRATED NEW DRAW-FEED

WHEELER & WILSON

SEWING MACHINES

Are without exception the most desirable for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in public favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.

E. W. HARRAL, Agent,

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SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, Etc.

For Sale, wholesale or retail, by

B. F. WELLINGTON,

(Successor to E. E. Moore).

425 Washington St., San Francisco. 22v7-1y

TO WINE & BRANDY MANUFACTURERS.

Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

Send for Circular. Address,

GEORGE JOHNSTON,

Sacramento.

Or, W. F. JOHNSON, Folsom, Sacramento County, California. Refer to Lachman & Co., San Francisco, and Johnston Brandy and Wine Manufacturing Co., Sacramento and Marysville. 2v8-12w

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo. F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements.

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rates Storage taken at lowest current rates. 4v8-tf

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.

Brittan, Holbrook & Co., Importers of

Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in grannlar form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

NOTICE TO FARMERS.

Something Entirely New.

HOME SEWING MACHINE.

This machine is manufactured after an experience of twenty years. It contains within itself every known improvement. It is the best because the simplest, easiest to understand and by far the lightest to run, and the equitable adjustment of all its parts makes it the most durable Machine in the market. Take the INTERESTED STTEMENTAS OF NONE, but

EXAMINE for YOURSELF.

SEND FOR A CIRCULAR.

It uses a Shuttle, Straight Needle, Two Threads, and makes a stitch alike on both sides.

E. W. HAINES, Agent,

17 New Montgomery St., Grand Hotel Build'g, S. F.

We also continue to sell another machine, the

HOME SHUTTLE SEWING MACHINE.

Price, $45.

Mme. Demorest's Reliable Paper Cut Patterns. Send for a Catalogue. 15v7-eow-6m

Napa Ladies' Seminary.

The next term will commence on TUESDAY, AUGUST 4TH, 1874, and continue for twenty-two weeks. This institution offers thorough instruction in a quiet, healthful location, easy of access from any part of the State.

Instructions in Piano-forte, Guitar and Vocal music by a superior teacher. French taught by a competent teacher.

It is very desirable that pupils should be present at the opening of school, although they can enter at any time, and be charged from the time of entrance. For particulars of school apply to

MISS. S. F. McDONALD, Principal,
Napa City, Cal.

REFERENCES.

Rev. R. Wylie, Napa; Hon. C. Hartson, Napa; R. T. Montgomery, Esq., Napa; G. E. Goodman, Esq., Napa; D. McClure, Esq., Naps; Rev. Dr. Goodbridge, San Francisco; Rev. P. V. Veeder, Yokohama, Japan; Geo. K. Glynas, Esq., San Francisco; James A. Crow, Esq., Stockton; R. O. Baldwin, Esq., San Ramon; J. R. McDonald, Esq., Grayson; J. B. Crow, Esq., Hills Ferry; Rev. C. M. Blake, San Francisco; Major Snyder, Sonoma; S. Alstrom, Esq., White Sulphur Springs; Geo. L. Kenny, Esq., San Francisco; Hon. R. O. Clark, Sacramento. 1v8-2m

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m 304 California Street.

PEPPER'S NURSERIES,

PETALUMA, CAL.

Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

Address, W. H. & G. B. PEPPER,
21v6-1y Petaluma, Sonoma Co., Cal.

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St.,
14v7-3m bet. Montgomery and Kearny Sts., S. F

DAIRY PRODUCE

DEPARTMENT

OF THE

CALIFORNIA STATE GRANGE,

P. OF H.,

414 & 416 Sansome St., Cor. Commercial,

SAN FRANCISCO, CALIFORNIA.

J. H. HEGLER, Manager.

We are now prepared to handle and dispose of all Dairy Produce, Eggs and Poultry.

This house is under the immediate control of the California State Grange; the Business Manager a thoroughly practical farmer and dairyman, Master of Bodega Grange and General Deputy for California for the organization of Granges in any part of California. Special rates to members of the Order; though any one may sell through our house and avail himself of our mode of doing business.

In shipments give plainly the name and P. O. address. Any persons wishing legitimate information concerning our business should write to the house, and are cautioned against accepting for facts many rumors now current. All sales guaranteed. ja31-tf

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.

CROSS & CO., Sole Agents,

316 California Street, - - - SAN FRANCISCO.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

Ask for LEA & PERRINS' Sauce, and see name on wrapper, label, bottle and stopper.

Wholesale and for export by the Proprietors, Worcester; Crosse & Blackwell, London, &c., &c., and by Grocers and Oilmen universally.

1v8-1y

SAN JOSE INSTITUTE

— AND —

Business College.

The Twenty-Fifth Session commences July 20th, 1874.

A day and Boarding School for both sexes; the only Institute on the Pacific Coast where a thorough Academic and business education can be obtained.

The Business College Department

Is under the supervision of James Vinsonhaller, who for many years was at the head of Business Colleges of San Francisco.

For circulars address

26v7-3m JAMES VINSONHALLER.

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,

Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.

21v2-1y



EUREKA WAREHOUSE.

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY 1ST, 1874.—First month, 50 cents per ton; each month thereafter, 37½ cents per ton. At regular monthly rates not to exceed $2.75 per ton for the season. Season rates, $2.00 per ton. Second weighing, 10 cents per ton.

Grain received on dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to Messrs. E. E. MORGAN'S SONS, San Francisco.

4v8-4m A. J. GOVE, Manager.



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,

1v8-3m 43 & 44 Cal. Market, S. F.

LANDS & HOMES FOR SALE

RANCHOS

FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,

542 MARKET STREET,

ap25-tf N. E. Cor. Montgomery.

Tobacco and Vegetable Land for Sale

AT A BARGAIN.—A farm of 100 acres near the thriving and rapidly growing town of Gilroy, Cal. This land lies on and along Carnedero Creek, and is distant from Gilroy six miles, by a good and level road Fully 25 acres of the tract are adapted in every respect for the cultivation of tobacco, now the most remunerative crop of that section of the country; 25 acres suitable for vegetables; good house of five rooms; young orchard and abundant supply of pure mountain water. Good market at all seasons of the year in Gilroy for vegetables and farm products. Apply to B. B. MINOR, 411½ California street. Room No. 4. ag1-tf

DAIRY RANCH FOR SALE,

Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Obispo.
20v7-3m

FARMING LAND,

TO LEASE ON SHARES.

1,000 ACRES,

Or any part of same, being levied and of similar character to that of SHERMAN ISLAND. Apply to

W. T. S. RYER,

No. 330 Pine street.....SAN FRANCISCO, CAL.

THE NEW WINCHESTER

REPEATING RIFLE,

(Model of 1873.)

San Francisco Agency.



The Winchester Repeating Arms Company, of New Haven, Conn., have recently made still further valuable improvements on the celebrated Henry Rifle, which now make it, beyond doubt, the most magnificent weapon in the world. They have just introduced this beautiful arm upon the market, and their San Francisco Agency is fully supplied with all the various styles, together with cartridges for the same.

In the manufacture of the new gun, iron mountings (blued or case-hardened) have been substituted for gun metal or brass, thus increasing the strength of the arm and decreasing its weight. It is also now so constructed as to carry a Central Fire Cartridge holding one-third more powder than used in the cartridge of the model of 1866, thereby greatly augmenting the power and accuracy of the weapon.

THE SPORTING RIFLE

Has a Set or Hair Trigger which can be used at will—set or not set, as preferred. All the arms have a sliding lid which covers the opening in which the Carrier Block moves up and down. This lid, by the action of the Carrier Lever, is always open when the gun is fired, and closed by hand when the firing ceases, thus protecting the lock and inner works of the gun from dust and rain.

Various other improvements, which it is not necessary to mention in detail, by which the strength of the several parts is increased and the general appearance of the gun improved, have also been made.

There is now a greater variety of the Sporting Rifle than heretofore. They can be had with a length of barrel (round or octagonal) ranging from 24 to 30 inches, fitted with Globe and Peep Sights, or any other kind in use.

The Carbine is now made with all the improvements above referred to, except the set trigger.

The Sporting Rifle and Carbine will also be made as Extra Arms, Gold, Silver or Nickel Plated, plain or beautifully engraved.

MILITARY ARMS.

Still further improvements have been accomplished which overcome all objections heretofore raised against the Repeating Rifle as an army gun. It is safe, certain and effective in fire, whether used with deliberation or during excitement in action, and no more motions are required than in operating the old model gun.

More extended and minute particulars concerning the new gun can be had by writing or applying to the San Francisco Agency for circular.

CARTRIDGES.

The trade is notified that the Shells of the Central Fire Cartridge for the new gun can be reloaded, and that the Winchester Repeating Arms Company are manufacturers of every description of Cartridge used for Carbine, Rifle and Pistol of any make, and that the Company have a full stock constantly on hand at their San Francisco Agency

JOHN SKINKER,

Sole Agent for Pacific Coast,

NO. 108 BATTERY STREET, SAN FRANCISCO.

NOTE.—Also Agent for the Dupont Powder Company and Eagle Safety Fuse Manufacturing Company.

eow-bp

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 8th, 1874.

Write for Catalogue to ELWOOD COOPER,

22v8-1y President Board of Directors

Davis & Sutton, Commission Merchants,

For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; O. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.

3v8-1y

MECHANICS' FAIR DAILY.



Immense Free Circulation!

Printed in the Pavilion for Every Visitor.

The DAILY will he a large, elght-page sheet, 28 hy 42 inches. It will be circulated eech dey, in pert, to a new list of readers—residents of hoth City and Conntry, throughout the Coast—numhering during the Exhibition

Over 100,000 Readers,

Making a list of individuel readers greater then that of all other city pepers combined. Each issue will be

Handsomely Illustrated,

Spicily written and beautifully printed, with new hody type, on a new press of a style never hefore used in this city.

Advertisements Displayed

In showy type will be one of our Specialties. Rates will be reesonehle.

Our Columns will afford the best, first-class advertising in the Feir.

As a reliable firm in an estehlished hnsiness, we will guarantee Setisfaction to eil patrons. ☞ No objectioneble advertising will be admitted.

Advertisements should he sent in soon to secnre a good position and an early insertion in our

Prospectus Edition,

To be issned before the opening of the Fair. The

The "Fair" Daily Printing Office

Will open iu the pevilion for printing business, address and visiting cerds, lebels, circulars, notices, etc., for Exhibitors and Visitors. The Nouparell (new style) joh press will be u'sed, with new and nnique type.

☞ Send for or call and see our Sample Sheet.

L. P. McCARTY, Business Manager

W. H. RATTENBERRY, Assistant.

DEWEY & CO.,

Publishers and Patent Agents.

Office of the MINING AND SCIENTIFIC PRESS and PACIFIC RURAL PRESS, No. 224 Sansome, Cor. of California Street. July 16, 1874.

bptf

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th. R. S. Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhibition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers, Mechanics' Institute, No. 27 Post street, San Francisco, California. In order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Williston, Secretary; J. B. Frisbie, Treasurer.

The First Annual Fair of the Bay District Fair Ground Association will be held at San Francisco, Cal., commencing on September 7th, and ending on September 12th.

The fourth annual fair of the Southern District Agricultural Society will commence at Los Angeles on Monday, October 26th, and continue six days.

The Northern District Fair will open at Marysville, September 14th, and continue one week.

ANAHEIM, July 30, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* Owing to temporary absence I have hecn unable to acknowledge the receipt of Letters Patent for my "Transplanter," up to this time. I take this opportunity to bear witness to the efficient manner iu which everything connected with your Patent Agency is conducted, and also the uniform courtesy and kindness I experienced et your hands. I mean to advertiso the "Transplanter" in the PACIFIC RORAL PRESS. Yours respectfnlly,

TIMOTHY CARROLL.

ALFRED S. MOORE. W. L. TIHWING.

ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - - SAN FRANCISCO.

7v8-3m

Removal.

July 13th, 1874, the business office of this Journal wes removed just one hlock eest of our former location, to No. 224 Sensome Street, southeast corner of California, over the Bank of British Columbia, where we heve secured lerge and elegent quarters. This removel is made in consequence of the sale of the building which we formerly occnpied, to parties who will proceed immediately to demolish the present structure and erect a new and magnificent hlock in its place.

[Diagram Showing Location of Dewey & Co.'s New Offices.]



Ninth Industrial Exhibition

HELD UNDER THE AUSPICES OF THE

MECHANICS' INSTITUTE,

WILL OPEN TO THE PUBLIC

TUESDAY, AUGUST 18, 1874, at 11 A. M.,

Corner of Eighth and Mission Streets.

The OPENING ADDRESS will be delivered by

COL. W. H. L. BARNES.

The Musical Exercises will ho under the immediate direction of Professor GEO. T. EVANS, assisted by Prof. W. Elliot.

The Art Department will be nnder the errangement of the S. F. Art Associatiou.

The Horticultural Department will be uuder the charge of the Bay District Horticnltnral Society, and will be one of the pleesing features of the exhibitiou.

PRICES OF ADMISSION:

Season tickets, admitting gentieman and one lady.$5 00
Season tickets, admitting one person..... 3 00
Season tickets, admitting juveniles nnder 14 years 1 50

☞ The above tickets are not transferable.

Single admission..... 50 cents.
Children nnder 14 years..... 25 "

Tickets can be obteined from any of the Managers, at the Mechanics' Institute, 27 Post street, aud at the principal music and drug stores.

ag15-bp-2t A. S. HALLIDIE, President.

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoriug the Grangers has ever been joined hy Floreuce Agents.

7v8-tf SAMUEL HILL, General Agent.

HELP FOR TOWN OR COUNTRY.

The long estehlished and well-known Intelligence House of Crossett & Co. is now receiving numerous applications from the rural districts for suppiying help of various kinds for Domestic, Farm, Mechenical work, etc., and are thns supplying a want that has long been felt in all parts of the interior of the State.

A long residence in the Interior, preceded hy a ten yeer's experience in this city, in the business of supplying help for both city and country, has given the undersigned such a general knowledge of the wants of the community in relation to help of every kind, and the sources of supply for the same, that we feel abundantly confident of our ahility to give the best satisfaction to both those in search of, end those who are in need of help—whether for the chamber, the kitchen, the farm, the mine, the factory or for general work.

Send in your orders trustingly, and yon can depend npon having them promptly and satisfactorily filled in eccordance with the character of the labor called for—male or femaie, skilled or unskilled, and of any nationality that may be specified, and on the most satisfactory terms. Address, CROSSETT & CO., Agents, San Francisco, 606 Cley street. aul-tf

GEO F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

And Tree Seeds,

GARDEN TOOLS, TREES, PLANTS, Etc.

No. 317 Washington Street, San Francisco,

Between Battery and Front.

jy11

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC

IMPROVE YOUR POULTRY.

IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.



Oakland Poultry Yards,

Cor. 16th & Castro Streets, Oakland, Cal.

Young Fowls now for sale at reduced prices. Also a few of my Imported Fowls in pairs or trios. Send stamp for illustrated circular, contsining a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,

4v8-tf P. O. Box 659, San Francisco.

CAMELLIAS.

We offer a large stock of these plants at low rates. They are unnsually healthy and vigorous, and embrace the best white and colored sorts. Prices of the different sizes will be forwarded on application, as well as the Descriptive Catalogue. In ordering, please advise as to the mode of shipment.

We offer eiso Chinese Azaleas, Gerdenies, etc., as well as the best and most rare Deciduous aud Evergreen

Trees and Shrubs.

R. B. PARSONS & CO.,

7v8-1m Flushing, New York.

MOUNT DIABLO VINEYARD—FOR SALE.

Cousists of 40 acres; can make 11,000 galions of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great hargain. Apply to

B. F. CLAYTON, San Jose.
Or C. J. CLAYTON,
10v7-6m Clayton, Contra Costa Co., Cal.

FREE to all applicants—my Nursery and Bulh Catalogues. F. K. PHŒNIX, Bloomington, Ill.

7v8-1m

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator-429 Montgomery street, San Francisco. 2v7-6m

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co,, Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gebilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

C. COMSTOCK, Sacramento, Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

WM. QUINN, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Orovilie, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Potsinma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

BENNETT & PAGE, San Francisco, breeders of Short-Horn Cattle.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoronghbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pnre-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoronghbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,

San Rafael, Marin Co., Cal.,

Breeder of Jerseys and Alderneys. 7v8-3m

PACIFIC RURAL PRESS

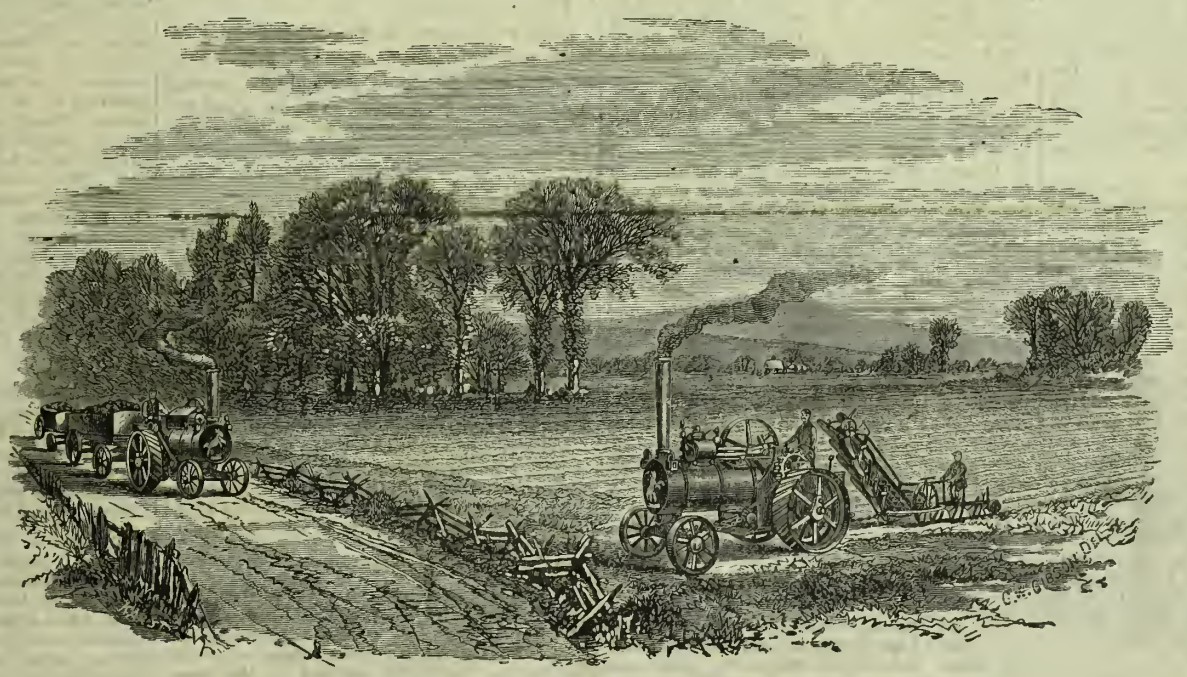
Volume VIII.] SAN FRANCISCO, SATURDAY, AUGUST 22, 1874. [Number 8.

Plowing and Hauling by Steam.

The accompanying illustration represents the road and farm locomotive made by Messrs. Aveling & Porter, Rochester, England, for hauling, plowing, thrashing, etc. Not only its success for conveying heavy loads on ordinary roads at greatly reduced cost as compared with that of animal power, but its usefulness and economy as a farm engine for plowing, thrashing, hanling agricultnral prodnce and driving machinery of various kinds, are manifested by the fact that to this date Messrs. Aveling & Porter have manufactured npwards of 1,000 of their locomotives, and have for a long time past been tnrning out from their works at Rochester, England, an average of six a week.

The illustration we give was taken from an engine of 12-horse power (Amerioan rating) having a steam jacketted cylinder of eight inches by 10 inches, and a lagged and felted boiler, having 120 feet of heating surface. The hauling capacity of such an engine is 15 tons on roads in moderate condition and on grades as steep as one in ten. With a four-furrow balance plow, the same locomotive will plow from eight to ten acres per day, cutting with each mould-board a furrow of 15 inches wide and from five to seven inches in depth. The entire cost per day of running the engine, inclnding fuel, labor, oil, etc., does not exceed six dollars, and when hauling, the rate of speed per hour can be continued at three miles.

At this time Messrs. Aveling & Porter are building 20 road locomotives for the Italian government, and they have lately added to their various sizes of farm locomotives one of 10-horse power (American rating), an extremely nseful machine for thrasning, as well as for plowing, hauling and other work. The total cost in New York of a complete farm locomotive, four-furrow plow and all appliances ready for work, we are informed, does not exceed $3 600 gold, the engine without the plow costing considerably less.



AVELING & PORTER'S ROAD AND FARM LOCOMOTIVE.

At the annual show of the Royal Agricultural Society of England, held at Bedford, the road and farm engines of Messrs. Aveling & Porter occupied a prominent and useful position in the trial fields in moving the various implements and machines to their proper places for operation, and at the last trial of traction engines (in 1871) by the Royal Agricultural Society, Messrs. Aveling were awarded the society's first prise of £50 for their road and farm locomotives.

One of the Aveling & Porter farm locomotives has lately been sent to Red Bluff, California, and it is said to be working excellently. A four-furrow plow to work with this engine is now on its way to Red Bluff.

Mr. Oastler, of Exchange Place, New York, who is Messrs. Aveling & Porter's representative in the United States, can be referred to for information relative to their manufactures of road and farm engines, steam road rollers, portable engines, etc.

Tall Ferns.—Mr. J. W. A. Wright brought to our office this week a few stalks of fern which he gathered within a few miles of Napa city. The stalks measured seven feet and six inches in length, leaving stubbles about eight inches high. The leaves were long, heavy and beautiful. Mr. Wright also brought—like all true worshipers at California's shrine—his offering of wild coffee. This, also was fonnd about six miles back of Napa city. He says it is fonnd growing all along the Coast range.

Ex-Alderman Blodgett, of Marysville, has jnst cleaned up 35,000 pounds of early rose potatoes from an acre, and threw ont many hundred pounds of the smallest.

Poor California!

At a meeting of the New York Farmers' Club, held at Rochester, June 3d, Mr. Culver, a member of the club, who "had been traveling pretty extensively (or extensively pretty) in California," was called upon to give his impressions of that country. Mr. C. was disappointed in California; therefore he did not disappoint the club in the rendering of his account. Mr. Culver thinks there is more grass on 100 acres in New York State than on 10,000 acres in California! Not one acre in ten is tillable! Have dry rivers! They plow there with gang plows, and only to the depth of about three inches! These are some of the palpable hits which poor California receives at the hands of its extensive visitor.

The world at large will not be surprised at this report. It is a very common thing for farmers' clubs to hold an inquest over any portion of the world, or to destroy the idols that outside barbarians are worshiping. The writer had the honor a few years since to be present on one of these solemn occasions. On this occasion, also, poor California was the victim. This was before the Herkimer County Farmers' Club, and one of the dairy oracles of that dairying people was invoked—just as our late visitor, Mr. C., had been—to give his impressions of California. He, too, had "traveled pretty extensively in California," having come overland on a flying visit, and remaining here several days. He, also, did not think much of California. It was not in his vocation so to do. Still, the country is safe; at least, California is safe, and remains just where she was before these "extensive visitors" were whirled through the State on the Central Pacific Railroad.

Now, if a Californian should visit Rochester or Utica—or if he wished to be considered an "extensive traveler," let him visit both of these cities—and should ride np and down the streets, in the cars of the city railroads "pretty extensively," he wonld be fully as well qualified for writing New York State up—or down—agriculturally, as these late visitors of California are for doing her justice in a similar examination. Poor California!

A Well-Considered Present.—A package of Dixons Patent American Graphite pencils was laid on our table this morning. They have been tried by various parties in the office and pronounced good. They—the pencils—are remarkably smooth and agreeable writers.

A storm of rain and hail passed over northern Idaho week before last and did some damage to the growing crops.

Complaint Against Alfalfa.

The *Utah Mining Press* contains an account of the death of a valuable horse, which was supposed to have been caused by eating lucerne or alfalfa. The lucerne had been cut and partially dried, and the animal, it is probable, had been deprived of all green or fresh-cut feed to an extent that induced excessive eating. The case excited some interest in the neighborhood, as it was the first complaint heard against alfalfa as feed. It should not, however, create any distrust of this valuable food. We have known a good many cases in which horses, and cattle also, have been seriously injured under similar circumstances, and some where the result was fatal. Animals when first "turned out" in spring are very apt to be injured by over-eating; but the most serious cases are those where horses or cattle have broken into gardens, grain fields or meadows, even. It is generally during the short feed of midsummer that these hungry raids occur, and animals often remain several hours in these tempting spots; gorging themselves and suffering, as a consequence, hoven or bloat. Probably the case mentioned above was one of these. We have known of alfalfa having been fed on Eastern farms for a term of several years, and have never heard of any injurious effects following. In changing from stable-feeding to grass, cattle and horses should not be allowed to fill their stomachs at first, but should have a slight feed each day until fully accustomed to it; and if plenty of salt is accessible it will lessen the danger of bloating, and perhaps save the lives of valuable animals.

Sonoma and Marin District Fair.—We have received the preminm list of the Sonoma and Marin District Agricultural Fair, which is to be held at Petaluma city, commencing on the 14th of September, and ending on the 19th. The premiums are liberal in amount, and are judiciously apportioned; and with the resources of the district, the taste and energy of the people, and the character of the officers of the society, a successful exhibition may be anticipated.

The Sacramento beet sugarie will this year make 800 tons of first-elass white sugar from its now ripening and ripened beets. If this shall bring 11 cents per pound, there are $176,000 saved to the labor of California, for all this money goes for labor.

Levi Flagg, who has charge of the Phelps' dairy, near Belmont, is now sending eighty cans of milk a day to San Francisco, each can containing three and one half gallons.

Rather Cheering.

The following letter will be pernsed by the readers of the Rural Press with a good deal of interest. It was received by us a few days since, and is from Davis & Sutton, produce commission merchants, No. 75 Warren street, New York:

Editors Press:—Have just sold our first car load of fruit from your State this season. It brought $2,824.50, which is the highest price ever obtained in this market for a car load of your State fruit. This fruit consisted of Bartlett pears and some fifty boxes Washington plums. If the latter had been in good condition, the car would have brought $3,000, easily. The car came from T. B. Crane, of Marysville. Thinking you might like to know the result of sending good fruit to our market, we give you this. Davis & Sutton.

Messrs. Davis & Sutton were perfectly correct in the supposition that we would like to know the result of sending good fruit to their market. We have persistently urged our fruit-growers to strive for excellence in their products, and it is with the greatest pleasnre that we acknowledge that our leading fruit-growers do not need any urging in this matter; and in this, as in various other California products, we are not content to see the climate and soil of the country credited with everything that is creditable in our products. But outside the circle of our extensive and progressive fruit-growers, there are many, very many, who have more fruit than they know what to do with. It is an incumbrance to them; and this is a condition unfavorable to efforts at improvement. But these amateurs and moderate fruit-growers should fall into rank, under the leadership of more experienced and successful parties, and pay more attention to quality than to qnantity; the latter point requires no consideration.

What we want is to induce an increased consumption of fruit at home, and to be able to excel, and undersell, our Eastern neighbors in their own markets. We must not deceive ourselves with the idea that the East is starving for want of our fruit. Their supply is restricted, it is true, but they will manage to get along with what they have until they can obtain a better and cheaper article. Nor should we underrate the skill and the natural advantages possessed by our competitors. Our fruit far excels theirs in size, beauty and cleanness; but we can hardly claim that we can equal them in flavor; and in the nicely graded, wide range of varieties, they are, it must be conceded, far ahead of us. We will find them more critical in this respect than our customers at home.

But as important as the production of fruit appears to us, we look with still greater interest to the operations of those who have the handling and disposing of it. The business of disposing of the fresh fruit of California to Eastern customers and to our neighbors on the Pacific coast, calls at the present time for shrewd, active, practical talent. There can be little doubt that this is destined to develop into a standard, legitimate business. The mistakes of the pioneers in the enterprise may set it back a season; but with the increasing demand on one hand, and the abundant supply on the other, calling into activity the business aptitnde of our people, we may reasonably expect to see this matter properly worked up in the eonrse of a very few seasons. This business requires a thoroughly organized system; securing the saving of time and money at every point possible; and practice will, no doubt, develop many new points by which we ean cheapen and expedite the handling and transportation of our surplus fruit.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Grain, Fruit-Drying, Etc., at Centerville.

EDITORS PRESS:—Probably no part of the State is just now the scene of greater bustle and activity than this vicinity. Washington township has its coat off and its sleeves rolled up, and is pitching into the work of harvesting with a will. At the end of a month, most all the grain will be in. The wheat yield is not quite so heavy as was expected; twenty-five bushels to the acre being a fair average. Barley has done better. The Chevalier variety stands at the head of the row, running as high in numerous instances as 75 bushels, or about $45 net per acre.

In the matter of warehouses, this township in common with the rest of the county will be better provided for than ever before. The railroad company are building large warehouses at all the important points—at San Leandro, San Lorenzo, Decoto, Haywards, etc., all along the line. That at Washington Corners is very large—350x58—having a capacity of 12,000 tons. That at San Lorenzo is of about the same size.

In this connection the influence of the Grange organization is made strikingly apparent. Last year freights were $1.50 to Oakland and San Francisco. This year the railroad people have gone down to $1. This is the first season that the railroad has made any attempt to secure the grain trade of this section, providing no conveniences whatever. The grain has therefore gone by the creek route. It is well known that the great and good Mr. Friedlander is at the bottom of all these warehouses. Ostensibly the railroad is the owner, of course. The farmers hereabouts understand perfectly well, but have no objection to storing their grain at 50 cents. The agents of old monopoly will be around to buy soon, but there is a strong disposition to hold on for satisfactory rates. The farmers were never better able to do this than now. All these increased conveniences and facilities are directly owing to the fight between Friedlander and Morgan's Sons. The producers are getting the benefit.

The fruit-drying factory here is running night and day, working principally upon plums and peaches. The capacity is found to be deficient, and there is some talk of enlarging. The stockholders have evidently got a good thing.

Irrigation is receiving its share of attention. The Washington and Murray Township Water company is a live corporation, and has already a 40-foot ditch one mile and a half long in operation. This main ditch starts at Alameda creek, about half a mile from the county bridge at Niles, and follows nearly the course of the creek to Centerville. When complete in all its projected ramifications—some 15 miles of ditch in all—20,000 acres of land will be irrigated. Its work will for several years be confined to winter irrigation, but it is intended at some future time to construct a system of reservoirs in the neighboring mountains, which will give a constant supply of water the year round. This will insure two crops. At present, water is furnished for from 500 to 1,000 acres throughout the year. The cost of the work already done is about $5,000. Work is to be resumed in the fall.

A pleasant feature of this neighborhood is the large proportion of handsome and comfortable homes. The eyes of your correspondent have not been perpetually offended by bare, unsightly boxes of houses, without a sign of taste. There are, of course, here, as elsewhere in the State, more than enough of buildings looking as bare as a close-shaven head; but the rule is pretty habitations, picturesque with vines and embosomed in trees. The residence of Mr. E. H. Beard, at the Mission San José is one of the most beautiful places in the State. The extensive grounds, filled with all sorts of fruit trees, native and tropical, are a wilderness of taste and beauty. You can fairly lose yourself in the artful forest of big trees, and it is well to keep an orange tree with its golden spots of color for a land mark, when you enter one of the numerous avenues. Little streams of pure water are kept running everywhere, and after a hot ride over the yellow plain, it is a delightful relief to get into such a luxuriance of shade and coolness. Did space permit, this letter should contain an extended description, as it would be of genuine interest.

The Grangers here have not, so far as your correspondent can learn, made any attempt toward shipping their own grain. In another year it is expected some arrangement with this end in view will be made.

Land in this vicinity is rising steadily in value. $200 per acre is the average rate at present. The population is increasing and improvements are numerous. Quite a number of residences, several of them handsome and of a citified air, are building here and there.

The vineyards shall form the subject of a letter for your next issue. Your correspondent sees them cool, dark-green, resting against the pink-gray sides of the hot mountains a few miles across the burning yellow of the valley, and he becomes expectantly thirsty with the bacchanalian prospect. Yours, A. M.

Centerville, Aug. 13th.

The Chinese as Laborers.

EDITORS PRESS:—I thought probably it might be of interest to the readers of the RURAL to say a few words about this class of laborers. Being among them for years, and in a capacity where I had a good chance of observing their mode of working, I am prepared to state, without fear of a successful contradiction, that the employment of Chinese in preference to white labor, instead of being a pecuniary benefit to the employer, is a bane in the form of a sinking fund. To prove the assertion, let a few facts be submitted. I refer now to vineyard owners in this valley, and I think the same will apply to vineyard men all over the State.

These wine producers will tell you they never could have arrived at the standard of success where they are now, but for John Chinaman. Let us look at the successful point they have attained in the business. Go to the county seat, and direct your steps to the proper official there, and you will find numberless instances of the falsity of such high-toned statements. These wine-growers are not like our grain-producing farmers; their pretensions are loftier, and consequently are not much in the field, where they would have a chance of observing how their much esteemed John proceeds with the business. They generally have a white man to oversee the work, who, wishing to be on the sunny side of everything, and there being a great many little ins and outs connected with the business of wine making that he does not wish one of his own color to know anything of, as it might have some restraint on his own actions, he therefore prefers Chinamen, and in representing them to his boss will give an unfair estimate of their worth, saying they are far ahead of white men. The only successful part of the play they take is picking the grapes. Plowing, and where exertion is required, they prove a failure. They will not go beyond a certain gait, and they have a cunning to slight work beyond the conception of the most ill-disposed white man. They will sit on the plow one-third of the time, and will ruin more vines in a day than the cost of conveying the bones of 100 of them to China. These are not prejudiced statements, but what can be vouched for by plenty of eye-witnesses.

Occasionally a good-for-nothing white man, in his perigrinations passing through this valley, falls into a job. Of course, he proves to be of no account, and they have good pretext in holding him up to view as a specimen of California white laborers. A good man will not come to Sonoma to seek employment; he knows he would have to suffer the indignity of contending with Chinamen, whose moral and essential worth would be continually preached in his ears.

They have a club here where they discuss matters relative to securing means and measures towards enhancing the wine business. If they would only open their prejudiced eyes and consider that during the cultivation and vintage every other department of farming labor is at a standstill, it they would hold out some encouragement to white labor they could easily procure good men at not very exorbitant wages, one of whom would do as much as three Chinamen, and do it better.

A SUBSCRIBER.

Sonoma, August 11th.

An Insect for Blistering.

EDITORS PRESS:—I enclose some small insects which I think may be very valuable. One got inside the sock of one of my children a few days ago, and she complained of irritation, but did not pay much attention to it; but when the socks were removed at bed time, there were two very fine blisters on her ankle, and one of these insects lying near them. I would like them to be tested by a medical man, and hear the results, for I feel convinced that they would stand a chance of superseding cantharides. There are a great number of them up here. A very slight redness around the blisters was removed quickly by a weak solution of arnica.

Yours truly, GEORGE HOBLER.

King's River, Fresno Co.

[The insects sent by our subscriber have been tested by competent parties, who report that they really possess blistering properties, but in a very moderate degree. Possibly our friend H. mistook irritation, simply, for blistering. Vesication is essential in blistering, and in this respect the insects sent us failed; not wholly, but to such an extent that they were pronounced nearly worthless for this purpose. The vesicating properties of cantharides give them their value; and the deficiency of this property in the insects alluded to unfits them for becoming even a substitute for the former.—EDS. PRESS.]

WILD COFFEE AT SHINGLE SPRINGS.—EDITORS PRESS:—I send you to-day a small box containing a sample of wild coffee and a section of wood with terminal leaves and bunches; also, a sample of plums on same in green state and a sample of plums ripe with some pits taken from the plums and dried. The berry, upon being taken from the plum, you will see, is sometimes of a dark brown color, but being exposed to the air turns to the color of the enclosed berry, when they have been out of the plum twenty-four hours. These samples were taken from a bush about six feet in hight. P. M.

Wine-Making—Russian Barley.

EDITORS PRESS:—I want to make a few barrels of wine of the Mission grape, and being a novice in the business, would like if you or or some of your readers would answer a few questions, which I have no doubt would also be of value to more readers of your valuable paper.

1st. What degree of ripeness should the Mission grape attain to make as light a wine as possible?

2d. What is the cause of so much wine made by amateurs being "sour'ed" and "heady," although the grapes were grown on up-land?

An article treating on wine-making in plain language would be much appreciated by your correspondent, and, I have no doubt, by many others. There are many farmers in this State who have small vineyards for grapes for table use, who yet wish to make a few barrels of wine for their own use; any instructions for such is what we want.

I would also like to know what are the characteristics of the Russian barley, and wherein it is different and better than the common barley, and where seed of it can be obtained?

AMATEUR.

[Will some of our readers take the hint suggested by "Amateur," and explain the process of making wine on a small scale. In regard to the Russian barley we would state for the benefit of our correspondent that it is grown principally for its productiveness, the yield being larger than other varieties. But it is not a favorite with the brewers. Seed can be obtained from San Francisco seedsmen at most seasons, though it is not considered a standard article. —EDS. PRESS.]

Will Alfalfa Succeed Here?

EDITORS PRESS:—Will you please answer a question for me through your valuable paper? I am living on a ranch in the foot-hills, in Tulare county; soil, gravel and sand, usually can not irrigate after the first of July. Will that insure success in raising alfalfa? An answer will oblige at least one of your readers.

C. K. LAWTON.

Visalia, August 5th.

[The soil is favorable for the growth of alfalfa; and, by irrigating up to the first of July, two crops at least could probably be secured from a standard meadow or even where the seed was sown the previous autumn.—EDS. PRESS.]

A Rare Flower.

EDITORS PRESS:—I send you a lily unknown to the denizens of Mount Pleasant. For fifteen years one stem four feet high has made its appearance in our garden, and at this season of the year some seven or eight flowers will bud and bloom. In some stages it is very beautiful, Whether wild or a stray cultivated flower we know not. All we know is this, that it is very rare, being the only one known in this section.

Yours respectfully, JOHN TAYLOR.

M. P., August 9th, 1874.

[The flower has been shown to experienced florists, who pronounce it a malvaceous plant, and not a lily at all. There seems to be no doubt about the class, but the species is not determined. Possibly it is a wild hollyhock. —EDS. PRESS.]

A PERPETUAL HOT BED.—At Niederplants, near Swickuan, in Saxony, a vast bed of coal has been burning for over three hundred years. The ground above this subterranean bed of fire has become thoroughly warmed by this time, and an ingenious gardener has utilized it by planting upon it a large nursery garden. Here he raises tropical plants of all kinds, with exotic fruits, which flourish with a vigor and luxuriance in the open air that the best forcing houses could not insure. His specialty is pineapples, of which he has a great variety. There are subterranean fires in other parts of the world which have been utilized in a similar way. Would it not pay, in certain cases, to take a hint from these accidental examples of underground heating, and warm large plots of soil by means of steam pipes, running under the surface?—*Rural Carolinian.*

AN EARLY APPLE WANTED.—A fortune will reward the originator of a first-class early Apple. The Harvest, now heading the list, is only of second quality, and the gorgeously arrayed Astrachan still lower in our estimation. The Early Strawberry is in every way excellent but ripening late. For cooking, during the months of June and July, the Dutch Codlin holds its sway. Fall Pippin, Holland Pippin, Gravenstein, Lyscom, Maiden's Blush, Roxbury Russet, do well until late in autumn. Rhode Island Greening, Baldwin, Swaar, Newtown Pippin, Spitzenberg, and White Winter Pearmain, will fill the list for winter, piled under the trees, and sheltered from rain and sun.—*Cal. Horticulturist.*

A MAMMOTH RHODODENDRON.—This spring there flowered in the grounds at Courtmacsherry, Ireland, a plant of *Rhododendron cinnamomeum*, bearing 130 trusses of flowers, each truss containing on an average 18 flowers.

BLOOD LEAVED BIRCH.—There is now a Blood-leaved Birch, as well as Blood-leaved Beech, in English gardens.

THE DAIRY.

Shipping Green Cheese.

Mr. L. B. Arnold, Secretary of the American Dairymen's Association, writes to the New York Butter and Cheese Exchange as follows, and his views are worthy of the careful consideration of dairymen:

I see by your reports that the market is being crowded with green cheese, and prices are falling in consequence. Would it not be well to urge more pointedly the propriety of retaining cheese longer in the curing rooms—until it is cured? This crowding forward green cheese works a double loss. Cheese never cures as well in boxes as in the factory. It makes inferior cheese, and this lessens consumption, for consumption of cheese varies with the quality rather than the price. Give people fine cheese and they eat freely; the better the goods the more they eat. When poor, it is used sparingly.

I was in the southern part of the State last month and saw cheese selling from 14 to 10 and eight, and even six days from the hoop, instead of 30 days as usual. By its inferiority from curing in boxes so much green cheese retards consumption to an extent that makes it drag in the market, and prices fall as a matter of course. If this green stuff could be kept back until it is owned into more palatable goods it would be consumed as fast as made, and the demand would be kept strong and active.

It strikes me that if this necessity were more earnestly urged in your reports, which are copied by all the papers which circulate in the cheese districts, it would materially check the exceedingly green shipments, to the relief of the market, the improvement of quality and an improvement of price and reputation.

The English Cheese Market.

At a recent meeting of the Northwestern Dairymen's Association, C. H. Wilder, of Evansville, Wisconsin, who has returned from England, where he went to dispose of a large lot of cheese, addressed the meeting. He said England furnishes the best market for cheese in the world. He went there to find out what kind of cheese men wanted, who were the best men to sell them, what were the best routes, and what would be the freight. He visited several great market towns. He found the standard to be the same. All wanted a mild cheese, fifteen inches in diameter, and weighing 60 pounds, though smaller cheese of that proportion as to size, would not be objectionable. The manner of weighing cheese, the standard of hundred weight, was different in these markets, as were the terms on which they were sold. Cheese is always sold by the hundred weight, which in some markets is 120 pounds, and in others 112 pounds. In some, five or six cheeses are weighed at once; in some only one, and in still others one pound is thrown in at every weighing. Many of the cheese dealers have excellent reputations. There are four routes to England—by Montreal, Boston, New York and Philadelphia—by each of which there need be but one transhipment to Liverpool. The texture of cheese for the English market should be close and firm, and the flavor mild. High color is not required. In some markets uncolored cheese sold best. Cheese should be shipped when tolerably new.

SHADE FOR COWS.—It has been contended that cattle graze more when there are no shade trees in the fields, and that therefore cows will make more butter, and cattle put on more flesh, when exposed to the scorching rays of a summer's sun than when protected by shade trees. At the ninth annual convention of the American Dairymen's Association at Utica, Mr. Blodgett, in speaking of this, says that cows graze more when they have no shade trees to shelter them, but it is also true that heat affects their health and the quality of their milk. Mr. B. also contended that grain feeding improves the milk and butter, increases the quantity, improves the manure, and enables the dairymen to keep more cows on the same number of acres, and makes a better net profit. He recommended protection by shade and feeding meal or other food, to avoid the necessity of exposure to a broiling sun to gather food.—*Farmers' Advocate.*

COWS IN SUMMER.—The Boston *Journal of Chemistry* says that cows taken from pastures that even are pinched by drouth, will fall off in the milk supply, if they are fed solely upon corn fodder cut before the ear begins to form, or at any stage of its growth if it is sown broadcast. It is a great point, however, to have within reach green fodder that will in a fair measure sustain the milk secretion when the grasses fail, and corn is so cheaply and easily cultivated that it is upon the whole the most available of any of the green crops. Cows should not, however, be confined to it alone, but fresh hay or sweet millet or clover should be alternated with the feed.

PURE WATER FOR ANIMALS.—One reason why epidemics among cattle, hogs and horses are so common and fatal, is because they do not have pure water. As the country grows older and more extensively settled, the streams are more likely to be polluted with excrement from decaying organisms; and this taken into the blood of animals is sure to breed diseased conditions. Once such epidemics were common among men, and swept off a large part of the race. Now, by wise hygiene, most of them are avoided.

The Apiary.

More about the Queen Bee.

Those who have given the subject of bee-keeping much thought and study have found that the queen-bee organism, habits and functions have demanded a large share of their attention. We have in previous issues of the Press given some extracts from a recent work on bee-keeping by P. O. Petersen. The following passages are also from the same source:

Hatching and Rearing the Queen.

The queen is hatched from an impregnated egg laid by a queen, and is regularly deposited in a large bowl-shaped cell (the queen cell), placed vertically—not horizontally, as are all the other cells in the hive. The queen is thus, strangely enough, raised and fed standing on her head, while the female and working bees unfold themselves lying on their back. In case of need, one of the small cells is altered to a queen cell, but even then the cell is placed as nearly vertical as possible. When the egg is impregnated it resembles exactly in shape, color, size and construction, the eggs out of which the other bees are hatched. It is also laid and fastened in the same way as the other eggs, while the larva that appears three days after is a great deal better nursed and fed, so that she almost floats in her food. After five or six days, during which time the larva grows considerably more than that of the working bee, she spins her cocoon; but remains in that cocoon a shorter time than the others, as she regularly sets out as a full grown queen, sixteen, seventeen or eighteen days after the laying of the egg. The reason for this is, that it is of the greatest importance for the hive to be provided with a chief without delay, either in order to be able to swarm so much the sooner, or, after the loss of the old queen, as soon as possible to be provided with a new one who can commence to lay eggs.

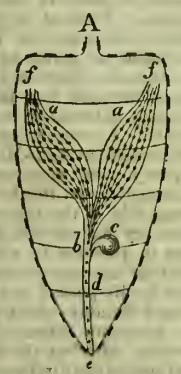
During the swarming season the full grown queen occasionally remains in her cell even as long as the twenty-fourth day. This is done partly because she is afraid of being attacked by the old queen's mother, or by young queens present, as they are always hostile to each other. To avoid starving during such confinement, the queen bee bites a small hole in the wall of her cell, through which she is fed by other bees. Soon after she has left the queen's cell it is generally broken down and brought away. After a short time the color of the young queen becomes darker; after that no further change takes place, the development of the body being complete.

The Queen's Food.

The queen's food consists of pure honey, which is provided for her by the working bees, and her excrements appear in clear drops which are immediately consumed by the working bees. With the exception of the honey-bowl, the wax preparing organs and the poison bladder, the interior developments of the queen are superior to those of the working bees. This is particularly the case with regard to the sexual organs.

The Organism of the Queen.

The sketch as presented here is not taken from nature, but is only to be regarded as a guide to illustrate the description. Imagine the queen's hind body A to be transparent, and then the egg-producing cavity may be seen to consist of a double ovary *a a*, which is filled with strings in which the eggs are found in different degrees of development. These are shown very small in the beginning by *f f*, and fully developed at *b*, where the ovaries connect in a tube. The egg leader, where the eggs appear when they are laid, is shown from *b* to *e*. At-



tached to the egg leader is a little bladder *c*, the seminal vesicle, which can easily be seen with the naked eye, glitters like a pearl, and which is connected with the egg-leader through a short channel. By nipping off the point of the queen's hind body this seminal vesicle becomes visible. Its contents are shining and clear while the queen is still unimpregnated, but white, or rather turbid after the impregnation, and yellowish in old queens who have ceased to be productive. The size of the bladder is as large as an ordinary pin head.

The Bee Community.

A bee community in general might be compared with a well organized government which is subject to a hereditary monarch, and possibly if statesmen would study the state organization of bees, they might derive many practical hints therefrom. The bee communities are led and governed by one leading ruler, so that every member being animated by the same instinct, and there always being harmony between the queen and the bees, the union and prosperity of the hive is secured. This harmony is so well established that the bee swarm can be regarded as a well organized body, in which separate and individual members work for the common good. When a bee is separated from the swarm it perishes in a short time, even if she does not lack either food or warmth; but it will almost immediately be the case in cold weather.

Every bee that separates itself from the cluster or pack into which the bees join themselves during the winter, will soon become stiff and die, for which reason it is of great importance that the bees are not disturbed in that season. The bee, whose blood is cold, like that of all other insects, cannot, when alone, produce the necessary temperature to support life in cold weather; but when packed together in one body they produce a degree of warmth that reaches that of the blood of a human being.

Even as injurious as cold is, too much warmth is just as dangerous, and often the bees are not able to get rid of the foul air in the hive, and the work must then be stopped for want of circulation. The bees fall in a sort of trance, and remain so until the ontside temperature changes. Petersen's Patent Bee Hive is specially constructed so as to keep up a continuous and perfect ventilation, so that the temperature will be rendered equable. There is no danger of any draught, while at the same time the bees have plenty of chance to rid the hive of the foul air.

Managing Bees.

There are two methods of managing bees with profit, by making honey or swarms. If you wish your bees to accumulate give them the whole hive. If you wish your bees to produce honey, take the hive that has a separate box with a row of frames in it, where neither the queen bee nor drones can get in. I don't mean to say that by this means you can altogether prevent your bees from swarming, but I mean by managing your bees in this way you can have more honey and less swarms.

Reader, if you will take time and study bees a little, you will find a good many practical and interesting lessons in a bee hive. Bees may be compared to sowing clean seed in ground that is liable to grow weeds, once sown and then left alone without any more care—after a while up comes the weeds, and if they are not pulled out will sometimes choke out the grain you have sown. It is the same with the bees; you put a good swarm of bees in a bee hive and they commence building different sizes of cells; the queen lays her eggs indiscriminately; left alone the drones come forth the same as working bees, and often so plentiful that they eat all that the working bees produce. The time you spend in weeding the drone cells out of your hive will well repay you for your trouble.

I am often asked: How much honey can a hive produce in a season? My answer is: How much milk can you extract from a cow that has two calves? You may get some, but if she has only one, or none at all, you will get a great deal more. It is the same way with the bees; the queen lays her eggs, and the honey bees bring in food for the young brood in their cells, while if the queen was prevented from laying her eggs, the working bees would produce more honey.

Sheep and Wool.

Fat Sheep for Heavy Fleece.

There is much said about ewes being too fat to breed well. In my experience of twenty years I have never seen anything that led me to think so, providing this flesh is put on with good pasture in summer, and a few roots, with good hay in winter. The fatter sheep become under these circumstances the more valuable I should consider them. There is no time of the year when it pays better to feed a small allowance of grain daily than in the fall, after the feed gets frozen, and it is not necessary to bring the flock to the barn.

It is an old saying "A sheep well Novembered is half wintered." Keep the ewes fat and the lambs will be fat, and the fleeces heavy. I do not say whether it is best to have the lambs come early or late, but I do say it is best to have them fat; then, whether early or late, they are salable. All ewes that with good care will not raise a lamb, and shear four pounds washed wool, should be sold. I have them in my flock that will shear nine pounds, and raise a pair of twins, and it costs no more to keep one than a sheep that shears only three pounds. I think no one will hear the man that keeps his flock in this way complaining because his sheep are "run out" and do not pay, and the like.

Ticks must be kept out of the flock; they are the worst enemy of the sheep. If they are not killed they will destroy the sheep. For killing them I have never tried anything better than strong tobacco juice. Give the lambs a dip before they are turned to grass, and again a few days after shearing, as the ticks leave the old sheep then and go on to the lambs. This will kill most of them. If any remain until winter, take some tobacco juice, made warm, and pour it along the back, and let it soak in the wool, and most of the ticks will be destroyed. If these directions are followed no one need apprehend any serious difficulty with ticks; but at best there will always be some. —*Cor. Country Gentleman.*

Operating for Hydatid in Sheep.

An English journal gives the symptoms produced by the existence, and an operation for the removal, of the *Cœnurus cerebralis*, which attacks both cattle and sheep, but principally the latter. The disease produced by it is known as sturdy, turn-sick, staggers, etc., and is caused by hydatid on the brain. Under its influence the sheep turns right or left, according to the side of the brain affected. The first severity of the attack seems to pass off, but the relief is more apparent than real, the disease becoming more intensified, the cerebral disturbance more marked, causing giddiness; finally paralysis sets in, followed by prostration and death.

The operation for removal is thus described: Having learned from a gentleman largely interested in sheep-breeding that Mr. William Hyslop, of Stretton House Private Asylum, Church Stretton, successfully deals with cases of sturdy amongst his own and his neighbors' flocks, we waited for an opportunity of witnessing an operation for the disease on a sheep of the Stretton Hill breed. We may premise that the *Cœnurus* is in a kind of bladder, provided with a variable number of exsertile heads, and it is believed that the nervous substance may be excited by the heads, which protrude from the bladder and penetrate the brain substance nearly two lines in depth. The operation, like that of Columbus' egg, was exceedingly simple, but very ingenious withal.

The sheep being firmly held by an assistant, Mr. Hyslop felt for the softened part of the skull, and having hit upon the precise spot he wanted, he pierced the brain with an instrument called a borer. He then drew off a large quantity of liquid from the cist of parasite, through a canula by means of a syringe. He then extracted the bladder, which contained the agents of the disease, and announced that the animal would be entirely well in a few days.—*Western Rural.*

To Tell the Age of Sheep.—Sheep have eight cutting teeth in front of the lower jaw, and six molar grinding teeth in each jaw above and below. When the lamb is born it generally has two cutting teeth, sometimes none—when one month old it has eight cutting teeth in the lower jaw; when sixteen months old the two central teeth are shed and replaced by others, which attain their full size when the sheep is two years old. Between two and three years old the next two incisor teeth are shed and replaced by others, which attain their full size when the sheep is three years old. At four years old the sheep has six full grown cutting teeth, and at five years the front teeth are all of a size, being fully developed.

Poultry Yard.

The Guinea Fowl.

Objections are found in the straying proclivities of this fowl; its disposition to lay away, by which many eggs are lost; and its pugnacious habit of beating other varieties of poultry. But for this latter trick it would long since have been naturalized as a game bird, having been turned into covert with perfect success; but it was soon found that the Guinea fowls drove away other descriptions of game to such an extent that the birds had to be destroyed on that account, the pheasants being most valued. As a domestic bird, however, these bad qualities are susceptible of much amelioration provided the treatment be kind and good. It is almost hopeless to commence a stock with adult birds; directly they are left at liberty they are "off," and probably never return. But by setting eggs under common hens, and rearing them at home, they grow up much tamer, and will flock round the person who feeds them, and even allow themselves to be taken up and petted, like other poultry. When reared thus kindly and secluded nests are provided, they will generally lay in the house; and if perches are placed high for them, and they are regularly fed every night, will roost at home also. So far domesticated they will pay to rear, in places where they can have ample range, for their flesh alone, which is most delicious, resembling that of the pheasant. The hen lays from 60 to 100 eggs per annum, the eggs being rather small, very pointed at the end, and of a dark cream color. These eggs are of beautiful flavor, and there is considerable demand for them in London, where we have often seen them exposed for sale in little baskets lined with green moss. Mr. Hewitt kindly adds a few remarks, which places their utility in what we must confess is to us a novel light, and which it may be well to "make a note of." He writes:

"As to Guinea fowls, if allowed to breed wild and become numerous, they will invariably displace all the pheasants in any covert they may take to, if not interfered with; and as when thus wild they will run before dogs with all the pertinacity of the cornerake, they afford but little sport for the gun. It may be added, the flavor of the birds thus allowed unrestrained liberty is certainly improved, and more game-like than ordinary, becoming more like that of the partridge than the pheasant. Although thus unsuitable for sport, it must be constantly borne in mind no birds are better house-guards, if allowed constantly to roost in high trees (which they will always do if they can) near the residence of their owners. It is with them, as it is with Spanish geese—'nothing can stir about in the night without their becoming aware of it; and they invariably give notice of it by their restless cries, so that to be forewarned of danger is half the battle.' Such were the remarks written to me by a friend long since dead, and who added: 'I am sure, Mr. Hewitt, in all these years I have rested safely without *any* robbery, though our place is desolate enough to invite pilfering, well knowing my Spanish geese and the Guinea fowls were the best watch dogs in the neighborhood; in fact, the dogs almost invariably gave us only the *second* notice of coming danger—indeed my impression certainly is the dogs themselves as confidently rely on the geese and Guinea fowls as we ourselves do.'" —*Wright's Book of Poultry.*

Poultry Enriching Land.—In villages and towns where manure is scarce, the poultry house may furnish valuable manure. In relation to its true value, "Elements of Agriculture" says: Poultry manure is nearly equal in value to Peruvian guano, except that it contains more water. If granted that a hen will consume of the different kinds of grain, meat and vegetables, during the year, the equivalent of two bushels of corn, which weigh 120 pounds, then it is certainly low enough to place the excrement—the result of the digestion of these two bushels—as equivalent to fifteen pounds of guano. As the manure from 100 fowls during a year would amount to 1,500 pounds of guano, taking the above supposition as at least safe, and as 300 pounds is ordinarily sufficient for an acre of corn, it will be seen that the manure from 100 fowls will make compost enough for five acres. The experiment has been tried by the writer of applying to one acre of corn in the hill the manure of twenty hens one year, mixed with muck, in proportion of one part hen manure and three parts muck, and the result was a better crop than upon an adjoining acre enriched, for sake of experiment, with a good, fair, ordinary dressing of stable manure.

Lubricating Packing.—In manufacturing this improved packing the inventor employs a mandril of any required diameter. Upon this mandril he winds a cord of twisted cotton, which has previously been saturated or covered with a solution of a compound of india-rubber. After the cord has thus been coiled upon the mandril, he coils or winds over the same cotton, yarn, or other suitable twisted or untwisted fiber, which is also saturated or covered with the aforesaid india-rubber solution; the packing thus made may be cut into portions or sections of any required length.

Iron fortifications are being erected at large expense in Germany and Great Britain.

The Swine Yard.

Desirable Qualities in a Pig.

Of all the desirable qualities of a pig, a vigorous appetite is of the first importance. A hog that will not eat is of no more use than a mill that will not grind. And it is undoubtedly true that the more a pig will eat in proportion to his size, provided he can digest and assimilate it, the more profitable he will prove. The next desirable quality is, perhaps, quietness of disposition. The blood is derived from the food, and flesh is derived from the blood. Animal force is derived from the transformation of flesh. The more of this is used in unnecessary motions, the greater the demand on the stomach, and the more food there will be required merely to sustain the vital functions; and the more frequently flesh is transformed and formed again, the tougher and less palatable it becomes. This quality, quietness of disposition, combined with a small amount of useless parts, or offal, has been the aim of all modern breeders. Its importance will readily be perceived if we assume that 75 per cent. of the food is ordinarily consumed to support the vital functions, and that the slight additional demand of only one-sixth more food is required for the extra offal parts and unnecessary activity. A coarse, restless animal would gain, in flesh and fat, in proportion to the food consumed, only half as fast as the quiet, refined animal. To assume that a rough, coarse, savage, ill-bred mongrel hog will require one-sixth more food than a quiet, refined, well bred Berkshire, Essex, or Suffolk, is not extravagant.

Quinsy in Pigs.

I have some pigs not far from two weeks old, that are troubled with a disease I never saw or heard of before. With most of them the front part of their under jaw swells, and a kind of white substance forms around the gums on the outside of the front teeth, similar to a canker, and seems to eat in and then is loose, except the root. I noticed one where this canker was under its tongue, and the tongue was swollen so it hung out of the mouth.

Those that are badly affected are swollen about the navel. The mother to these that were first diseased seemed healthy, and is the fleshiest of any of my brood sows, but only in fair condition. S. N. B.

I know of no other disease that at all simulates yours, but quinsy. True, there is a little more swelling than is usual in quinsy, but upon the whole, I think the above disease is the one upon your pigs.

Treatment.—First, a clean, dry, warm, airy, comfortable place. Rub the throat with oil, 6 oz.; 4 ffs. ammonia, 2 oz.; ether, 2 oz.; mix. Keep well corked, shake, and rub swelling twice a day. If bowels are constipated, give the young ones, three weeks old, ½ oz. epsom salts; the old sow, 2 oz. Let them have all the anthracite (hard coal) screenings they will eat. Wash out the mouths with Tilden & Co.'s Bromo-Chloralum, one to eight of water. Let them have exercise—fresh air they must have or die, also general cleanliness.—*W. H., in Western Farmer.*

Grapes for Hogs.—We should suppose that the flesh of swine fattened on grapes would not be very firm, however acceptable the flavor. The *Ohio Farmer* says: Mr. R. A. Hunt, of Euclid, Ohio, last season fed his swine on culled and rotten grapes from his vineyard, and informs us that they did as well as if fed on corn, and that they ate the grapes with a relish truly wonderful; indeed, so passionately fond of the fruit did they become that corn would be left when grapes could be reached. The swine grew fat very rapidly, and made most excellent pork. Cows will also eat grapes, he says, either rotten or sound, and appear to do well upon them. Mr. H. thinks there is really but little difference as to nourishment between sound and unsound grapes, as, in his opinion, the seeds hold the fat and flesh forming properties.

Prevent Swine Rooting.—If swine are permitted to run at large in the field they should have either a ring in the nose, or have it cut, to prevent them rooting. We have practiced both methods, and found both very effectual. So far as the operation of ringing or cutting is concerned, one appears to be no more severe upon the animal than the other. Clover fields are very often nearly ruined by swine throwing up the plants and eating the roots.

The secret in raising poultry is about contained in these four words, which are light, warmth, cleanliness and wholesome food. These are requisites which no poultry raiser can with safety ignore. It is as necessary to follow hygienic principles in this department as any other, and thereby avoid the ills chickenhood is subject to from careless management. —*Rural New Yorker.*

Instead of using hinged doors as heretofore, English inventors propose to apply to strong rooms or safes sliding doors of great strength, and to move these doors by means of hydraulic pressure, which pressure may be maintained until access is required by an accredited person to the interior of the same. The doors they propose to make of such size and thickness that the mechanical appliances to which burglars resort will be powerless to move such masses.

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

The Sunny South.

Many years have passed since the above title seemed appropriate. For a quarter of a century the darkening curse of slavery hung like a pall over the land. Then followed three years of bloody wartare, during which the smoke of battle shrouded all in gloom; and although with the dawn of peace a glimmering ray of sunshine broke over the fair and goodly land, it was soon shut out, and to-day a dark and threatening cloud envelops the southern sky. The wild and reckless assertions of colored leaders, the desperate attack on the city of Austin, the organization of white lesgues, the destitution in many parts of the South, all tend to and threaten this fearful catastrophe.

The war of the Rebellion would be nothing to this. There was something noble in fighting valiantly for what they believed to be right; but in this war of races, if it comes, there will be nothing noble, nothing grand—all will be ignominious, indiscriminate carnage and slaughter, fire and pillage, and ravage and death. One dark and dense and awful gloom will veil the sky, and one mighty whirlwind of destruction will sweep over the land, leaving scarce a trace of its former beauty and opulence. We all know what ignorance and superstition will do for any class, and especially the passionate, excitable negro. Once on the track of war, nothing but annihilation can stop him; but at what a fearful cost to the white race would this be accomplished. In this hour of intense danger there is one ray of hope, one God-send to the suffering South. It is the Grange. To this we turn as the mariner turns to the beacon light in the awful tempest. All over the South our beloved Order has spread with wonderful rapidity, and to its hallowed and peaceful teachings we look for safety in this hour of imminent danger. Already are the journals of the Order pouring oil on the troubled waters. Brothers and sisters in the once glad and sunny South, we look to you to avert this fearful, threatened calamity. You have means of quick communication, and can secure a concord of action. Labor earnestly, constantly, untiringly to turn back the bloody tide of war which is already setting in. Already your soil has been stained with blood, and the fierce, relentless passions of the blacks are being fanned to a flame. Let your action be prompt, decided, harmonious. If the noble precepts of our Order, its fraternizing, purifying principles prevail in beating back the waves which threaten your already suffering people, then will the Order indeed have accomplished a glorious work for right and humanity.

We are in receipt of a communication from Bro. Hobler, of King's River, in which he suggests that retail stalls be established in the markets for the sale of eggs and poultry. The want of this is certainly felt by Grangers residing in this city. Last week we called on Bro. Hegler for a roll of his beautiful fresh butter and a couple of doz. fresh eggs, but were politely informed that "we don't retail." The deuce you don't," said I. "I want some butter and eggs." "Can't sell at retail." So we had to pack off up town and take what we could get. We believe that a Granger stall in the market here for poultry and dairy produce would do a "smashing" business. Lest the ladies look after this. The brother also suggests that eggs and poultry when sold in large quantities should be sold by weight, so as to encourage the breeding of good varieties of fowls. Another good idea; but this could only be accomplished by securing a concert of action on the part of all dealers, or an act of the Legislature.

Correspondence.—Yuba City, Sutter Co., Cal., Aug. 18th, 1874.—At the meeting of Yuba Cit Grange, held this day, on motion of Bro. J. C. Smith, the Secretary was requested to draft a paper to be read at the next meeting of this Grange, expressive of the sentiments of the Grange in the matter of the removal of Prof. Carr from the Chair of Agriculture in the University of California. Also, that the Secretary give notice through the public press of the action of this Grange in the premises, to the end that all the other Granges in the State may adopt such a course as they may deem proper in this matter, which seems to us to be an effort on the part of said Regents to rob the producers of our State of an educational patrimony given them by the Congress of the United States. S. R. Chandler, Sec'y.

Eden Grange of Haywood's has passed resolutions in regard to the removal of Prof. Carr similar to those passed by other Granges.

Grangers' Homestead Association.

In pursuing this interesting subject, we are gratified to be able to lay before our readers the following communication from Bro. Abbott. We hope all journals favoring the project will give the communication an insertion. We are glad that Bro. Abbott agrees with us that the enterprise should embrace the State and extend its benefits far and wide. The undertaking is yet in its infancy, and we promise to keep our readers thoroughly posted on this important movement:

Editors Press:—Your letter to the Santa Barbara *Press*, inquiring with regard to our "Grangers' Homestead Association," has been referred to me, and in answer I will state that "the purposes for which it is formed are to secure a large body of land, commonly called a rancho, at a low rate per acre, on the most favorable terms possible—divide the same into suitable tracts, to be distributed equitably among the members of this association as homesteads, and to accumulate a fund to pay for the same."

Already a very desirable rancho has been offered to us on the following terms: Ten per cent down, and ten years to pay the remainder, with 10 per cent. interest, payable annually. Other choice ranches will undoubtedly be offered to us on the same terms as soon as it is generally known we are ready to purchase.

The enterprise meets with hearty approval, and before the plan has been matured a company has been nearly filled up with those who desire to purchase land and make homes in one of our most desirable valleys. We are to pay $500,000, and have not allowed the name of the rancho to be published, in consequence of competition from speculators.

There are about one thousand persons a week arriving in California, many of whom are Grangers seeking homes, and have to pay from fifty to one hundred and fifty dollars per acre, when they can save from seventy-five to ninety per cent. in the purchase of land, as good, and quite as well situated, by forming colonies and co-operating in their purchase and settlement. These strangers will be very glad to co-operate, yet they can hardly tell, without acquaintance, who are worthy and well qualified to act as directors and manage the important business of the association. For that reason the Masters of the different Granges in the county have consented to act in that capacity for the first year, until the purchasers become acquainted with each other.

The organization is intended to be general instead of local, and provide for all the immigrants who desire to avail themselves of its benefits. The headquarters should be in San Francisco, as soon as the plan gets into successful operation.

Your assistance so kindly offered, will be very acceptable to those engaged in starting the association, and exceedingly beneficial to those seeking homes at wholesale rates. Through the influence of the Rural Press and the *Granger*, it is anticipated that all of the agriculturists of the State will become acquainted with the design of our Grangers' Homestead Association, in purchasing and settling charming little valleys, now owned in vast bodies, by parties under Mexican grants, called ranchos, formerly of little value, and now in the market at from two to ten dollars per acre.

Fraternally yours,
O. L. Abbott, O. S. G., P. of H.
Santa Barbara, Cal., Aug. 14th, 1874.

Protest.

Protest of W. M. Hamilton to the Board of Regents, against the removal of Dr. Carr from the chair of Agriculture in the University of California. The protest was ignored and the chair declared vacant by a voto of eleven to six.

I protest against the summary removal of Professor Carr at this time:

1st. Because such removal will be in direct violation of pledges made by friends of the University to the House Committee on Education of the last Legislature.

2d. I believe such an act will be in opposition to the wishes of a large class of the friends of the University, viz: the agriculturists and mechanics of California; and will go far to to confirm the belief that the vacating of the chair of Professor of Agriculture at this time, is more to gratify personal feeling than to subserve the public interests.

3d. Because such removal will have the effect of strengthening opposition to the present management and give colour to the charge, now so openly preferred, that the President and Regents are striving to build up a purely literary institution at Berkeley, at the expense of the agricultural and mechanical interests, and are thus diverting the University from the original purpose for which it was formed, by either ignoring entirely or making those objects secondary, which the organic act declared should be primary ones.

4th. Because the summary dismissal of any of the Professors of the University for alleged incompetency, without first granting the accused the privilege of a hearing and an opportunity to defend himself from the charges made against him, is demoralizing in its tendency, and is not in accordance with the principles of right and equity, which should ever prevail in the management of the institution.

J. M. Hamilton.
San Francisco, August 11th, 1874.

Reply to "Granger Legion."

Editors Press:—I observe in the *Call* of Aug. 12th, an article purporting to come from a prominent farmer and a Granger. In the first place, we have serious reasons for doubting the genuineness of said article, from the fact that we believe no true Patron would hesitate to attach his own name to an article claimed to be so entirely in the interest of the farming community, and certainly we think it very culpable in a gentleman who may possibly have been admitted to the Patrons, to set forth his own ideas in the manner he has in the article alluded to, and represent them to be the views of a legion of Grangers. It is barely possible that there are those in the Grange who think as this individual does. If so, it is very evident they are greatly in the dark in reference to the relations existing between them and the house of E. E. Morgan's Sons., and that they have been educated up to such belief by such anonymous letters as the one above referred to, or have taken their cue from the emisaries of those who have formed so strong a combination against us in the past. The writer lays strong stress upon what Mr. Walcott is made to say to a reporter of the *Chronicle* some time ago: viz: that the Ex. Committee of the State Grange agreed to ship all the produce of California through the house of E. E. Morgan's Sons., and this is really the only point in Mr. Somebody's article worth noticing at all, as the other point is only a re-hash of the argument made use of by the old wheat ring, and has been talked about and written upon so much, that I judge every one has become disgusted with the subject. Now, whether Mr. Wolcott did say to the reporter of the *Chronicle*, that the Ex. Committee of the State Grange agreed to ship through the house of which he is the managing partner on this coast, all the produce of California or not, we are unable to say. But we believe him to be a man of too good sense to have believed that they would have been able to do so, even if they did make the promise. However, we happen to know that no such agreement ever was entered into on the part of the Executive Committee; but that they did agree to influence all the Patrons of California that they could to patronize the house of E. E. Morgan's Sons (in consideration of certain privileges granted to them in behalf of the aforesaid Patrons), so long as said committee were satisfied that the above-mentioned house were dealing fairly and justly with them. The safeguards thrown around them to keep them honest—if such guards were at all needed—are very well known to those of the Order who have become sufficiently interested in the Order to post themselves. It is charged by the author of the article above alluded to, that the high price paid for wheat last year is not at all attributable to any one agency. Upon this point we feel compelled to take issue with our worthy brother (as he claims to be), as we feel certain that hundreds of our fellow Patrons will do. It is claimed by that individual that E. E. Morgan's Sons were not operating in the interest of the Patrons, and that last year they would have bought all our wheat at $1.60, if they could. Facts prove the contrary. Individually we know this to be untrue. We offered our wheat to E. E. Morgan's Sons for $2.10 when wheat was bringing that price, but were advised by them to hold on, which we did, and afterwards realized from the same house $2.30 for our wheat, delivered in Stockton; and we can mention scores of others who were advised the same and realized like benefits. We mean to speak well of the bridge that carries us safely over. I. G. Gardner.

Sacramento Grange.

Editors Press:—Last Saturday, August 8th, the Sacramento Grange held another harvest feast, at Pioneer Hall, at which time a class of males and females had conferred on them the fourth degree, becoming true Patrons of Husbandry. As customary, a table was spread and loaded with good things. Fruits of various kinds were dispensed around, including some fine varieties of peaches, raised by E. F. Aiken, "Glen Garden," Sacramento, varieties imported from England and raised in his garden. J. W. Hancock, of American township, Sacramento county, exhibited some seedling peaches, named the "Royal Duke." To add to the enjoyment of the occasion we had as our guest Brother A. D. Nehr, Master of Roseville Grange, and Brother E. G. Morton, Master of the American River Grange, with a large number of brothers from the Roseville, American River, Enterprise and Florin Granges, with their wives, filling the hall as it never was before. One rural member, perchance a Local Optionist, brought with him a keg of Adam's ale, drawn from the "old oaken bucket" as he holds *Sac. straight* with impunity. As the table was too small for all, the gentlemen with gallantry seated the ladies first, after which the "lords of creation" were complimented in return. With good music, songs of mirth, and genial greeting, the hours passed rapidly. All parted feeling better for the re-union, as Patrons of the soil. Yours fraternally,

Sacramento Aug. 12th, 1874. Geo. Rich.

The Grange took action in regard to making arrangements for selecting headquarters for all Grangers that may visit the coming State fair, so that they may have a place to meet and get acquainted, and feel at home. A committee was appointed to make all necessary arrangements. G. R.

Not Disbanded, but Purified.

Editors Press:—So much has been said by the press throughout the United States about the resolutions and disbandment of Good Hope Grange, in McDonough county, Illinois, and so many of our opponents have cited the same as the beginning of more general disaffection and dissolution in the Grange, that the following facts concerning it, direct from headquarters, are highly satisfactory. These facts are copied from a letter sent me by Brother A. Golder, Master of the Illinois State Grange, in answer to one of inquiry about this odd affair. All true Patrons everywhere knew the statements in those remarkable resolutions were utterly false. We *know* that the expenses of the National, State and subordinate Granges, so far from being extravagant, are kept on the most economical basis. We *know* that the benefits of our noble Order very greatly outweigh our moderate expenditures. We *know* that by expending hundreds of dollars, we are annually saving tens of thousands, with the prospect, by harmonious co-operation, of saving still larger amounts, as our work is made more and more perfect. We *know* that the officers of our National and State Granges are not tyrannical and overbearing; but, quite the contrary, gentleness, fraternal regard and sympathy mark all our work. We strive as much as possible to avoid all that is harsh and repulsive. We labor for good and pleasant results, not for evil and disagreeable ones. Yet officers in all such organizations must be firm; and in all gentleness, must require a proper observance of our rules and regulations.

When these resolutions were first scattered broadcast throughout the Union, we knew they were calculated to injure our cause, but we felt facts would at length become known, that would place this whole matter in its true light; and we preferred to await such time. We could not feel that every Grange so unfortunate as to have members who could utter such falsehoods, would be blessed by getting rid of them. And we wish now that every Grange could be purged by dropping from its rolls all who work or talk in antagonism to our interests. We are glad to believe they are few in number, but the sooner we find them out and get rid of them, the better.

But to the statement which shows that the Illinois Grange is not disbanded, but merely purged: Without copying the letter in full, allow me to send you the facts bearing upon this point, as given by Worthy Master Golder. He says the Secretary of Good Hope Grange was nominated last fall for a county office, on a ticket believed to be in the interests of monopoly. An opposing ticket was put in the field, called the Anti-Monopoly Ticket. A large majority of the members voted the latter ticket, causing defeat of this brother who had got on the wrong side of the fence. It is reported that the Secretary has carried the preamble and resolutions in question to every meeting for months, awaiting an opportunity to pass them. They were finally passed at a special meeting. There being a Sunday-school picnic that day, most of the members attended it. Notice not being given to any but the Secretary's friends, that anything of the kind was thought of, only *fourteen* members were present out of a membership of over *a hundred*. *Twelve* of the *fourteen* voted to disband, divide the funds and sell the property. They took the property from the hall. They were informed that the property must be returned. Some time in the night of July 3d, the property was put back in the hall. Bro. Golder closes by saying, "The Grange is in good working order, one of the strongest Granges in McDonough county."

And the question arises, will not this and any other Grange be stronger to get rid of all such untrue, worthless members?

It is presumable that these twelve faithless ones are ruled out by their own action, and have saved their Grange the trouble of expelling them. All papers that have given place in their columns to the bogus resolutions, to show that Good Hope Grange has disbanded, when the truth is that it has not, will please copy these facts. Time is wanting to send a copy to every paper, as much as we should like to do so.

Yours fraternally, J. W. A. Wright.
Petaluma, August 17th, 1874.

Resolutions of Potter Valley Grange on the Death of John M. Carner.

Whereas, It has pleased the Grand Master of the Universe to strike from our roll of membership the name of our young friend and brother, John M. Carner, by removing him from our midst. Therefore, be it

Resolved, That while we bow to the divine decree, we feel that in the affliction we have lost a loved and respected brother; the Grange, a true member; the community, an upright citizen, and his bereaved parents a kind and affectionate son.

Resolved, That we hereby extent our heartfelt sympathy and condolence to his aged parents, and to his friends. To them it is an irreparable loss. They will miss him here and in vain await his coming—forever hushed the dear voice that was wont to greet them so cheerfully. May their hearts be comforted, and may they never lose sight of the promise of a glorious re-union in "that home not made with hands, eternal in the heavens."

A. H. Slingerland, Secretary.

Good Hope Grange.—Alonzo Golder, Master of State Grange of Ill., says that Good Hope Grange—the one over which our enemies chuckled so much as being dead—is now in a better condition than ever before. It numbers over 100 members. How'a this for "Granges bustin' up?"

Legal Forms Necessary in the Organization of Co-operative Companies.

Many letters are received at this office, asking information as to the proper methods of organizing elevator companies, co-operative stores and other joint-stock associations. In answer to such inquiries we present below the necessary legal forms.

The first thing is, of course, an agreement between the parties to engage jointly in business as a corporation, thus:

Articles of Association of the....Company.

The subscribers berehy associate themselves as a body politio and corporate in pursuance of the provisions of the Statute law of the State of ....., authorizing and regulating the formation of stock corporations, and adopt the foliowing general articles of association and agreement:

1. The name of this corporation shall be ..... Company, and its capital sball be ..... dollars, to be divided into ..... shares of ..... dollars eacb.

2. The purpose for whicb this corporation is organized is ..... [Here specify the purpose in full, as for example, "to do business as a co-operative Grange store, and to bny and sell and deal generally in real estate, as may be necessary for the successful prosecution of said business."]

3. Tbis corporation shall bave existence for the term of ..... years.

4. Each subscriber hereto agrees to take the number of sbares in the capital stock of tbis corporation which are set against his name, to be paid for by installments as called for by the directors.

Dated at ....., this ..... day of ....., A. D., 18....

Names of Subscribers,	Number of Shares.
.....	.....

The signers thus become the corporators. They may, if they so chose, take all the stock and afterwards sell it to whom they see fit. The association may be put into working order at once by the adoption of the following article:

5. The following named persons, being *bona fide* stockboiders in tbis company, sball be and are hereby made directors to act in and for tbis corporation for this first year, or until tbeir successors are elected and qualified, to wit:.....and.....

When the company has been fully organized, as set forth below, it is necessary that a copy of the articles of association, properly signed and duly attested, shall be filed (in Sacramento) with the Secretary of State.

The organization is perfected by the election of officers, who are in general a board of directors of, say, five men, a president, a secretary and a treasurer, and the adoption of by-laws which prescribe the duties of these officers, the times and places of holding meetings and elections, and such other matters regarding the business of the association as may be agreed on.

One of the most important officers is the secretary. His first duty is to procure a proper book, and record therein all matters pertaining to the organization of the company, including the articles of the association, the stock subscriptions, the notices of meetings, the election of officers, the by-laws adopted, and all other of the proceedings in order.

From Middletown.

Visit to the Mines — Resolutions of Respect to Judge Stark.

Middletown, August 12th.

This little town is alive with enthusiasm over the bright prospects of the mines in the vicinity. In many of the new ones the ledges are fouud to be very rich, and those companies that have got machinery up are doing very well. I have just returned from a ride with Judge Hamilton, through the American Pine Flat mines. The former have their machinery at work, which gives the place a business appearance, with satisfactory results to the owners. On our drive from this place to Pine Flat, we drove over some of the roughest road thet man ever drove over. This road runs through a mineral belt all the way, and every gulch is ornamented with a miner's cabin, and the face of every hillside shows the mouth of a tunnel.

Pine Flat

Was reached after many jolts, and found to be a thriving little town, built up by one of the richest cinnabar districts in the State. Water here is very scarce. On asking to have our team watered before leaving, we were told it could no be done without traveling a distance of a quarter of a mile; and as neither river nor team could drink whisky, we left as thirsty as we came, arriving home the same day, satisfied with our mining exploits, and almost tempted to give up farming and turn miner.

Guenoc Grange

Met on Saturday, with a crowded house. Some new members were elected and much business transacted for the good of the Order.

After a few brief and appropriate remarks by Mr. J. M. Hamilton, upon the death of John S. Stark, Esq., one of the members of the Grange, the following resolutions of respect were adopted:

Whereas, Since our last meeting the great Master of the Universe has called from time to eternity our beloved brotber, John S. Stark, and passed him, we trust, to a higber degree of enjoyment.

Resolved, That while we deplore the loss of our brother, and shall miss him in our deliberations, and from our social gatberings, still we humbly bow in submission to the will of the Master above, feeling well assured that our loss is our brother's gain.

Resolved, That we mourn with profound regret the severance of the first link in our fraternal chain, and that we extend our sympathies to the bereaved family of our worthy brother, and commit them in this time of their affliction to Him who tempers the wind to the sborn lamb.

Resolved, That these resolutions be spread upon our minutes, and the Secretary be directed to send a copy of them to the family of deceased, J. S. C.

Register.

The Farmers' Warehouse company, at Nicolaus, Sutter county, last week, declared a dividend of $10.80 per share for the first year.

The Solano District Council.

We made a brief mention in our last issue of the important and enthusiastic council-meeting held on Tuesday last, at Snisnn City. The Secretary, Bro. J. M. Jones, has since sent us the following resolutions, which were unanimously passed at that meeting:

Whereas, The large surplus wheat crop of the State, aud the low price now ruling the markets, with prospective low prices, nntil reliable information shall place us in a position to form opinions as to the future; the opposite opinions entertained, and advice tendered to the producer as to his or their policy in disposing of the same, all combine in making the present position of the farmer a precarious one, and call into active play all the energies of the mind, as to the most advantageous course to pursue. Therefore,

Resolved, By the Solano Couuty Conucil, in conjunction with members of Yolo and Napa County Councils, that after a full and fair consideration of the subject of the sale or shipment of our present crop of wheat, we have come to the conclnsion that it will be greatly to our interest to ship a large portion of said crop on our own acconnt to a Enropean market. And that in so doing we believe that it is both our duty and interest to ahip through the house of E. E. Morgan's Sons, of San Francisco. Further

Resolved, That the plan of conduoting our business, as indicated by Bro. A. F. Wolcott, in the matter of shipping and disposing of our grain meets our hearty approval, and we pledge the house of E. E. Morgan's Sons our united support. The same having our entire confidence.

J. C. Merrifield,
R. C. Hall,
Of Solano Co.
N. Wyckoff,
G. D. Stephens,
Of Yolo Co.
Jas. B. Saul,
J. Llewelling,
Of Napa Co.

Notice to Patrons.

A Letter from the Worthy Master of the State Grange.

The following circular from J. M. Hamilton, W.M. of the State Grange, has been furnished to the *Chronicle* for publication:

Guenoc, August 12tb, 1874.

Communications or expressions of opinions in the public prints, purporting to emanate from subordinate Granges or individual members tbereof in regard to business transactions or the proper line of policy to be pursued in carrying out the objects and purposes we have in view, sbould not in any respect be considered a declaration of the policy or sentiments of the Patrons of California.

Our organic law provides tbat in the interim of the meetings of tbe State Grange, the Executive Committee alone are autborized to attend to these matters, and all information in regard to them will be conveyed in proper form to tbe different parties entitled to receive it,

J. M. Hamilton,
W. M. State Grange.

The occasion for the above notice by the Worthy Master need not be mentioned to those who read the papers. The dodge which the old wheat ring has made of securing "Grangers" to write articles calculated to sow the seeds of distrust and uneasiness in the minds of the Grangers is an artful one. Any patron lending himself aud the weight of his title as a Granger to so base a purpose is uot worthy the name of brother and the sooner the tares are separated from the wheat the better for the Order. These individual Grangers setting themselves up as mouth-pieces for the Order, rushing into print with articles which, while they profess loudly to be in the interest of the farmers, contain the poison with which the Grangers are expected to commit suicide—need to be set before the public in their proper light. And this the above notice is designed to accomplish. Why don't these professed friends send their carefully worded articles to one or the other of our Grange papers, the Press or the *Granger?*

But the hook is too poorly baited to catch the true Patron. The Grangers are awake and alive to their true interests. They have suffered too keenly to allow themselves to be deceived by such cunning. How hard it is for these wheat speculators to let go their hold on the farmers! Every device that minds long practiced in the art of deception can suggest will be resorted to and a most determined attack will be made all along the line. But the Granger army is on the alert, its sentries are at their post. And while a spy may now and then enter and a base deserter escape, the grand army, ever watchful, united and strong, will move on to a glorious victory. "Peace hath her victories more renowned than war;" and this will be one of these grand victories. Brothers, remember that "eternal vigilance is the price of liberty." Watch with a suspicious eye everything that comes to you irregularly nnder the cloak of Granger friendship. Keep your eyes open, your minds clear, your faith unwavering, your hearts strong, your ranks closed up and your faces to the foe. Should your leaders err in judgment, as they often will, stand by them, sustain them and help them plan more judiciously Be patient, don't expect everything to be accomplished in one season. Should some of you loose a few dollars by adhering to your plans don't fly to pieces and give your influence against us. Take a long look ahead and above all *stick together.*

Defending the Grange.

A New York Granger, refuting the attacks of Chas. W. Green upon the Order, at the anti-secret society convention, held some weeks ago at Syracuse, N. Y., made this noble defense of the Order, its principles and its officers:

The Order is essentially philanthropic in its origin and modes of working; its founders, among whom Mr. Saunders is the one most widely known, so far from being, as Green represents them, "dignitaries without dignity," "given to vulgarity," and "men who would hardly be received into decent society," are men of refinement, culture and of a most genial and benevolent disposition. So far is it from being true that they have sought to continue themselves in office for the sake of personal gain or honor, that, at the expiration of their first term, all of them withdrew from office, and but two, the secretary and treasurer, would permit themselves to be re-elected. Mr. Saunders, the first Master of the National Grange, refused absolutely a re-election, and when he was compelled by the National Grange to accept the laborious and thankless office of chairman of the executive committee, he put himself under the order of the other officers. The revenues of the National Grange, under the great and healthy increase of the Order, are now of considerable amount, the aggregation of millions of littles; but every dollar of its expenditures being accounted for, and its books are now, as they always have been, open to the examination of every member of the Order. There is no contingent or secret service fund, no money to be used in bribes, or to be squandered by pampered officials or expended for political or other sinister purposes. The salaries of all the officers of the National Grange, though they are the hardest worked men in the United States, are less than those which any wholesale merchant pays to his clerks; and it is true to-day that the salaried officers of the National Grange are poorer than they would have been had they remained in their several previous avocations. The records of any secret society in this or any other country may be searched in vain for a nobler, purer and more patriotic showing than these earnest and patieut men have made and can make of their connection with the National Grange. The whole story of the connection of the Grange with politics and political parties is equally false, and to any member of the Order is perfectly absurd. The constitution of the National, State and Subordinate Granges requires that no political or partisan topic shall be discussed in the Grange, and no rule is more strictly enforced. The members of the Order are from all political parties, and from every shade or section of each, and their political views are never questioned or influenced in the Grange. Belonging to the great agricultural class, it is fair to presume that they will seek to have the State and National legislation such as will promote and facilitate, in the highest and widest sense, the interests of agriculture; and as these are affiliated with all others, they will not probably wrong any others. They are, so far as we know, a unit in favor of honesty, capacity and economy in the management of National and State affairs. But even these principles, against which no sincere patriot can raise any objection, cannot be discussed in the Grange.

Manufacturers and Grangers.

In my opinion, there is no substantial reason why manufacturers should oppose the Grange movement. There should be completo harmony between individuals engaged in making plows and mowing machines and those who have occasion, as tillers of the soil, to use them. And yet individuals engaged in the manufacture of these indispensable farm implements, are out of patience because there is a growing sentiment in the country in favor of the right to buy those implements of those who make them, instead of agents, by paying them an additional fee. This may be a very silly idea, but it is gaining ground, and manufacturers are alarmed. What I ask, and what every farmer should demand, is, the right to go into any establishment where farm tools are made, and buy them at a fair and reasonable price. What gives a man a more contemptible idea of humanity than to be told when desiring to buy directly of the manufacturer, "Oh, we sell through our agent at your place. Mr. Smith is our agent over there, and he has the exclusive right to sell in your town?" In cases of that kind, the manufacturer seems to beuefit whom? Himself aud his agents. The welfare of the farmer is the last consideration. Grangers don't ask anything unroasonable, and they will not ask that long before it will be grauted. It may be true that the idea upou which Grangers base their organization is not absolutely practicable. What of it? If they are half right, and monopolists half wrong, there is an opportunity for reform. A first-class sewing machine costs the manufacturer say $35 to $40, but before I can own one I must pay nearly double that amount. Hundreds, and I may say thousands of sleek, oily-tongued fellows, swarm the country and make their living off the farmers aud the laboring classes. It is time this game was stopped. If I am able to have a farm tool, or my wife a sewing machine, I am able to send or go where they are made and buy them. Farmers and manufacturers should learn to understand each other, and then they will learn that their best interests can best be subserved by friendly co-operation and mutual good will.

W. O. Spenser, Madison county, N. Y.

Wheat Shipments.

The Grangers have made a very good arrangement for shipping wheat with Morgan's Sons. They have no contract, further than that all wheat shipped by them goes through that firm, the Pacific coast representative of which acts as ageut, and for which he receives a commission. The wheat is in the market of the world from the time it leaves San Francisco, and will be disposed of at the option of the producer. The sale will be made at the ruling prices when sold, and it may not be disposed of until it reaches Liverpool. The market may be ruled by a monopoly in this country, but there it will not be subject to any intrigues of such combinations as dally with the producers here. The cost of handling wheat from the time it leaves the farmer until it reaches the market will be one-half saved by this arrangement, and he will have the benefit of a rise in the market, if any should occur; but, at the same time, he must suffer any depression. It is not likely, however, that any depression will happen from the present price, siuce the crop of this year will not have any serious competition in the surplus of a previous crop. All the surplus wheat of last year was called out by the extreme high prices which ruled in the market during the winter and spring, and from this fact it is safe to conclude that prices are uow as low as they will reach.—*Yolo Mail.*

The following quotation from the New York *Herald* concerning the wheat market will interest farmers: France, Germany, Belgium, Holland and the countries bordering on the Mediterranean are nearly bare of stocks, and on this fact it bases the opinion that wheat will command higher prices. The amount needed to supply Great Britain with bread, over and above her crop, ranges from 40,000,000 centals in a good season to 90,000,000 in a very bad one. If we put her necessities this year at the lowest figure, say 40,000,000 centals, it will require more than the surplus of the United States to meet the demand, and if the continental crop is a failure there is no doubt that the market will keep up to the present figures, with a strong probability of an advance.

A Little Tricky. — A delegation of Yolo and Solano farmers secured a small reduction on freights from Woodland and Dixon to Vallejo, from the Central Pacific railroad company. The company, in order to make up for the loss, charge extra rates for towing a ship from Vallejo to San Francisco. This little arrangement makes it worse for the Grangers than it was before. Moral: when you get ahead of the monopoly you can sing, but be sure you've got it before you whistle.—*Yolo Mail.*

Important Meeting.—A meeting of the Los Angeles and San Bernardino District Council was held at Anaheim, on the 11th inst. Seventeen Granges were represented. The meeting was very enthusiastic and unanimous in its action. A full report of its proceedings will be given uext week.

An Eastern exchauge says that the Grangers will be of great beuefit to tho politicians, as they will onable them to wear out their old clothes.

Correction.—Rising Star Grange is in Fresno county, instead of Monterey county, as heretofore published.

Gathering the leaves of the Yerba Buena, to be shipped to New York, and nsed in the manufacture of Dr. Walker's celebrated Vinegar Bitters, was engaged in for a short time, snperintended by Dr. Stamper, residing below Comanche, who had the contract for furnishing the same, giving employment to quite a large uumber of people. The leaves only are taken—bought from the gatherers by the pound when delivered—then dried and pressed into bales, averaging about 300 pounds. The herb is quite plentiful on the hills, and an export picker can make very good wages. Children join in the work, come in with their packs on their backs, and receive their cash, to their great satisfaction. The desired amount being gathered, work has ceased.—*Tehama Independent, August 8th.*

The First Apples.—Mr. Moses Heald, who resides near Colfax, sends to the office of the Press a box of apples, the first offering of this kind that has been laid on its altar this season.

The wheat in the vicinity of Haywood is much shrunken, and the farmers are disappointed in their crops. The barley yield is large and of good quality.

With ninety-five bee-hives to commence with this year, a man in Sepunga cañon has sold 15,000 pounds of honey, at ten cents per pound.

Capt. Luke, who has resided in Central America, pronounces the wild coffee tree growing in Lake county to be a genuine specimen of wild coffee.

Kusel, of Oroville, has a watermelon measuring six feet three inches in length, seven feet in circumferonco, and weighing 125 lbs.

The Stockton *Independent* says that there is no less than 23,000 tons of wheat already stored in that city.

Fruit is said to be going sadly to waste in Yolo county.



Tom Turner.

A fisherman was Tom by trade;
H slept on briny planks;
And though not rich, he often made
A run upon the banks.

On fish he lived from day to day—
Fish caught by his own hand;
And when he did not land his prey,
He did not praise the land.

When he had seen a shoal of shad,
Their struggles were in vain;
The fish might hop around like mad,
And soon they were in-seine.

He led a happy life, content;
He never thought to ream;
And every day he fishing went.
And brought his net gains home.

Tom loved a girl, so tall and slim,
The fairest in the town;
But Sal would not take up with him,
So he was taken down.

By passion's power now racked and worn,
He called on Sal, a swain forlorn,
Led on by love's suggestion.
He found that she was popping corn,
And so he popped the question.

She was the sweetest girl in town,
And playful as a kitten;
For her Tom threw the gauntlet down—
And she gave him the mitten.

Then Tom was mad! He kicked a lad!
His heart was sad! His head was bad!
His language was still badder!
And he who once had lived on shad
Soon faded to a shadder.

To be a man he swore to try;
He left that town of woe;
He went out West to do or die;
He met an Indian six feet high—
Of course it was not Lo!

The Indian saw the Yankee small;
The Yankee saw the Sioux;
At once they knew that one must fall;
At once they both felt to.

The Indian struck a mighty blow;
By Tom's good luck it missed the foe;
The Indian was fortorn.
Tom tried the Indian to lay low;
Tom dropped a rock upon his toe,
And crushed his Indian corn.

The Indian paused; this blow so rude
Had caused him great soticitude;
He thought he would no more intrude;
He thought he'd fly, if none pursued;
The white man next he slyly viewed,
And then began to better.
Tom deemed all Indians copper-hued,
But this one proved a yeller.

Tom seized a log to make a thrust,
To lay the Indian in the dust;
The Indian ran away—
So swift he cut his stick, he must
Have been a Chip-away.

And thus was fought and won the fight,
In which Tom took great pride;
Then home he went to Sally bright,
And won her for his bride:
But on that night his hair turned white,
And staid so till he died. —*Harper.*

Daniel Drew and His Family.

[Written for the PRESS by MRS. C. I. H. NICHOLS.]

"There won't be any apples in my day, and I'm not going to plant an orchard for others to eat the fruit."

"But the children, Daniel, may live to enjoy it, and I would like to have it planted for them."

"Nobody planted an orchard for me, Susie, and if the children want one when they are old enough they can do the work. I've no time to do it, and clear up the land I want to put in crops this year and next. And besides, I've no money to spare for anything that won't pay."

"Here John! bring up the oxen; it's time we were at work on that corn ground."

"Let the man go with his trees, Susie, we don't want 'em."

Daniel Drew and his son John, a lad of ten healthy years, went to their clearing, the latter casting a disappointed, but significant glance at his mother. The tree peddler, as he stepped into his wagon and turned to say good-bye, saw the glance, interpreted the boy's thought and the regretful response in the tear-dimmed eye of the mother as she turned to the house, and springing from his seat he selected four fine apple trees—two early and two late—and made her a present of them, saying, "There, ma'am, cultivate them carefully and in fifteen years you will harvest an average of fifteen to twenty bushels of fruit per tree and have fruit from July to May."

The grateful thanks of the surprised and care-worn woman fully compensated the giver, and he rode whistling away, feeling that it was "more blessed to give than to receive." It was little to him pecuniarily, but much to both in the fine gold of human sympathy. She never met him again, but as the trees grew and bore fruit, the kind deed of the stranger grew out of all proportion; the apples were luscious with remembered kindness. Ah, the power of human sympathy! Could Daniel Drew afford to take in exchange for this tender memory of the woman he loved, in a way, and had bound to him for life—a few bushels of corn and potatoes?—did it "*pay?*"

Susie Drew put her trees in the cellar, and when John had done his evening chores she went with him to the garden and, having chosen suitable places, they planted the trees nicely and wished they knew the name and address of the generous peddler, that they might sometime repay the obligation.

Eight years mother and boy tended and watched with keen enjoyment the growth of their beautiful trees, which had already given them a taste of their quality; but the ninth year repaid their care with a generous crop, and the fifteenth verified the peddler's promise. Meantime John had attained his majority, and yielding to the earnest solicitations of his parents—more than all to sympathy with his mother—settled down on the home farm to care for them while they lived and own the farm at their decease by paying certain sums, as "portions," to his youngest sister—he being the oldest child and an only son. It had been a condition of the arrangement that he might at once make sundry improvements, among them a half-acre inclosure for flowers and shrubbery around the house; and an extensive orchard.

"Somebody will enjoy and profit by the fruit, if I do not live to," said John, "and cultivating and watching their growth will do us all good, mother. You and I grew to be more to each other in planting and tending those trees in the garden together." "Yes, John, but I've always regretted that your father took no share in our interest in them. I cannot help it, but it hurts me to think of him in such niggardly contrast with the stranger who gave them to us."

"I know, mother; but it taught me my life lesson. It set me to thinking how little of human sympathy it takes to make friends of strangers even, and keep their memory warm; while the nearest kin, without such sympathy, are as widely separated in spirit as if they were indeed strangers. Father's highest personal ambition and the one controlling purpose of his life has been to acquire a large farm well stocked and cultivated. He has succeeded, but in doing so has impoverished his own soul, and driven his plow-share through your heart and mine; recklessly—it may be unconsciously—tearing up many a blossom of sweet promise, and laying bare the rugged sub-stratum of our work-a-day life. He has taken no time to read, no time to think, except of ways and means to make the most profit out of his labor and his self-denials—if sacrifices demanded by purely selfish ambitions can be regarded as denials of self. As a rule, in all these years, father has come in from his day's work too tired to enjoy anything but sleep, and risen in the morning intent only on getting all the work possible out of himself, his team and the rest of us, at the least possible cost for keeping. Not that we have been stinted in comfortable clothing or wholesome food. But any extra expenditure for the simply becoming in dress, he has denied us as foolishness; and any appetizing variety in food, that was "money out;" and products of the farm, that were readier of sale, or brought a higher price, as eggs, chickens, butter and choice cuts of slaughtered animals, have been seldom on our table, so that company, as an excuse for table luxuries, has often been a god-send. He "couldn't afford" us a weekly newspaper, till he found he had lost $20 on a single clip of wool by his ignorance of a rise in the price, which his neighbors realized through information in the price colums of the *Recorder*. You know all this, mother, and that he has taken no recreation of body or mind in the social reunions that invigorate both, and develop the kindly sympathies that practically establish the brotherhood of men. Under these unnatural conditions, our enjoyments as a family have been volunteer growths, or cultivated by stealth and with a tacit understanding that to save them from confiscation or, at the least, from depreciation, they must not 'get in father's way.' Mother! I resolved years ago that with God's help my manhood should not, like my boyhood, be fettered in the legitimate use and enjoyment of His gifts; that my home should be a home for the beautiful, the lovable, the enjoyable; that I would not be starved in my sympathies or mocked in my intellect by the shadow of the "almighty dollar," neither should my wife be with my consent; nor my children, if I have any to rear and educate. And I am going to begin with my sisters; with your consent and co-operation, I feel sure. Mary and Sue must attend the academy a year or two. They can board with Aunt Jerusha. She says it is just the thing all round, for she would like the girls' company and wants our butter and eggs and other farm produce, and you know we can have them at home Saturdays and Sundays."

"But, John, your father will never consent. He says a common school education is all a woman has any use for, as men do all the business. And the girls, you know are up with their teachers in all the common school studies. Lawyer Merriam said the examining committee would give them first-class teachers' certificates if they wanted to teach."

"I know, mother, but I have talked over all my plans with father. He is not afraid that the property will depreciate in my charge; and I stay on condition that I may carry out my views of life and labor, only I am not to expect him to turn '*book farmer*' or '*book worm*.'

"And mother, you must have a good, strong woman to do your hard work and give you time to read the magazines and newspapers, and books of history and science, which all your life you have regretted as lost opportunities. If father had read more he would know that women have already extended the lines of their sphere around all the 'learned professions,' and that business in the various departments of commerce, manufactures and the arts, is falling into their hands as fast as they are educated to take it; and there is hardly an honorable career in art, science, finance, agriculture or the professions, which is not inviting women, educated and qualified by natural gifts, to its pursuit. And from the very first, widows and other single women have been eligible under the laws of the States, to administer on estates and act as guardians of the property and persons of minor children. And to discharge the duties of these positions properly, they must have the education which such business requires. Many a widowed mother, who understood her husband's business well enough to to have carried it on successfully and met all the liabilities as they became due, or to have settled and closed it up without waste, being ignorant of probate forms and liabilities and the laws of estates, (the State by the way wickedly and insanely *compelling* the probating of estates of deceased husbands, thus breaking up the business and the family), is swindled by probate officials and advisers, out of her own and children's bread.

"The thorough education of women is surely coming, and will precipitate other and much needed domestic and political reforms. The State is the fountain of which the homes are the head waters, and society is made up of the organized elements of both. Uneducated women are not fit helps and companions for educated men; who, if they have not intelligent society in their homes, will generally seek it elsewhere and often in saloons and other public haunts, unsafe for good habits and good morals.

"I read not long since in a newspaper published some thirty years ago, of an Indian delegation—of the head men of their tribe—urging upon the committee on Indian affairs at Washington the establishment of schools for their children of both sexes. Said their chief speaker: 'We made a mistake in sending our *sons* to your colleges to be educated. They returned and married among their own people; the children took after their ignorant mothers; the fathers lost interest in their families and became reckless of decency and position. If we had sent our *daughters* to your schools'—added this delegate from barbarism—'they would have educated their children, and we would now be an educated people.'

Every woman should have education enough to understand and take a lively interest in the current literature, scientific reports, general legislation, and social and political movements of the day. With such an education, in common, parents would be brought into nearer and more enduring companionship with each other, and the home would be a training school for the children; the parents being, in relation to their servants and children, advanced scholars teaching as they study, read, discuss and explain; and in many instances communicating through the press words of cheer and information. But, mother dear, the cows have come and we must finish our conference to-morrow."

And space admonishes me, that I must defer further report of John Drew's plans and their execution to a future page of the RURAL. But as something may happen—Mary Mountain for instance get in our porridge dish—I will add as a practical comment on the opening words of this paper, (have you forgot them?) that Daniel Drew lived to eat of the apples grown in the orchard of John's planting, and died at 75 years of age, a cider drunkard—never till the intoxicating beverage could be had without *cost* having indulged in even a temperate use of ardent spirits.

MASKS AND FACES.—A nobleman once gave a grand feast to some of his friends. While his visitors were sitting at the table, there came into the room a little lady and gentleman, most splendidly dressed, wearing a mask, but no taller than children of five or six years old. The gentleman wore a scarlet coat, trimmed with gold lace; his large curly wig was powdered so as to look as white as snow, and in his hand he held a cocked hat. The lady had on a dress of brocaded satin, trimmed with silver spangles.

She wore a beautiful little hat and feather, and held a fan in her hand. They began dancing very gracefully, and sprang about in such a charming way that everybody was delighted with these pretty, well behaved children.

An officer who was dining there suddenly took a rosy apple from the table and threw it between the pretty dancers. Then there did begin a scuffle and a to-do. They fell upon each other, tore each other's cloths, scratching and scrambling, till off fell masks and headdress, and instead of two pretty children, two ugly monkeys stood before the company. Everybody was surprised, yet laughed aloud, but the old officer said, "Monkeys and foolish people manage to look well for a time in fine clothes, but they soon show what they are." —*German Fable.*

A TEMPERANCE meeting has decided: that whisky is the key by which many gain an entrance to our prisons and almshouses; that brandy brands the noses of all who cannot govern their appetites; that wine causes many a man to take a winding way home; that punch is the cause of many unfriendly punches; that ale causes many ailings, while beer brings many to the bier; that champagne is the source of many a real pain; that the reputation of being fond of cocktails is not a feather in any man's cap.

A Bohemian of Old.

An eminent runner after news in Paris was named Mathieu Donzelot, otherwise called the "Pavement Sinker." In the morning, before leaving his room, the wide awake Donzelot consulted the skies, and a barometer which adorned the mansard: then he took his cane, a writing case, saying "Rain! Some will slip to-day under carriage wheels, and be crushed to death;" or else "stormy weather! We shall have to record some cases of mental alienation or of hydrophobia." Or finally: "Gloomy! cloudy! Fine weather for spleen. Let us make war on suicides!"

There was a riot one day in Pantheon place. Donzelot sat down amid a hail of stones, pen in hand, to note down the events. One of his friends said, "What are you doing here, sir? Run! fly."

Donzelot, without looking at him, drew out his watch, and continued to write down minute for minute the phases and evolutions of the riot.

"Are you not going to run?" cried anew his friend.

"God forbid; but since you are going yourself, oblige me by handing this to my journal; you will tell them that I remain on the spot to send the continuation."

An hour after, the disorder was at its hight; the authorities and insurgents had come to blows. The National Guard fired, and our Bohemian was struck by a ball. A surgeon hastened to him.

"You are wounded?" said he.

"Yes," replied Donzelot, "and severely, too, for I cannot write."

"Write!" abruptly said the surgeon; "think of your wound."

"Don't be in a hurry," replied Donzelot. "Each one to his business; mine is to relate events. You will replace me. Here, write at the bottom of this postscript:

"'20 minutes past 3 P. M.—In consequence of the discharge of musketry by the troops three men were wounded and one killed.'"

"Who is the dead man?" asked the surgeon.

"Myself," replied Donzelot, and he expired.

Brightness versus Goodness.

Old and New touches a tender spot in many parents by the statement which contains the truth, the whole truth, and nothing but the truth:

One of our most distinguished teachers says that, in the case of two thousand or more boys who have passed under his care, no parent has ever forgiven him if he said, "Your boy is not quick or bright, but he is thoroughly pure and true and good." They did not forgive him for saying so, because they took it for granted that the goodness could be attained in any odd hour or so; but the brightness or quickness seemed of much larger importance. On the other hand—if the teacher said, "Your boy learns every lesson, and recites it well; he is at the head of his class, and will take any place he chooses in any class"—nine parents, he says, out of ten, are satisfied, though he should have to add, "I wish I were as sure that he is as honest, pure and unselfish; but in truth the other boys do not like him, and I am afraid there is something wrong," To that warning, he says, people reply: "Ah well, I was a little wild myself when I was a boy. That will all come right in time." "Will come right," as if that were the one line of life which took care of itself, which needed no training; the truth being, that this is the only thing which does not come right in time. It is the one thing which requires eternity for its correction. If the work of time has not been eagerly and carefully, and with prayer, wrought through.

THE FATHER AT HOME.—Some of the best husbands and fathers whom I know have some one or more evenings which they assign to home-life. They consider themselves engaged to spend such allotted hours with their wives and children. Why not? What earthly obligation is more sacred? What claim or engagement should interfere with it? Moreover, these model husbands and fathers are always inventing topics for games, or occupation that shall make the time they spend at home as pleasant and instructive as possible. Why not? Should a man devote all his genius to making money, or sermons, or lectures, or editorials, or inventions, and never try it on home-life, on the nature of his children, on the comfort of his wife? There are various opinions about what is the great question of the day. I think it is the home question. And our homes are to decide the future of American civilization. Let us look to them. —*Christian Weekly.*

THE following style of parlor ballad is very good, but it is often excelled in ridiculousness by the quartettes of some of our modern church choirs:

Deserted by the moon, the harper, sick and sore,
Salutes the gloomy castle-gate—"What, ho!"
And held brave knights, assembled—by the tail—
And held his tail—his tail he held—
Held by his tail—he held his tail—
Enraptured by his tail—he held his tail—
His wretched tail he held—he held his tail—
Brave knights his tail held—held his tail—
His tail—enraptured—
Brave knights assembled from the war,
Enraptured by his wretched tale of woe!

NO MAN is so foolish but he may give another good counsel sometimes, and no man so wise but he may easily err, if he takes no other counsel than his own. He that was taught only by himself had a fool for a master.—*Ben Johnson.*

Human Weeds.

There they are, growing as luxuriantly in the filth of the gutter, as the finest exotic in a lady's dressing-room; and though they are neither pruned nor tended with loving care, and certainly seldom "watered" yet they do not pine under their neglect, but, like genuine weeds, grow the stronger the more they are trampled on.

These weeds, reader, are simply boys and girls, children of ignorant, careless or improvident parents, who have left their offspring to the training of the streets, and the educating influences of the corner grocery. Ragged, unkept, uncombed, and so begrimmed with dirt and filth, that the only marvel is, how any more could possibly stay on. What wonder is it, that these unfortunates should become like the weeds they so closely imitate—bitter, sour, noxious, and altogether repulsive.

The youngest of those waifs of humanity was not long ago a baby; in fact, is not much more now; with bright blue eyes and fair golden hair. Did his round limbs ever glow from a bath, or was that silken hair ever turned around a mother's fingers, to fall in tiny curls about his face? If so, it must have been at a very early age indeed, for there is not a trace of such care now. The golden locks are in a hopeless tangle; the body, face and limbs are so incrusted with dirt which has been deposited there so long that there remain but little traces of the flower that once began to blossom, which now is a stalwart weed.

Poor, blind, ignorant parents! In a few short years, these buds that took root by your fireside, and would have blossomed there into flowers of use and beauty, had they been nourished and guarded with proper care, will have grown strong on the filth and the poisonous airs of the streets and alleys into which you thrust them; and they in turn will bear fruit which will be as bitter to your taste as it will be obnoxious to others. "As ye sow, so shall ye reap;" and if the human plants you have sent out into the world become poisonous cumberers of the soil, instead of what nature intended them, useful, healthful or beautiful, you have only to attribute it to the soil in which they were planted, and the influences with which you have surrounded them. Street education, the slang of the saloons and greg-shops will not be likely to develop a child into a pure, upright, intelligent citizen.—*Dora Darmoore in Oakland Homestead.*

THE WAY TO CONQUER.—"I'll master it," said the ax, and his blows fell heavily on the iron; but every blow made his edge more blunt, till he ceased to strike.

"Leave it to me," said the saw, and with his rentless teeth he worked backward and forward on its surface till they were all torn down or broken; then he fell aside.

"Ha! ha!" said the hammer, "I knew you wouldn't succeed; I'll show you the way;" but at his first fierce stroke off flew his head, and the iron remained as before.

"Shall I try?" asked a soft, small flame. But they all despised the flame; but he curved gently round the iron, and embraced it, and never left it until it melted under his irresistible influence.

There are hearts hard enough to resist the force of wrath, the malice of persecution, and the fury of pride, so as to make their acts recoil on their adversaries; but there is a power stronger than any of these, and hard indeed is the heart that can resist love.

A FRENCH gentleman, having received direct from Martinique a small box of coffee, invited some friends to dinner, solely with the object of letting them taste the infusion of the famous berries. On the renowned coffee being served, every one was delighted with its delicacy and aroma. "Ah, my friends," cried the host, "What a fortunate country is Martinique! A soil which can produce a beverage like this must indeed be blessed!" At this moment the footman entered the room. "Excuse me, sir," said he to his master, "but cook wishes me to say that, as you forgot to let him have the coffee for the evening, he sent for half a pound to the grocer's." Tableau!

SIR GEORGE ROSE being introduced one day to two charming young ladies, whose names were Mary and Louisa, he instantly added with a bow, "Ah, yes! Marie-Louise—the sweetest pear I know;" a compliment almost worthy of being coupled with that most beautiful one of Sydney Smith, suggested by the sweet-pea. A young lady walking with him in the garden paused to examine a favorite flower, on which she had taken great pains. "I am afraid, Mr. Smith," she said, "that this pea will never come to perfection." "Then allow me," taking her politely by the hand, "to lead perfection to the pea!"

CHEERFULNESS is an excellent wearing quality. It has been called the bright weather of the heart. It gives harmony to the soul, and is a perpetual song without words. It is tantamount to repose. It enables nature to recruit its strength; whereas worry and discontent debilitate it, involving constant wear and tear.

A VERMONT debating club is now struggling with the question: "Which eats the most chickens—ministers or owls?"

A TOAST.—Woman: the last and the best of the series—if we may have her for a toast, we won't ask for any but-her.

ORANGE peel is often the power behind the throne.

YOUNG FOLKS' COLUMN.

Grandmothers.

Grandmothere are very nice folks,
They beat all the aunts in creation;
They let a chap do as he likes,
And don't worry about education.

I'm sure I can't see it at all,
What a poor fellow ever could do
For applee, and pennies, and cakes,
Without a grandmother or two
Grandmothere have muffins for tea,
And pies, a whole row, in the cellar;
And they are apt (if they know it in time)
To make chicken pie for a "feller."

And if he is bad now and then,
And make a great racketing noise,
They only look over their specs,
And say, "Ah those boys will be boys!
Life is only short at the best,
Let the children be happy to-day."
Then they look for a while at the sky,
And the hills that are far, far away.

Quite often, as twilight comes on,
Grandmothere sing hymns very low
To themselves as they rock by the fire,
About heaven, and when they shall go.
And then, a boy, stopping to think,
Will find a hot tear in his eye,
To know what will come at the last—
For grandmothers all have to die.

I wish they could stay here and pray,
For a boy needs their prayers every night,
Some boys more than others, I 'spose;
Such as I need a wonderful eight.

George's Rocking Horse.

When George was five years old, his uncle gave him a rocking-horse. It was a very large horse, almost too large for a small boy; but George liked it all the better for that.

It pleased him greatly for a while; but when he got to be eight years old, and had been on a visit in the country, and had had a ride on a real horse, the rocking-horse began to lose its charm for him.

There was a way, though, to have fun out of it still; for George had some young friends, smaller than himself, to whom such a famous rocking-horse was a great delight.

George took much pleasure in showing it to them. One day, he invited Tom Wilson, Charles Brown, Sam Howard, Willie Thompson and Fred Wilkins to come in and play with it. George meant to give all a ride; but he found he had invited too many boys for one horse. There was a dispute at once as to which should get on first, and, to settle the question, George had to mount the horse himself.

Then there was a scramble for the best places on the rockers. Fred Wilkins secured the hind-rocker; Charles Brown seated himself very comfortably under the horse's hind-legs; George's little sister Mary, not to be out-done, left her picture-book on the floor, and took her place under the horse's fore-legs.

The only place left was the front-rocker. Tom Wilson and Willie Thompson both made a dash for that. Tom got it first; and then Willie, who was a little out of temper, tried to push him off.

Just then, George started his horse with a shout; and before Willie could get out of the way, the rocker came down with full force upon his toes. It made him whimper a little; but, for my part, I think it served him right for being so rude.

All this time, Sam Howard, who was a very modest boy, had stood quietly looking on. Seeing that Sam was completely crowded out, George got off the horse, and told Sam to mount in his stead, which he did; so the boy who was least selfish had the best place after all.

But Sam would not keep the best place all the time. He let the other boys take it, each in turn; and so they all had good fun.

THE GIFT OF THE NILE.—Did you ever hear that rivers made presents to the world? I never heard it till to day. The land of Egypt was a gift of the river Nile. It was in this way: Once this country, now so fertile, was nothing but a barren desert, like that of the Great Sahara, which lies near it. The river Nile had to flow through this desolate country to get to the sea, and every year brought down from the rich land of Abyssinia as much fertile soil as he could carry, and, overflowing his bank, spread it all over the sandy desert as far as he could reach. By doing this year after year, he turned the desert into a fruitful land. Sometimes he would bring down so much rich soil that he would have more than he could spread on the sandy plain. This he would take down and drop into the sea, until at last, in the course of ages, he has built up here a triangular piece of very fertile land, called the delta of the Nile. The whole has formed a very rich present to the world.—*Jack in-the-Pulpit, St. Nicholas.*

A SCHOOLBOY, being requested to write a composition upon the subject of "Pins," produced the following: "Pins are very useful. They have saved the lives of a great many men, women and children—in fact, whole families." "How so?" asked the puzzled teacher; and the boy replied: "Why, by not swallowing them." This matches the story of the other boy who defined salt as "the stuff that makes potatoes taste bad when you don't put on any."

WHENEVER you see a small boy emerging from the house with his left arm shading his eyes and the other smoothing the basement of his trousers, it is safe to arrive at the conclusion that he has been chasing the bootjack around his father.

GOOD HEALTH.

An Antidote for Mercury and Lead Wanted.

Many of our Western and Southern doctors pour in the calomel and blue pill for almost everything, as freely as the profession used to do in former times. Since this is so, and since the other medical schools have not yet furnished a practical substitute for mercury, the great want in medicine is a counteractor for a remedy often as bad if not worse than the disease. Chemistry and experiment must help the doctors, and still more the sufferers from mercurialization, if it be possible. Chemists and physiologists long ago found two, and only two, efficient agents, capable of rendering mercury in the system harmless; and these two substances, namely, iodine and sulphur, happened also to be the best neutralizers of another common cumulative poison, lead. But the difficulty was and is to cause the assimilation of iodine and sulphur, or either. Sulphur is nearly insoluble in any menstruum capable of being taken into the stomach. Iodine is very soluble in alcohol, oil, etc., and even in water to some extent, but largely soluble as iodide of potassium, a drug now used to excess. Unfortunately this iodide, also the tincture, are but slightly assimilated, passing off by the bladder. The small amount of iodine contained in that well known organic substance, cod liver oil, would be likely to prove more effective as an antidote to lead and mercury than a large quantity of iodide of potassium, because the organic oil enters into the blood and tissues. We put forth the suggestion that some vegetable may be found which is rich in iodine, also other plants, and harmless ones, may contain sulphur in an assimilable shape, for sulphur is an exceedingly common element of organisms in general. If we could have strong extracts of such plants, the object spoken of would be accomplished. In that case, our calomel givers could salivate their patients to their heart's content, and have them live through a dozen courses of mercury, a matter of profit and pleasure to every regular doctor.

Thousands of cases of chronic rheumatism, as well as consumption and other fatal diseases, have been traced to the use of mercury. Lead poisoning has become alarmingly prevalent of late years, producing colic, constipation, hardened liver, neuralgia, nervous dyspepsia and paralysis, which sometimes attack people in the prime of life. We will not discuss the question of lead in water pipes farther than to observe that every decent chemist knows that pure water acts on lead with astonishing quickness. To have water pipes, as used at present, coated internally with a sulphide or sulphate seems to be the only good practical preventive of lead poisoning. But in the case of lead pipes kept for weeks in hogsheads and barrels of ale and cider, there the solubility is certain and its effects destructive or pernicious to no small degree. Such dangerous nuisances should be abated by law. Again, soda fountains where the water, highly charged with carbonic acid, acts on lead, and sometimes on copper in old fountains, are things deserving of legal attention. Many of the hair dyes in market, and some of the cosmetics, are well proven poisons.—*Scientific American.*

DIGESTIVE POWERS OF A SAILOR'S STOMACH. An American sailor, named John Cummings, died in 1808, in Guy's Hospital, London, under the care of Dr. Currie. The post mortem examination verified his statements, which the doctors could before scarcely believe, that his disease was due to his repeated exploits of swallowing knives, from the effects of which he had been sick for three years. The first time he swallowed 14 knives, became sick, but recovered, and commenced again, betting from time to time on his bravado exploits. While a prisoner on an English ship, in 1805, he swallowed 17 knives in two successive days; but this appears to have been too much, and after long suffering he died. Fourteen of the knives were found in his stomach, but, strange to say, partly digested, the iron parts as well as the horn handles; the silver mounting, however, was scarcely touched. The stomach itself was not at all injured; he had a good appetite to the last, and his sickness and death were alone caused by the haft of a large knife becoming fixed across the intestines. This shows that the gastric and other juices of a healthy stomach have the power to dissolve finally not only horn and bone, but even iron and steel, but not silver.

DOCTORS.—We do not agree in the view that the physician will ever become a useless member of society, for the simple reason that, instead of decreasing the share of his duties, the culture of preventive medicine—of the knowledge of how to prevent diseases as well as to cure them after they are engendered—must tend to amplify and enlarge the same. His will be the task, not merely to recognize the forms of ills and endeavor to combat their effects, but to look into the future and, through the aid of all circumstances of the present, predict possible evils and point out means of defense. Add to this the constantly increasing knowledge of drugs and their properties, of the wonderful relations of mind and body, of the nature and habits of disease, which science is rapidly developing, and the physician of the future has before him not a narrower but a far wider field for the exercise of his skill.—*Sci. Am.*

Sun-Baths.

These cost nothing and are the most refreshing, life-giving baths one can take, whether sick or well. Every housekeeper knows the necessity of giving her woolens the benefit of the sun, from time to time, and especially after a long absence from the sun. Many will think of the injury their clothes are liable to from dampness, who will never reflect that an occasional exposure of their own bodies to the sunlight is equally necessary to their own health. The sun-baths cost nothing, and that is a misfortune, for the people are still deluded with the idea that those things only can be good or useful which cost money, and they will cheerfully pay away their dollars, for Turkish and Russian baths, when they could get any number of sun-baths, which would be far more beneficial to them, for nothing.

Let it not be forgotten that three of God's most beautiful gifts to man—three things most necessary to good health—sunlight, fresh air, and water—are free to all; you can have them in abundance, without money and without price, if you will. If you would enjoy good health, then see to it that you are supplied with pure air to breathe all the time; that you bathe for an hour or so in the sunlight; that you quench your thirst with no other fluid than water.

In regard to sun-baths, let any invalid who reads this, and who has been housed for some time, take an occasional walk in the sun, if it should be only on the piazza, and observe the effect. In our opinion he will find it the most healthful bath he has ever taken. Sleeping rooms should be selected in such parts of the house as have the most benefit from the rays of the sun. The bed and bedcloths should be aired and kept in the sun as long as possible every day. Many of the sleeping-rooms in the hotels are so situated as never to feel the sun's rays, and those who occupy such rooms for any length of time are simply committing suicide.—*Household.*

SHORT-SIGHTEDNESS is a malformation of a somewhat serious nature, as short-sighted eyes are diseased eyes, and they require special treatment. Never allow a child or friend thus afflicted to fall into the hands of "traveling quacks," or those who make loud claims to optical knowledge. In all large cities there are reputable medical gentlemen who make a specialty of the treatment of eye affections, and they are the proper persons to consult. It cannot be too universally known that short sight tends to increase; and that if it increase at all rapidly, it tends also to destructive changes, and therefore it is an affection which requires prompt attention. Perfection of sight is essential to our welfare and happiness, and any one who neglects those precautions upon the observance of which its preservation depends, will find cause for deep repentance in later life. Young men and young women who suffer themselves to fall into the habit of reading by fire-light, or at a window by the waning light of evening, or at a considerable distance from lamps and gas-burners, are guilty of acts for which they must suffer. Parents should promptly interfere to prevent the formation of such dangerous habits.—*Boston Journal of Chemistry.*

HYDRATE OF CHLORAL IN HOOPING COUGH. Dr. Bordley commends chloral hydrate in hooping cough. The dose, of course, must be regulated by the age of the patient and the severity of the attack, care always taken to observe the peculiar susceptibility in each individual case; as some children are much more susceptible to its action than others, as much so as is the case with opium and its preparations. He commences with a half grain for a child one year old, and increases half a grain for each additional year, and repeats every three or four hours. After noting the effect of that dose, he increases it from a half to one grain each day, according to the severity of the attack and the peculiar tolerance of the medicine. The "compound syrup of sarsaparilla" is a good vehicle for its administration, as it masks the taste and destroys the pungency of the chloral effectually.

GOOD LIVING.—Privation of food, not of quality, to some men who gain their living by literary pursuits, is most trying. Mental labor after a certain period of life, even to those not fastidious, requires a certain kind of pabulum. The steam will not rise, the brain mechanism will not work, without the proper fuel. Some men's capacity could be gauged by what they eat. Suppose Thackeray put for a year or two on a regime of corned beef, Dickens on a diet of bacon, or Bret Harte on a fare of scrapple, and it is questionable whether "Henry Esmond," or a "Tale of Two Cites," or the "Outcasts of Poker Flat," could have been written.—*N. Y. Times.*

PARIS GREEN.—As an antidote for poison, the free use of milk as a beverage is recommended, but hydrated peroxide of iron is better. Sores caused by the green should be well covered with this, as with an ordinary salve, and a teaspoonful in a wine-glass of water should be taken twice a day, internally, while working with the green. This remedy can be obtained from any druggist or chemist.—*Journal of Chemistry.*

COOLING DRINKS.—Infusions of flaxseed and bran and sage seed are recommended as forming very agreeable and useful drinks in fever, and their diaphoretic powers may be increased by the addition of the sweet spirits of niter or antimonial wine.

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SAN FRANCISCO:

Saturday, August 22, 1874.

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Street Traffic of London.

It is estimated that one million persons enter London, the great commercial metropolis of the world, every business day of the week, and leave again for their homes in the suburbs or in the country, every evening. One million persons represent a number equal to the entire population of California, whose locomotion must thus be provided for to their places of business and back, six times a week. No doubt a much larger portion of this number make their way on foot than would be found doing so in any American city of large extent; but a larger proportion also employ private vehicles and all moving over pavements than would be employed to accommodate the same amount of traffic in an American city. Twelve years ago it was estimated that something over 60,000 vehicles entered and departed from the city every day. By reason of the more recent and general introduction of cars—steam and horse—the number of vehicles has not increased since that time in proportion to the amount of travel; but still the number of vehicles passing through the main thoroughfares is immense, and causes much inconvenience and delay by street blocks and general crowding by constant passing and repassing. New expedients are constantly being devised to relieve this increasing pressure of street traffic, among the more important of which are new railways—generally steam railways conducted over the tops of houses or through underground tunnels—new police regulations, and new and wider streets. Yet the difficulty of solving the problem must be obvious from the mere statement of the case, and the constantly advancing ratio of increase in population and volume of business. The same problem has already become an almost insoluble conundrum as applied to the great commercial metropolis of the new world.

A Little More Coffee.

This coffee subject must not be hurried. It requires a good, thorough steeping; but should not be allowed to boil, and if, while the pot is steaming over the fire, the odor of the beverage should be offensive to certain parties, they should not be allowed to toss it out of the window. On the other hand, those who are at present indulging somewhat intemperately in wild coffee should admit reason and common sense at the table.

This is apparently becoming one of our local issues; and it would seem as though the papers throughout the State felt called upon to define their position, and take their stand either for or against the wild coffee. The RURAL PRESS has opened its columns to both parties, and has probably never been accused of having an ax, or any coffee, to grind, in connection with the matter. Those who have brought in their free will offerings of wild coffee have met with civil treatment, as we did not feel justified in pronouncing the whole thing a "humbug," though it was evident that undue importance was attached to the supposed discovery, and there was a probability that it would prove an utter delusion. But delusions and humbugs are not of the same class. The subject is an interesting one, to say the least; and we apprehend that it will not be staved off by any scientific disquisition or by ridicule. The question has not had its day. Parties who are making observations on wild coffee, if they are in earnest—and some of them undoubtedly are—will not be satisfied until they have made experiments in grafting, and it may possibly lead to planting the genuine tree in California.

The area of coffee growing is extending; and may possibly reach California. The introduction of this plant in south Africa is of a quite recent date. As recently as 1867 there were only three hundred weight exported during the first nine months of that year. In 1872, however, it had increased so rapidly that there were no less than seventy-eight plantations in the English colony of Natal, in that country; and since then many plantations have been opened. Much doubt existed at first, if indeed it has yet entirely died away, as to whether its cultivation would prove profitable. Natal is the only country in the world where sugar and coffee may be grown on the same estate. This, added to the lamentable failure of the first pioneers, made people very doubtful of its ultimate success. Many causes combined—as they also did with sugar planting—to render those who first embarked in it unlikely to succeed; want of knowledge and want of money being the most conspicuous. The growing bushes required a large amount of manure, and this had to be purchased, as very few cattle were then kept there; but the purchasing and stocking of grazing grounds has been advised. By this means a supply of manure will be secured, while the substantial benefits derived from beef-raising and dairying will become important auxiliaries to coffee growing, and will enable the people to live independent of it, should this product be unremunerative.

Those, therefore, who are now a little wild on the subject of wild coffee, will be enabled to realize that California coffee growing is far off in the dim future, if it is not really among the impossibilities. But even if it should prove a delusion, it is a harmless one, and probably it will end without anybody being seriously hurt.

Our readers will find in our correspondence department of this week two more communications on the subject of wild coffee. One of these, it will be seen, treats the matter botanically, the writer declaring the supposed coffee bush a buck thorn. Another communication on the subject was received, the writer taking precisely the same view of the subject as the one alluded to above—pronouncing the bush a buckthorn; but as the ground was pre-occupied the last one was omitted.

One of these correspondents considerately sent us some of the dried pits of the berries. We took a hint from this, reasoning that if the proof of the pudding is in the eating, the proof of the coffee should be in the drinking. We accordingly roasted and ground these pits and made from the material a cup of coffee—or buckthorn, if botany so decides—treating it in every respect precisely as we would the genuine article of commerce. The assertion of one of our correspondents, that "the buckthorn is an active, griping cathartic," did not intimidate us; we rather gloried in the prospect of a mild case of journalistic martyrdom.

How did it taste? It had a pleasant, wholesome taste, with a flavor decidedly coffeeish. The aroma was not as strong as that of the genuine coffee, but it was quite agreeable. It was tasted by different parties, some of whom have been intimately acquainted with the coffee of civilized life for half a century; and the opinion expressed by all was favorable to the wild berry. No effects were perceptible, the "subsequent proceedings" of the barbarian not occurring according to predictions.

All this, we are aware, does not prove that this is really coffee, and we have no desire to enter the lists as its champion; but botanists should consider that an impatient, adventurous people, having discovered, growing in wild abundance all about them, a berry which resembles coffee in appearance, taste and odor, will hardly be satisfied with the classifications of science. And those who believe in wild coffee should also consider that it will probably be a long time before California is called upon to supply the world with this luxury. In whatever class science may place this shrub, we hope its friends will at once strike it from the list of "big things, sure," and place it among those matters that are certainly interesting, and possibly of considerable consequence.

Gold and Silver Plating in San Francisco.

The San Francisco Plating Works, 653 and 655 Mission street, are the largest of the class on this coast. Every description of gold and silver plating on all metals is done, but the proprietor, E. G. Denniston, makes a specialty of silver-plated amalgamating plates for miners' use. For this purpose he has a vat containing over 700 gallons of solution, so as to be able to turn out plates of any required size. The use of these plates results in the saving of a much larger percentage of gold than can be obtained by the ordinary plates, the copper and silver combined causing the quicksilver to adhere much more tenaciously to the plates and also presents a greater attraction for the gold than when copper alone is used.

These plates are made any size, according to order. The copper is usually covered with about one ounce of silver to the square foot, but sometimes less is used, if desired. It takes from 17 to 24 hours to deposit one ounce of silver to the square foot of copper. These plates are made here, and sent all over the coast; and recently some 250 feet of copper, prepared in this manner, were sent to Japan for a quartz mill.

All descriptions of goods, including table ware, from which the silver is worn, are now replated at these works. Watches, jewelry, etc., are also plated with gold. Over 2,000 gallons of solution are kept constantly on hand, and six men are employed to turn out the work. These works obtained the first premium silver medal at the last fair of the Mechanics' Institute, and a handsome display will also be made this year. Articles are plated light or heavy to suit orders, and the goods compare favorably in beauty and finish with any produced in the Eastern States. This is another one of our home industries which is turning out goods at prices which will compete with the East.

RURAL RETREATS. — We recently had the pleasure of spending a few days with Mr. Nathaniel Jones and family, near Lafayette. "Locust Farm" has been before mentioned in the RURAL PRESS. It seems recessed in between the hills so as to possess a peculiarly healthy atmosphere. Many are its balmy days and cool nights. Oftentimes when clear over head bay fogs roll in the distance at the right and at the left. Mr. Jones located in 1849, in which year he planted the seed of the locust trees (now 80 feet high) which surround his residence. His farm consists of 382 acres, bearing a variety of produce, including vegetables, corn, wheat, hay, etc. He has a band of horses, a good dairy and a large orchard of choice fruits. A sulphur spring on the place, one mile from the house, is supposed to contain health-producing qualities. But the surest health-producing articles are to be found upon Mrs. Jones' board—that is, well cooked cereals and home-produced vegetables, fresh, genuine cream, butter, honey, milk, eggs—served in abundance, with good humor. And we wonder, that with such inviting, cheap and delightful places of rural retreat, so near at home, that San Franciscans do not much more resort to them.

THE Santa Clara *Argus* of August 8th, says: The yield of hay and grain throughout the valley this year is estimated to be the largest yet gathered. The hay crop is so great that fears are entertained that the rains will commence and find much of it unbaled. From Gilroy to Alviso the valley is dotted with haystacks of all sizes, reaching well upon the hillsides. Hay-pressers are in great demand, and are engaged weeks ahead.

A LETTER from Clallam county, W. T., in the *Courier* says: The farmers are all busy just now Hay is cut, and now for the grain. Mr. Thornton commences threshing grain in a day or two, with Mr. Cline's machine. Crops are yielding well this year, and all this county wants to make it one of the richest counties in the Territory, is more settlers.

TO CORRESPONDENTS.—The communications of some of our friends are necessarily excluded out of the present number. Among others is the letter of S. W. S., of Jackson, Amador county. The miniature sack of wild coffee accompanying the above mentioned letter, is also received, and we will endeavor to give the material a thorough examination.

SPEAKING of the crops the Sutter *Banner* says: Our reputation for clean, plump wheat has already gone abroad, and mill men are contracting for all they can get of it. Summer-fallow does not turn out quite as well as last year, while winter sown is far better.

ARRANGEMENTS are nearly completed for commencing work on the ditches to convey the water from the Santa Ana river over the lands below Anaheim. These ditches, when completed, will irrigate about 100,000 acres of as rich land as there can be found in Los Angeles valley.

Opening of the Mechanics' Institute Fair.

The inauguration of the ninth industrial exhibition of the Mechanics' Institute took place according to arrangement on Tuesday of this week. The number of visitors present is estimated at about 5,000. It was truly a magnificent scene, and this brilliant occasion may well be accepted as a true indication of the position which industry holds in the estimation of the people of California. The music of the orchestra, consisting of 50 instruments and 500 voices, was superb. The President of the Mechanics' Institute, Mr. A. S. Hallidie, made some appropriate and extremely interesting remarks at the exhibition, and was followed by Col. Barnes of San Francisco, the "orator of the day." This address was a very able one, and was listened to with much interest by the vast assembly of visitors. The occasion was a success in every particular; and may be considered an appropriate opening of this grand exhibition.

President Hallidie, in alluding to the different circumstances under which the first fair of the institute was held, 17 years ago, and those surrounding the present exhibition, spoke as follows:

Seventeen years ago San Francisco held its first Industrial Fair. A plain, simple pavilion, whose total dimensions were less than to-day is set apart for and occupied by the fine arts department of this exhibition. James Lick generously gave the use of the land it then occupied—now covered by the Lick House. Then the whole interest of this State was centered in its mines. A few specimens of wheat were exhibited by some visionary exhibitors, who thought that certain portions of California might, with proper care and irrigation, raise grain. The immense valleys of the San Joaquin and the Sacramento, and all the lesser valleys, were known then as now, but the imagination of the wildest of these visionary exhibitors could not have pictured a yield in 1874 of 31,000,000 bushels of wheat, or a surplus for exportation of 700,000 tons, giving employment to two ships of 1,000 tons each per day, the year round, to carry off the surplus crop.

We shall make it a point to give in each issue of the PRESS during the exhibition something of interest connected with it.

TRANSPORTATION OF SEMI-TROPICAL FRUIT TO THE EAST. — On this subject J. J. Warner, of Los Angeles, thus writes to the *Express*, of that city: "As the question is frequently asked, and as a negative answer is usually given—Can our fruits be sent to the Eastern States from Los Angeles, and reach their destination in good condition, I will relate my experience in that matter. On the 16th of June last I packed a redwood box with oranges, limes and lemons, and sent it hence that day, by Wells, Fargo & Co.'s Express, to Lynn, Conn. The agent informed me that it would be 12 days in reaching its destination. The oranges were freshly gathered from the trees—part of them from B. D. Wilson's orchard, and a part from that of Mr. Wolfskill. They were all fully ripe, and in fine condition for eating. Each orange, lime and lemon was separately wrapped in thin white paper. In the bottom, top and sides of the box a large number of half-inch holes were bored. The person to whom they were sent writes me as follows: 'The box of fruit came in due time and in excellent order, and all agree that they never tasted such delicious oranges. There were only two of them touched with decay. We enjoyed them very much.'"

THE following item is from the Los Angeles *Express* of the 6th instant: D. Lewis, of the Monte, called on us this morning. We learn from him that his hop plantation is now looking very fine. It is in capital flower, and presents one of the most beautiful sights the eye could rest upon. His twelve acres will yield this year in the vicinity of 20,000 pounds, the same as last season. Mr. Lewis is the only farmer in the county who makes a specialty of raising hops, and has, for a number of years (since 1860, we believe), been very successful. The great secret in the culture of this flower, as in that of the tobacco-plant, is in understanding how to cure it.

THE fruit yield is particularly heavy in southern Utah this year, the grape crop being very much larger than that of any previous year since the settlement of that district; and, as a result, the amount of wine that will be made there this year will be two-fold more than the manufacture of any season hitherto. The cotton crop, which was planted late on account of the backward spring, was looking healthy and full of promise.

A FAMILY at Altoona, Pa., were poisoned recently by eating new potatoes, on the stalks of which Paris green had been used to kill potato bugs.

DR. GLENN, of Colusa county, has about 30,000 acres in wheat, from which he expects 25 bushels to the acre, making a total of 750,000 bushels.

THE cranberry crop in Wisconsin is almost an entire failure this year on account of the "worm."

CAPTAIN MOSS has finished another large warehouse at Moss's Landing, Monterey Co.

Why do we not Discourage Immigration?

The local papers of all new countries are blamed for endeavoring to induce immigration to their particular localities. It is a standing charge against them; and they are apparently willing to let it stand; for they still persist in displaying in the most attractive manner the advantages of the country they represent. Bnt we would ask the candid, impartial observer — if a man can be snpposed to be impartial in the qnestion of local preferences — if the course of the press of the older countries, in trying to prevent emigration, is not as reprehensible as is that of new countries in endeavoring to foster it? If a person desiring to locate in any of the cities, villages or agricnltural districts of the East were to form his estimate of the financial, social and sanitary condition of any locality from the representations of its press, and should gauge his purposes and prospects accordingly, he would, we venture to say, be as greatly disappointed, and could as justly complain of wilful misrepresentation as can the immigrant to any of the new States or Territories.

As far as gilding their own side of the picture is concerned, there is nothing to choose between the two; but in throwing dirt, our elder brothers are as far ahead of ns as they are in age. The press of new countries, in trying to promote immigration, rely upon persuasion; and this, we believe, is mostly prompted by honest enthusiasm; but in preventing emigration, our staid Eastern neighbors resort to the construction of bugbears, and fill their papers with gross misrepresentations concerning the places that invite it. In trying to keep their children at home they tell them improbable and unjustifiable stories about these new countries, and the people who are suspected of enticing them away.

We have said thus much in defense of that portion of the California press that has made active endeavors to promote immigration. But the complaint is not limited to those who have persisted in persuading the people of the East to come and take up their abode here; they are also laid at the doors of those papers that simply neglected to warn people from coming here. The Rural Press, fortunately, ranks in the list of the less culpable criminals. Its readers are aware that it has never urged immigration; thongh we claim that we are second to none in our high estimate of the country. But being aware that solicitations of this kiud—no matter in how good faith they are made—are thankless labors, and often bring reproaches upon those who engage in them, we have preferred to let emigration take its natural course. It wonld be doing injustice to human nature to seek to convey the impression that California immigration is exempt from home-sickness; and knowing as we do that the victims of this depressing complaint are extremely unreasonable in attaching blame to those who favored their regretted change, we have prudeutly avoided all responsibility in the matter.

But the complaints to which we more especially refer, do not come from the victims of home-sickness in its acute form. They are uttered by a limited but well-defined class, composed of those who are evidently determined to not like the place of their adoption. These complaints are stereotyped in the visages of these people; so that it scarcely is necessary that they should utter them. Still they do utter them, and parties who do not write back to their friends in the East and dissuade them from coming here, are represeuted as being accessories to a cruel wrong; and papers that have taken the position of the Rural Press, have been blamed by them for not discouraging immigration.

According to their views it is a great pity to allow those poor fellows to leave their comfortable homes at the East and come to a country like California. In their comparisons of the merits of the two countries exaggerated contrasts are the rule, as might be expected. The East is painted as it appeared when these champions left it a number of years ago—and over painted at that—but in the intervening time the opportunities for men of limited means have been gradually, but steadily contracting. A position which affords even an opportunity to earn a livelihood is sought for as eagerly as an office in the U.S. revenue department. The names of boys remain on the lists for months, awaiting their chances for an opportunity to learn a trade at four dollars per week; men are "given" employment, instead of being hired because they are wanted, and retain their positions by favor; and the promise of work, or fear of being discharged, influences to a great extent the conduct of working people. The agricultural laborer has a hopeless prospect before him. He can not expect to become the owner of land tbere, and the prospect of settling down as a farm laborer for life is not agreeable to Americans. If any degree of ambition is entertained, emigration is looked forward to as a matter of course; the only question being whether the parties shall remain on Eastern farms, with the hope of earning snfficient to purchase land in some newer country, or go at once and be learning new country farming while they are earning the money to purchase a farm of their own. This question we are willing to leave for the parties to decide for themselves; but we are not disposed to discourage those who wish to come here sooner or later, from emigration.

"Any placé but this," is the cry of the chronic discontent, and of acute home-sickness in all parts of the world; and we are free to acknowledge that many have returned from California to their Eastern homes, as they have from all points of immigration; but we claim that this country differs from them all in attracting back to its nest these temporary wanderers. Men who have remained in California long enough to make their "stakes," or to take their places among the permaneut failures, and have gone back to their original homes, have found things there so changed that they return back to California as their real home; and those who have not remained here a sufficient length of time to outgrow their home-sickness, become so charmed with the climate that they cannot content themselves with that of the Eastern States, and come to spend the remainder of their lives here. Few who have lived in California are satisfied with any other climate. The real advantages which this State offers to the Eastern emigraut were never greater than at the present time, and we can see no good reason for discouraging working men, or anyone else, from coming here.

Coffee Plant vs. Buckthorn.

We give on this page of the Rural Press a cut of the so-called "wild coffee plant." Accompanying it is an illustration of the true coffee tree, with its flower and fruit. Dr. W. P. Gibbons, of Alameda, has furnished us with the following description of the two plants:

Having observed a notice in the *Evening Bulletin*, of the 7th instant, that "wild coffee" is thriving at Shingle Springs, and that several persons familiar with the culture of coffee plantations had called at the office for information, with a view of "developing the resources of the State in this particular," I wish to volunteer information which may set this question at rest. As the Rural Press first gave currency to the idea that there is an indigenons species of coffee growing in California, it should be the first to correct auy erroneous impressions which may have been derived from this announcement. The shrub in question belongs to the natural order *Rhamnaceæ* or Buckthorn tribe, of which there are three genera found in California: the *Rhamnus*, the *Frangula*, and the *Ceanothus*, The shrub supposed by some to be the coffee plant, is the *Frangula Californica*. It is found in almost every part of the State; it grows from 4 to 12 ft. high, throwing up numerous stems from the same root; bark whitish brown, leaves alternate, oval-oblong, sometimes acuminate, finely crenate, glabrous on both sides, petioles from ¼ to ½ in. long. Flowers greenish white in umbrels, pedicels ½ to ¾ in. long. Petals 5, scale-like, style 5 cleft, fruit 2 seeded; the seed enveloped in a fleshy endocarp; berries slightly avoid, from one-third to half an inch longest diameter; dark brown, approaching to black when ripe; pulp juicy, of a bitter sweet flavor, producing slight nausea after being eaten. Seeds convex on the back, nearly hemispherical, and when ripe, nearly black. Their albumen or farinaceous substance, small in quantity, the embryo filling most of the leather-like envelope.

The coffee tree—*Caffea Arabica*, belongs to the natural order *Cinchonaceae*. It grows from 15 to 20 ft. high, is erect and conical, with light brown bark, and opposite, oblong-acuminate, wavy, shining light green leaves. It bears clusters of flowers at the base of the leaves, the corolla is white, tubular, 5 parted and spreading

Fig. I.



Coffee Tree.

Fig. II.

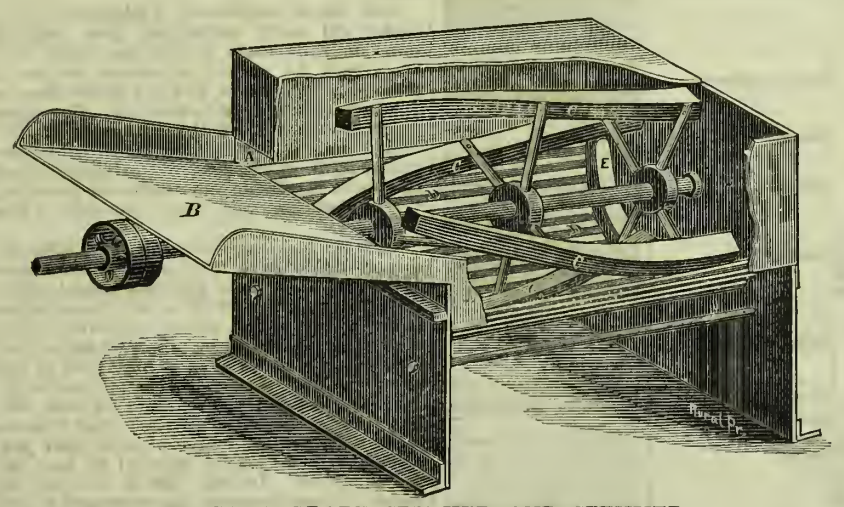


Buckthorn or "Wild Coffee."

limbs, 5 stamens, one pistil with bifid style and oval berries, black when fully ripe. Each berry has two seeds, inclosed in a parchment-like membrane; the seeds are convex on one side, with a longitudinal groove on the other; they consist mostly of albumen, at one end of which is the embryo.

A comparison of the foregoing general descriptions will enable the reader to judge of the total lack of identity between the coffee plant and the buckthorn. The difference is no less marked in their properties: coffee being a palatable, nutritious beverage, indispensable as an article of food, and the buckthorn an active, griping cathartic, which has been more or less used in medicine for over two centuries The *Frangula Californica* is popularly known as the coffee berry. Some years ago, two Freuchmen, observing some resemblance between it and genuine coffee, prepared some and used it as such. The experiment *worked well*, but from appreciable motives, they did not give much publicity to the results.

The accompanying outlines will give a more practical idea of the difference between these two shrubs. Fig. 1 is an illustration of the coffee tree, with its flower and fruit. Fig. 2 is the buckthoru, with its fruit.



JOHNSON'S GRAPE CRUSHER AND STEMMER.

The European Wheat Crop. — *Mark Lane Express*, Aug. 12, says: We are now in the middle of the harvest, and the new wheat crop shows nothing to indicate more than an average quality and growth. Some fields show premature ripening. Some of our contemporaries say the crop will not be above an average—others say one-third above an average, while some think it will be below an average. An immense amount of wheat is yet unharvested, and an increase of rain would be a serious disaster. There is much diversity of opiuion about the crops in France and Belgium. In closing its review of the market, the *Express* says: We do not see how the price of wheat can be much depressed.

The Placerville *Democrat* calls for the erection of fruit driers. The crop in El Dorado county this year will be immense, and shiploads will rot for want of a market.

Improved Grape Crusher and Stemmer.

The accompanying illustration represents an improved grape crusher and stemmer, recently patented through the agency connected with this office, by George Johnston, of Sacramento, and William F. Johnston, of Folsom. The invention is an improvement in that class of grape crushers and stemmers in which a series of beaters are revolved inside of a box or case. the lower portion of which is formed of parallel slats. In this class of machines, as ordinarily made, the grapes are crushed in separate charges and the stems thrown out of the case after the grapes are crushed, by opening one side of the case, so as to permit the revolving arm to throw them out. The improvement in this machine consists in a peculiar construction of the case and revolving beaters, by which the grapes can be continuously fed into the machine at one end while the stems are automatically discharged from it at the opposite end.

The accompanying cut shows the machine with the cover broken away to give a side view of the interior. A shaft across the box has two or more sets of radial arms, npon which are placed the bars, *C*, so as to form spiral or screw shaped beaters. When the shaft revolves the beaters are carried around close against the faces of the slats. The grapes are fed in at the opening, *A*, from the table, *B*, and the berries are rubbed off the stems by the spiral beaters, *C*, through the grates, *D*, the juice falling into a tank placed below the machine, the stems being carried along by the spiral form of the beaters and discharged through the opening, *E*, at the opposite end of the machine. The beaters, *C*, run clear of the grates one quarter of an inch, aud consequently no seeds can be broken.

The ends of the box are connected by the slats, *C*, which are so placed as to form a semi-circular trough-like box as shown. The grapes being fed into the opening, *A*, in bunches as they are picked from the viues, the rapid revolution of the beaters causes the grapes to be crushed, and separates them from the stems, the juice and crushed grapes passing through the slats into the tank below, while the stems are thrown out through the semi-circular opening, *E*, at the end of the box.

The main features of this machine are the improvements for attaining a contiuuous operation. With one of these machines nine tons of grapes have been crushed and the stems antomatically discharged in a thoroughly separated condition without the necessity of stopping or varying the operation of the machine. Two sizes are made, one weighing 350 pounds, which will crush and stem from 10 to 15 tons per day, with one horse, and more in proportion with two horses. The other size weighs 1,300 pounds, and will crush 60 tons per day of ten hours, if driveu at the rate of 175 or 200 revolutions per minute. with one man to feed and another to take away the stems. Messrs. Lachman & Co., of this city, aud the Johnston Wine and Brandy Manufacturing company, of Sacramento and Marysville, are using the large machine of this kind. For further information, address W. F. Johnston, Folsom, Sacramento county, or George Johnston, Sacramento, Cal.

In a trip through a portion of Yolo county, and of this county, says the Sacramento *Bee*, we were astonished at the immense quantities of fruit we saw going to waste. The trees are literally loaded down with fruit, and the owners do not appear to value it in the least. In some places hogs are turned into the orchards to eat the dropped fruit, and in others the fruit lay around loose in tons, waiting in vain for somebody to gather it in. With a little energy hundreds of barrels of good cider could be manufactnred out of the thousands of tons of fruit now going to waste within six miles from this city.

Now that the Saucelito narrow-gauge railroad has been extended to San Rafael, the people of Marin county contemplate the formation of a mammoth milk joiut stock company, to supply this city daily with fresh milk from that county. The company will buy the milk from the dairy men, says the *Journal*, run it to the city by a special or early train, aud deliver from wagons to customers. The milk will be as fresh as any that can be supplied in the city, and as it is proverbially much richer and better than the product of ordinary pastures,it is sure to find a ready market.

The Bellingham Bay *Mail* is informed that the settlers on some of the San Juan Islands are much embarrassed by the presence of large herds of sheep on the principal sheep ranges of the county, which are owned by British subjects who reside in Victoria, and who are only represented by Indian herders. It says this is getting to be an intolerable monopoly, and one which is ruinous to American citizens, whose means are so limited that they are unable to fence their ranches, and protect their interests from the encroachments of these non-residents.

The grape crop of Pierce county, W. T., is very promising. The bunches are nnmerous and very large, and the berries are plump and very healthy.

The Los Angeles Tobacco company have commenced the manufacturing of cigars from tobacco grown there this season.

Miscellaneous.

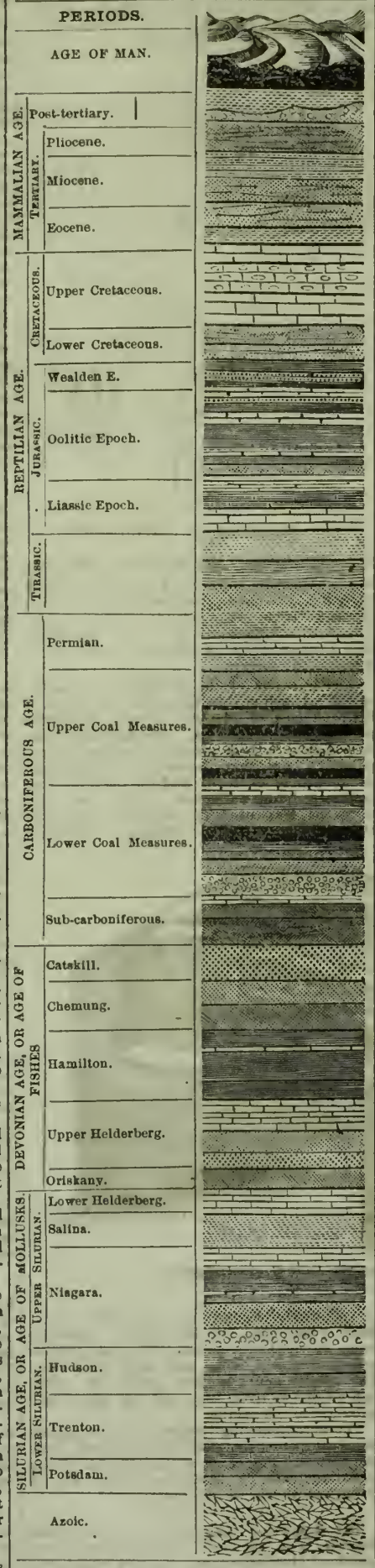
The Earth's Crust—How Made Up.

By the "earth's crust" is meant that small portion of the exterior of our planet which is accessible to human observation. Our research of course, is confined to only such observations as can be made in deep mines, or in valleys which have been excavated by natural means, such as the attrition of icebergs, or the action of water. The object of this present article, and the accompanying diagram, is to give such of our readers as have not ready access to scientific works some idea of what has been learned in this direction. Those who are familiar with the principles of geology will, of course, excuse the elementary facts here given for the benefit of others. The illustration is taken substantially from Dana's Manual of Geology, and gives an ideal vertical section of the earth's crust, as it would appear at some locality where all the various deposits might be found, regularly imposed, without any disturbance from upheavals or erosions. Of course, no such place exists, for evident reasons; but all the deposits shown are found in some one or more places on the earth, and always in the precise relative order as shown. Of what materials the earth is composed, and the manner in which they become so peculiarly and regularly arranged, seems only until quite recently to have formed the subject of special inquiry and study. It has ever been apparent that the solid parts of the earth consist of distinct substances; such as loam, clay, sand, slate, granite, lime, etc.; but, for long ages, and indeed until within a very brief period, it has been supposed that all these various substances came from the hand of the Creator, in substantially the same form as we find them. As soon, however, as scientific men began to turn their attention seriously to the study of the phenomena connected with the surface of the earth, it was found that among the rocks the remains of animals and plants were found in great variety, and always arranged in a certain uniform manner, with regard to their superposition, any particular variety which was found below another in one locality was sure to be found in the same relation in every other. This discovery naturally led to inquiry as to the cause of such uniformity; and the result of these studies has been the building up of the modern science of geology. The diagram not only shows the different deposits in their chronological order, but the comparative thickness, also, of the various beds or layers.

All the remains of animals and plants are found above what are termed the crystalline rocks, such as granite, gneiss, etc. No matter how far we go down into the granite, we nowhere find any remains of life, either animal or vegetable, or any change in the character of the rock structure; hence the whole geological structure, so far as known, is superimposed upon the crystalline rocks, which are called "azoic," a term meaning without life. Starting then, from this point, at the bottom of our diagram, and going upwards, we immediately find evidences of life with the first change in the character of the rocks. In the animal kingdom we here first find the remains of three orders of animals—the *radiates*, the *mollusks*, and *articulates* (as crustaceans and worms)—in the vegetable kingdom we find only the *algæ*, or sea plants. Other kinds of animals and plants appear in succession as we move upward along the diagram, until we finally arrive at the age or period of man, and the most perfect forms in the vegetable kingdom.

It will be observed by looking at the left hand side of the diagram that the entire time in which life has existed upon the earth is divided into six great periods or ages—the age of mollusks, the age of fishes, the carboniferous age, the age of reptiles, the mammalian age and the age of man, or mind. The first grand division is sub-divided, for the convenience of scientists, into two—the upper and lower silurian; the fourth grand division—the age of reptiles—is separated into three sub-divisions—the triassic, jurassic and the cretaceous; the mammalian age is also sub-divided into tertiary and post-tertiary. In addition to the sub-divisions already mentioned, there are a great number of other sub-divisions, as given in the column next adjoining the diagram. In addition to these, again, there are still further sub-divisions, usually given on the right of the diagram, but which we have omitted altogether from our diagram, as they would here only serve to confuse the reader.

The azoic rocks—granite, gneiss, etc., rocks in which no remains of life are found—constitute the only formation which is continuous, at a certain depth, all over the earth. They form the floor of all other deposits, and were the first rocks which emerged from the primeval ocean, which no doubt at one time enveloped the entire earth. As sections of these rocks were pushed up, the air, rains and moving waters commenced wearing them away, and re-depositing them in still water. From this source we have the earliest stratified sand or mud, which subsequently hardened into rock, and formed the various layers of the lower silurian rocks. They in their turn were again worn away, mixed with more debris from the underlying granite and again deposited, forming at certain points certain other deposits or layers. It has been by such and similar action of wearing away and re-depositing, that one layer after another has been created and deposited as we now find them, through the four or five miles' thickness of what we know of the crust of the earth. In some places the original granite still appears. In others it is buried to depths greater or less, as the elements, upheavals, depressions, etc., have been more or less active in their operation. This system of arrangement in the earth's features is every way as marked as that of any of the species of animal or vegetable organisms. It might be in-



teresting in this connection to mention that the portion of the earth which is supposed to have been the first to have been lifted from the primeval ocean, was that to the north of the St. Lawrence river, extending north-eastwardly from Lake Superior to the Atlantic ocean, and north-westerly from the same point to the Arctic ocean.

The three first great divisions as shown are more perfectly represented in America than any other part of the world. Hence the reader will find the names of American localities generally applied to their more minute sub-divisions, as given in the diagram. The later formations, including the reptilian age, are better represented in Europe than in America, as is seen by the European terms more generally given to the subdivisions—not however given in our diagram.

As already intimated, it should be borne in mind that there is no one place on the globe where all these formations are perfectly represented. In many portions of the world only one or more of the geological divisions are represented. This is explained by the fact that such portions of the earth's crust were first elevated above the ocean bed during the epoch to which the division is assigned. Consequently none of the earlier stratified beds could be found there—they could not have been formed beneath the ocean. We will give in a future issue a diagram showing the progress of life—animal and vegetable—from the silurian age to the present time, which forms the basis of the subdivision of the earth's crust as herewith shown, into geological ages.

Artificial Stone.

There are two ways of making artificial stone. The first and oldest is simply to burn clay; the result is called brick; and is obtained in different degrees of hardness, according to the degree of heat employed in the burning. The softest are those burnt at a low degree, and called after their color, salmon brick, while the hardest, burnt at a high degree, very near the fire, dark, sometimes glazed on one side where an incipient infusion took place, and occasionally almost black, are best adapted for paving stones. Again, when the clay has been made more compact by previous pressure, a heavier, smoother, and less porous brick is the result, called pressed brick. The quality depends, of course, also, on the quality of the clay used. Very fine qualities make different kinds of pottery or stone-ware, and the purest of all, porcelain; but all depend on one principle, the baking together of the constituents by heat; in fact, an incipient fusion.

It appears that the oldest material for cementing bricks and stones together was asphaltum. The most ancient monuments found appear to demonstrate this. For instance, in a certain very old ruin, found in Asia, and said to be the remnant of the celebrated tower of Babel, the bricks are all cemented with asphaltum; and it is remarkable that after so many thousand years the more extensive use of this material is again revived. Soon, however, the knowledge of burning lime was obtained, and its property of hardening when slackened and mixed with sand, was discovered. Such a mixture of burnt lime and sand, which is mortar, forms, when dry, also an artificial stone; and, in fact, a good mortar placed between the bricks, and submitted to proper pressure during the hardening process, forms a single stone to all intents and purposes. Some stones, like granite, basalt, etc., do not unite well with mortar, while more porous ones, like brick, sandstone, and the like, form a very strong union.

With these preliminary explanations, the reader will easily understand how artificial stones may be made without the use of fire. It is simply by mixing substances similar to those forming mortars; and if a dense stone is required, submitting it to pressure. The value of the product depends thus on two things, the proper materials to commence with, and the treatment to which they are subjected—very fine previous grinding, and sufficient pounding or pressure, being the chief requisites of the latter.

As it is less expensive to mold different shaped small objects from a plastic substance than to cut them out of the solid natural rocks, the natural cut stone finds a strong competitor in this artificial stone, which, moreover, during the drying and hardening process is not subject to any shrinkage, such as is produced by fire in the baking process. It is impossible to make large flat surfaces, required for slabs and tiles, except when a very coarse grain is given them with a great excess of sand, and just enough clay or plastic material to keep the sand together. In fact, this is the way in which are manufactured the celebrated Dutch tiles, imported by our forefathers into this country, occasionally found in some old houses in the earliest settled portions of the land, and to the present day most extensively used in the Levant, for the trade of which Holland still sustains extensive tile-bakeries in Delft and some other cities. The artificial stone tiles now produced in the country promises to maintain a strong competition with these, when their value commences to be understood. But the manufacturers will not confine themselves to tiles only. We have seen a number of capitals, balusters, lintels, crosses and monuments for graveyards, of beautiful design and finish, and, in a variety of colors imitating natural stone. For these purposes, the artificial stone is not only cheaper (it costs one-half as much for tiles, and for more elaborate objects still below that), but also stronger and harder than any natural stone. To understand this, we have only to bear in mind that the compounds in question are silicates, while the natural marbles are only carbonates. The first are not attacked by acids nor the weather; the latter are to a greater or less degree.

Another peculiar virtue of this artificial stone is, that it improves by age. While our brown sandstone deteriorates, and, in many instances, slowly crumbles away on the surface, this artificial stone becomes harder and harder by age; in fact, it sets slowly to an extraordinary degree of hardness.—*American Homestead.*

One hundred barrels of crude petroleum will make about 75 barrels of refined oil on an average.

Generation of Ozone.

Dr. Brigham, in the *Herald of Health*, says: Thunderstorms are generators of ozone, so it is supposed, though Reichuber thinks that the amount of ozone which is left after a tempest depends more upon the quantity of rain which has has fallen than upon the abundance of the lightning. It is agreed that there is more of it in the air in the winter months than in the summer months, in the wet season than in the dry season, in cold weather than in hot weather, at morning and evening, and even in the night, than at noon. In this respect it goes with electricity, for it is a common mistake to suppose that electricity is more abundant in summer, because thunderstorms come in summer. As a rule, the air is far more electrical on a tingling, frosty day than upon a sultry, debilitating day. According to observations made in Germany, the average of ozone is nearly double on snowy days, and is considerably greater on rainy days than it is on clear days. Fog is unfavorable to its production, but a driving snowstorm greatly promotes it. This may, nevertheless, be the effect of wind in clearing the air. The authorities differ widely in their conclusions about the winds which are ozone producers, some assigning more to winds from the east, others rating more highly winds from the west. Cold winds bring more than hot winds; and those whose houses are exposed to cold winds have this compensation, that if they burn more coal, they probably get a better quality of air.

The following extract from the report of Mr. F. M. Allen, Chief Engineer to the Hartford Steam Boiler and Inspection Company, deserves perusal: In some parts of the country crude petroleum has been found to keep boilers free from scale without injury to the iron, while in the same districts, and in the immediate vicinity, boilers not using purgers would have a scale from one-half inch to three-fourths inches in thickness. We have a specimen of scale in this office nearly one and a-half inches thick that was removed from a boiler in the West by crude petroleum, or what is known as unrefined black earth oil. I am aware that there is a great prejudice against using anything of the kind in steam boilers, but earth oils are very different from animal oils. They are very volatile, and in an experience of several years, where hundreds of boilers have been treated with them, we have found no injury to plates or tubes, and the boilers have been kept free from scale. Petroleum works better where sulphate of lime predominates, than in waters impregnated with carbonate of lime. We would not advise it in connection with the latter. I desire to impress upon all persons the importance of careful attention to their boilers when solvents of scale or purgers are used. It often happens that scale is thrown off and allowed to accumulate on the bottom of the boiler, and from want of attention, not being removed, the boiler becomes nearly or quite ruined. If a purger is used the boiler should be often opened, and as often thoroughly cleaned.

About Nails.—Every farmer who has occasion to drive a nail into seasoned oak posts knows its liability to bend and break. If the point be moistened in the mouth, it will usually drive more kindly. Oil is better, but then it is inconvenient to dip each nail separately into it. Another point is, that boards become loose eventually from the rusting of nails, which, communicating to the wood, causes not only an enlargement of the nail-hole, but the wearing away of the nail itself, rendering the fence or building shaky or insecure. This may be prevented by heating any rough grease until it smokes, and then pouring it over the nails to be used. The grease will penetrate the pores of the iron, and cause the nails to last without rusting for an indefinite period. Besides this, no difficulty will then be experienced in driving them into the hardest wood. The reason is, that the coating of grease prevents contact by air, and consequently oxidation. Oxygen is the great destroyer of iron, and moisture is the inducing cause. Anything which is kept from air is preserved indefinitely, and if it is kept dry the effect is measurably the same. Paint upon buildings prevents the contact of air and moisture. If the whole fence can not be painted, the heads, at least, of the nails therein should be touched.—*Newark Builder.*

To Harden and Bleach Tallow for Candles.—Take of tallow, five pounds; alum, one pound; water, sufficient. Dissolve the alum in water, add the tallow, bring the mixture to nearly the boiling-point, and stir well together. Then allow it to rest a short time, draw the water liquid out, and cast the tallow into the proper moulds. It is said that candles made in this way are as hard and white as wax. —*Druggists' Circular.*

Transparent Gum.—A little glycerine added to gum or glue is a great improvement, as it prevents the gum or glue becoming brittle. It also prevents gummed labels from having a tendency to curl up when being written on. —*Gaslight Journal.*

The solvent power of petroleum adapts it for use in the cleansing of steel articles. It does not become rancid or gummy, as is the case with other oils.

The parts of plants seldom leave, when burned, more than five pounds of ash from every 100 pounds of the dried plant.

Coining.

The operations conducted at the private mint at Birmingham, Eng., as we learn from an interesting report in *Iron*, are as follows: The raw material consists of immense quantities of copper in ingots for bronze coinage, and "cakes" of the same metal for copper coinage. The metal used for the bronze coins is composed of 95 parts of copper, four parts of tin, and one part of spelter or zinc. The metal is first taken to the casting shop, and there melted and run into molds of the required length. The processes of casting being almost the same for all purposes, there is no need of giving a minute or detailed description of the operation.

The strips of metal when cast are taken to the rolling mills. The slabs of metal are first passed through the heavy revolving cylinders, and the pressure is so great to which they are subjected, that they are rolled into much longer, and, of course, thinner strips. They are next submitted to the ordeal of fire, and annealed. They are submitted to this process of rolling until the requisite thickness, or rather thinness, is obtained. A slab, which is at first only some 15 inches long, is rolled out to six feet in length. It is then placed once more in the annealing oven, "pickled" by being passed through acid, then cleaned and scoured. Each slip has to be gauged with the utmost nicety after it has undergone these processes, to ascertain whether it is of equal thickness throughout.

After being approved, the strips are taken to the cutting-out room, where they are passed under a press, and bits of circular metal of the size required are cut out and drop into receptacles beneath. These bits of plain metal are appropriately called "blanks," and are cut with almost incredible rapidity. One press produces 750 a minute, and in the mint the number of presses employed are capable of producing over 3,000,000 of blanks a day. After being cut, the blanks are tested by being passed through a machine, which is so nicely adjusted that any irregularity or imperfection is detected, and the tares are separated from the wheat. The blanks which pass successfully through the trial have also to be annealed. For this purpose they are "put into small iron pots, the lids of which are carefully adjusted, and the junctions stopped with clay, and placed in the oven, where they remain generally about three-quarters of an hour. They are then allowed to cool gradually, passed through a solution of acid, and in their wet condition are placed in a revolving wooden drum, together with quantity of rough saw-dust. The motion of the drum causes the saw-dust to escape through small apertures provided for the purpose, and by the time the blanks are dry—usually in 20 minutes—all discolorations have been removed, and a uniform bright color attained. They are then ready to receive the finishing stroke—the impression which shall cause them to be universally recognized as tokens of value."

Two dies are required for each coin; the one for the obverse, the other for the reverse. These are engraved on the best steel, but the original dies are not used in making the impressions on the coins. For this purpose a punch is made, and from this punch the moulds by which the coins are made are taken by pressure. The pressure required for this purpose is at least 40 tons. The moulds are made on the surface of pieces of steel, the diameter of which is a little larger than the coin to be made. So great is the pressure of the striking hammer, that the slightest flaw in the steel used is fatal to the working die, for it comes from under the machine exhibiting a large rent wherever the flaw may be. The importance of this power of multiplying dies will at once be manifest. Sometimes they are destroyed in a few minutes, lasting, we learned, on an average not more than two days; but the original die, which represents a fortnight's skilled work, remains perfect, for the production of other punches to be used in making working dies.

The coining is a very simple process, and is now rendered almost noiseless by improved machinery. In each press is a movable steel slide, in the center of which is a circular hole the size of the die, called a collar. The blanks to be impressed are placed in a long brass tube, called a feeder or hopper. From this feeder one blank drops into the collar with each movement of the slide. It is between the top and bottom, and as the blow is struck, both sides are impressed at once.

H. K. CUMMINGS. 1858. H. H. RALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have no interests that will conflict with those of the producer. 4v23-1y

EUREKA WAREHOUSE,

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY 1ST, 1874.—First month, 50 cents per ton; each month thereafter, 37½ cents per ton. At regular monthly rates not to exceed $2.75 per ton for the season. Season rates, $2.00 per ton. Second weighing, 10 cents per ton.

Grain received on dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to Messrs. E. E. MORGAN & SONS, San Francisco.

4v8-4m A. J. GOVE, Manager.

Ninth Industrial Exhibition

HELD UNDER THE AUSPICES OF THE

MECHANICS' INSTITUTE,

WILL OPEN TO THE PUBLIC

TUESDAY, AUGUST 18, 1874, at 11 A. M.,

Corner of Eighth and Mission Streets.

The OPENING ADDRESS will be delivered by

COL. W. H. L. BARNES.

The Musical Exercises will be under the immediate direction of Professor GEO. T. EVANS, assisted by Prof. W. Elliot.

The Art Department will be under the arrangement of the S. F. Art Association.

The Horticultural Department will be under the charge of the Bay District Horticultural Society, and will be one of the pleasing features of the exhibition.

PRICES OF ADMISSION:

Season tickets, admitting gentleman and one lady..$5 00
Season tickets, admitting one person..... 3 00
Season tickets, admitting juveniles under 14 years 1 50
☞ The above tickets are not transferable.
Single admission..... 50 cents.
Children under 14 years..... 25 "

Tickets can be obtained from any of the Managers, at the Mechanics' Institute, 27 Post street, and at the principal music and drug stores.

ag15-bp-2t A. S. HALLIDIE, President.

Napa Ladies' Seminary.

The next term will commence on TUESDAY, AUGUST 4TH, 1874, and continue for twenty-two weeks. This institution offers thorough instruction in a quiet, healthful location, easy of access from any part of the State.

Instructions in Piano-forte, Guitar and Vocal music by a superior teacher. French taught by a competent teacher.

It is very desirable that pupils should be present at the opening of school, although they can enter at any time, and be charged from the time of entrance. For particulars of school apply to

MISS. S. F. McDONALD, Principal, Napa City, Cal.

REFERENCES.

Rev. R. Wylie, Napa; Hon. O. Hartson, Napa; R. T. Montgomery, Esq., Napa; G. E. Goodman, Esq., Napa; D. McClure, Esq., Napa; Rev. Dr. Goodbridge, San Francisco; Rev. P. V. Veeder, Yokohama, Japan; Geo. K. Gluyas, Esq., San Francisco; James A. Crow, Esq., Stockton; R. O. Baldwin, Esq., San Ramon; J. R. McDonald, Esq., Grayson; J. B. Crow, Esq., Hills Ferry; Rev. C. M. Blake, San Francisco; Major Snyder, Sonoma; S. Alstrom, Esq., White Sulphur Springs; Geo. L. Kenny, Esq., San Francisco; Hon. R. C. Clark, Sacramento. 1v8-2m

TO WINE & BRANDY MANUFACTURERS.

Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

Send for Circular. Address,

GEORGE JOHNSTON, Sacramento.

Or, W. F. JOHNSON, Folsom, Sacramento County, California. Refer to Lachman & Co., San Francisco, and Johnston Brandy and Wine Manufacturing Co., Sacramento and Marysville. 2v8-12w

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.

Works, King street, bet. Second and Third. fe15-eow

PEPPER'S NURSERIES,

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Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

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Wire for Fencing and Baling.

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22v7-3m

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Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

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Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

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Worcestershire Sauce.

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The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

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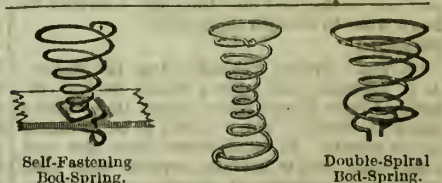
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We manufacture all sizes of BED and FURNITURE SPRINGS, from No. 7 to the smallest Pillow Spring; also, the Double Spiral Spring, which is the most durable Bed Spring in use. It is adapted to upholstered or skeleton beds. We have the sole right in this State to make the celebrated Obermann Self-Fastening Bed Spring. Any man can make his own spring bed with them. They are particularly adapted to Farmers' and Miners' use. Send for Circulars and Price List to

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A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER, 22v6-1y President Board of Directors.

Agricultural Notes.

California.

BUTTE.

Immense Day's Work.—Butte *Record*, Aug. 15: Sturday last was the day set apart by Hoag and Baylis for a friendly contest for a big day's work on their lands on the Glenn ranch, and quite a large crowd of people from the surrounding country attended to witness the race. Hoag had seventy men, seven headers and twenty-four header wagons. His separator is a Case patent—improved upon by Hoag and a Mr. Pelton, and bears the name of a Case-Pelton patent. It is a machine of great capacity—the cylinder being forty-eight inches. He claims that he can thresh with it 2,500 sacks per day. In this contest Saturday he had two or three slight detentions in consequence of the breaking of belts—but threshed 3,504 sacks, a general average of 138 pounds to the sack—equal to 5,759 bushels, which is 10 bushels per minute. He has threshed five sacks per minute—making 11¼ bushels per minute. Baylis used a Pitt's forty-inch separator, being of much less capacity than Hoag's. He worked seventy men, seven headers and twenty-one header wagons, and threshed 2,440 sacks, the general average being 138 pounds to the sack. It was a friendly contest, and was enjoyed and admired by all present, and the day's work of each is pronounced the largest ever known. The following day Baylis and family dined with Hoag and a number of friends. Gupton, on the same land, declared that he could beat either with his forty-inch separator, and on Tuesday last started in for that purpose. He threshed 2,329 sacks, using about the same number of men headers and header-wagons.

CALAVERAS.

Some Millet.—Calaveras *Chronicle* Aug. 15: Mr. Harris, of Sandy Gulch, in this county, has sent us a number of stalks of millet, grown on Collier's ranch, above West Point, that measure upwards of seven feet in length. It is the tallest millet we have ever seen, and very well headed out withal. Mr. Harris says he sent us the plants to prove that the mountains can produce something as well as the foothills we blow so much about. We are convinced.

COLUSA.

Storage.—Colusa *Sun*, Aug. 15: There have been some great efforts made to provide room for the grain in this county. Judge Diefendorff has a warehouse at his landing 300 by 40 feet; the Farmer's Company at Grimes' Landing, have a house in course of erection 200 by 40 feet; Howell Davis has a large house at his landing, the size of which we did not get. At Colusa, E. W. Jones & Co. have added to their large house until now they can store 8,000 tons; the Farmers' Storage and Commission Company can store 12,000 tons. At Princeton, Jessie Wall & Co. have erected a very large warehouse, and at Jacinto Dr. Glenn has another very large one. Wheat is coming in to Colusa now at about the rate 200 to 300 tons a day. Jones & Co. have received to date 2,256 tons, and have made no shipments. The Farmers' company have in store about 2,000 tons, and have shipped several hundred. There is but little disposition to sell or ship at present prices.

CONTRA COSTA.

Building Warehouses. — Antioch *Ledger*, Aug. 15: The Wristen brothers are commencing the erection of a warehouse 50x100 feet, near the Granger's wharf. The Antioch Grange also will shortly construct a building, the lower portion of which will be used at present for storing grain and the upper story for a hall. This building will also be located in the vicinity of the wharf. It is truly encouraging to witness these substantial improvements going on in Antioch after the exceedingly dull times of the past few years.

The ship "El Dorado" is loading with grain for Liverpool at the wharves at Antioch, causing much rejoicing among the denizens of that burg.

EL DORADO.

El Dorado *Republican*, Aug. 15: Haying and harvesting have kept the farmers very busy the past few weeks, and now they are bothered to know what to do with their fruit.

FRESNO.

Cotton.—Fresno *Expositor*, Aug. 12: Messrs. A. T. Yeargin & Co. have a 40-acre field of cotton on Upper King's river, about three miles below Centerville, which is said to be the finest in the county. It stands about three feet and a half high, and is literally covered with bolls in the various stages of growth and squares. As high as 170 odd bolls of various sizes have been counted on a single stalk. From present appearances it is estimated that the yield will be at least one bale, or 500 pounds per acre. Our informant, who has himself engaged in the culture of cotton in the Southern States, says this crop is not surpassed by any that he ever saw growing in his native State, Alabama. He claims an advantage for this section over the old cotton-growing regions, in the fact that the seasons here are at least six weeks longer. If the yield is anywhere near as good as is now anticipated, it will be a remunerative crop.

Last year several banana roots were planted on the ranch of Aug. Weibe, near this place, two of which came up and grew luxuriantly during the summer; but as they were not protected, the first cold snap cut them down, the plant being very delicate and sensitive. The tops being killed, the roots were protected by a covering of straw. This season, but one of the plants came up, and it is growing nicely. Mr. Forthkamp, the manager of the farm, will endeavor this season to save it from being killed by the cold.

Wine.—Petaluma *Argus*, 14: On Monday last John Kron, of this city, shipped to Hoboken, New Jersey, 500 gallons of wine, the product of his vineyard in Sonoma valley. Some weeks ago he shipped to the same place 1,500 gallons. Mr. Kron and his partner planted the first vineyard in Sonoma valley, in 1855. They now have 50 acres of bearing vines, which two years ago yielded 30,000 gallons of wine. It is expected that the product this year will be much larger. Mr. Kron, who has had many years experience as a vintner in Europe, considers California much better adapted to the production of good wines than the most favored countries of the old world. A well informed vintner residing in this city, who is half owner of a large vineyard in Sonoma valley, informs us that one gallon of wine to each vine six years old and upwards is a fair estimate of the yield of well cultivated vineyards this year. Upon this basis, after making ample allowance for grapes that are not used for wine-making, the product of 1874 will be from 10,000,000 to 12,000,000 gallons in the State, and 1,200,000 to 1,500,000 in Sonoma county. These figures appear extravagant, but when we state that the latest reliable statistics show that there are over 30,000,000 grape vines in the State, and 4,750,000 in Sonoma county, the estimate will not seem so unreasonable. It is not improbable that 10 or 15 years hence the wine product of Sonoma county will exceed that of the entire State at present. We have a sufficient breadth of available land, and all the requirements for the annual production of 15,000,000 gallons of wine.

LAKE.

The Harvest.—Lake County *Bee*, Aug. 13: The farmers of Lake county are now in the midst of their harvesting. The cutting will be finished this week. One steam and two horse-power threshers are at work in Big valley. The grain is turning out well throughout the county. We are informed that the average yield of wheat will be about 27 bushels to the acre, and barley, 37 bushels.

Wild Cherries.—There is a large grove of wild cherry trees on Scott's creek, about two and a half miles from town. The cherries are about half the size of the ordinary cultivated cherry, and of a bitter taste.

MERCED.

The Cotton Crop.—Merced *Tribune*, Aug. 13: The cotton crop in the county is doing well. In a week or so the blooms will commence opening. The only place we know of where cotton planting has proved a failure is the 600 acres planted on Bear creek, and the failure in this case is due to the want of proper cultivation. Outside of the last mentioned tract, about 600 acres is under cultivation, which will produce this season about 180,000 lbs. lint of cotton. M. J. M. Strong, the pioneer cotton grower in this State, informs us that Tulare and Fresno counties will put in the market about 40,000 lbs. of cotton, making the total yield of cotton in this State foot up to about 210,000 lbs. Mr. Strong also informs us that the yield in this county the present season will be fully 100 lbs. per acre more than that of the most favored Southern States.

SAN LUIS OBISPO.

New Wharf.—San Luis Obispo *Tribune*, August 15: A grand time was had in Cambria on last Sunday, over the arrival of a sailing vessel, which lay alongside at the Leffingwell wharf. This is a new and much needed improvement, and now that a coaster can approach the place, is a cause of public congratulation. The people met down near the wharf, where appropriate speeches were made.

Harvesting is about done in this county. Threshing machines have taken the place of headers in the hands of the farmers.

SONOMA.

Agricultural Notes. — Petaluma *Argus*, August 14: Rather more than the usual area has been planted with potatoes in the vicinity of Valley Ford. The indications are good for a large crop. Australian wheat, now and for many years a favorite variety in this county, was introduced by the Fowler Brothers, of Valley Ford, in 1854. It is much less liable to rust than most other varieties. A. B. Glover, who has a farm one mile south of Bloomfield, informs us that the grasshoppers have done much damage to his as well as to his neighbors' potato crops. He says there is a larger area than usual sown in his section to wheat this year, and the average yield will be fully twenty bushels per acre. His neighbor, John Giverson, has in 100 acres of wheat, which will yield from 30 to 40 bushels per acre. The wheat crop in the vicinity of Valley Ford this year is of superior quality, and about an average as to quantity. Most of the farmers in that vicinity treat their seed wheat to a solution of bluestone before sowing, as a preventive of smut. Three pounds of bluestone dissolved in hot water to one thousand pounds of wheat is the proportion used. This method is found to be a sure safeguard against smut, which in some seasons has been very destructive in that quarter.

Crop Notes.—Sonoma *Democrat*, August 15: Headers and threshers with their crews pass daily through town, *en route* to harvest fields. We procured for Gus. Peterson a sack of Proper wheat, last fall. It turned out splendidly. It is the plumpest grain and the whitest we have seen. Jack Peterson sowed 60 pounds, from which he expects to harvest 50 bushels. Mr. Hanneth has cut and partly threshed his grain. 150 acres will average 30 bushels to the acre. The crop of Robert Forsythe and H. C. Mizer will average 33 bushels to the acre. James Smith, whose farm lies upon the border of the corporate limits of Santa Rosa, has 18 acres of volunteer wheat which will yield 50 bushels to the acre. 25 acres of "corn land," cultivated on the same farm, will yield about 40 bushels. On land cultivated the previous season in corn the wheat crop is double. On other lands the yield is light, and will average less than 20 bushels to the acre.

SUTTER.

Grain Items.—Sutter *Banner*, Aug. 15: Last year Wm. P. Harkey engaged his wheat in the spring for $1.50, and sacks furnished. His crop turned out 18,000 bushels, and he lost by the engagement between four and five thousand dollars. This year Mr. Harkey again engaged his crop at $1.50, with sacks furnished, just before harvest. The yield this season was 13,000 bushels against 18,000 last year. Oscar Walton's wheat has turned out better than he had expected. He will have over 200 tons, Club and Proper. J. C. & W. J. Gray have 210 tons of Club wheat, mostly summer-fallow; yield, 34 bushels per acre. George Obleyer last year had 80 acres of summer-fallow which threshed 38 bushels per acre. This year his summer-fallow went 30 bushels, and winter-sown, 15 bushels. Mr. Obleyer says, by all means summer-fallow half your ground every year.

TULARE.

Improvement in Stock.—Visalia *Delta*, Aug. 12: Thoroughbred Spanish Merino bucks and ewes, to the number of several hundred, have recently been sent to this and adjoining counties, from the stockyard of L. U. Shippee, at Stockton. Among late purchasers are A. P. Crowley, M. Brooks, Wm. Lyle, J. Williams, Waterson & Bro., Ostrander, Kayson & Baxter, B. M. Wilson, N. E. Wells, of this county; Wm. Kern, of Kern county; Capt. Morrison, of Fresno county; Wm. Underwood, and some others. It would appear that our county is receiving a rapid influx of valuable stock, there being a large sprinkling of owes among late purchases. We have noticed the arrival of fine stock from different parts of the State, and but few that equal or excel those from Stockton. We saw a fine lot of 92 thoroughbreds at Perkins & Weaver's corral, at Tulare, and learned they were the property of Rhoads, Miller, Caruthers, Lambert and Rocky Black.

TUOLUMNE.

A Curiosity in Fruit.—Tuolumne *Independent*, Aug. 15: On Monday, Mr. M. J. Rehm, of Columbia, exhibited to us a most wonderful specimen of his fruit growing. It was a huge ball of early Catherine pears, full grown, seventy-two in number, which grew at the extremity of a twig about as large as one's little finger. They were packed like a bunch of grapes—only that the bunch was round instead of oblong—measuring nine inches in diameter and weighing over ten pounds. No other fruit grew on the tree except two similar bunches, one having 22 and the other 25 pears. The tree is 15 years old, 50 feet high, and the mammoth cluster grew on a limb about 15 feet from the ground. Mr. Rehm intends to send this concentrated fruit "orchard" to the Mechanics' Institute fair.

VENTURA.

Fruit.—Ventura *Signal*, Aug. 8: It would pay those who think we cannot produce the finer varieties of peaches successfully on the coast, to visit the orchard of J. M. Egbert, where may be seen as fine peaches as can be found anywhere. Mr. L. D. Chilson placed on our table last week an almond tree limb two feet in length which had on it 111 matured almonds. He also brought in four apricots, which weighed one pound and two ounces. They are the largest we have ever heard of.

YOLO.

Warehouses.—Yolo *Mail*, August 15: We visited the Grangers' warehouse on Monday evening last. It is a very large structure, and when completed will be a safe and dry depository of the products of the farmers of this section. The railroad passes through it, leaving sufficient room on either side for wagons to pass through, and for handling the wheat. Already the west half of the building is two-thirds full, sacks being piled up twenty-one deep in front and fourteen in the rear. We notice one section occupied entirely by wheat, belonging to J. W. Scott, and one almost full, by D. Clanton. One dozen such farmers as they would demand the whole of this warehouse for storage. The building is not yet roofed or enclosed, but workmen are busily engaged on it. We also notice that there is a vast amount of wheat lying along the track, which we suppose is sold and to be shipped. The warehouses of Thomas & Hunt are being rapidly filled. They have a capacity sufficient to accommodate 12,000 tons, and from the slow movements in real transactions we are informed that all these warehouses will be needed, and still not accommodate the surplus grain which will be held to await better prices. Every day the cars carry off from 80 to 100 tons, but this does not seem to lessen the heaps of sacks which are stacked up here and there in the vicinity of the depot.

Good Farm.—One of our contemporaries makes mention of a good farm, and gives the dimensions and profits with considerable gusto. We have one in our mind which lies about two miles from Woodland. In 1867 it could have been purchased for $1,000. It contains eighty acres only; has on it a very ordinary dwelling-house, and a good barn. It is all under cultivation. About one acre is set with a variety of choice fruits, and the balance in the most select varieties of grapes and in Chili clover. The owner of this little farm makes it a point to irrigate every summer, at such times and as often as he deems necessary, and he makes such good use of his produce that he considers it a nice little fortune, while others equally well situated let like products go to waste, for want of care and attention. This eighty acres which could have been bought six years ago for $1,000, could not now be bought for $10,000. The owner has refused $8,000 for it on one or two occasions.

Oregon Items.

The Polk county paper says: The wheat yield of that county this year will be an abundant one. The farmers are all in the highest spirits in anticipation of a full pocket of coin for their labors this season. Since the third instant, the hum of the threshing machine has greeted the ear in all directions. Farmers have been scarcely able to obtain help enough to secure the grain as fast as it ripens.

The Eugene *Journal* says: "A very large portion of the cultivated land in Lane county is in wheat this season. There are neighborhoods where the eye sees scarcely anything but wheat fields for miles. The yield will not be as much to the acre as it has been in some former years, but the total amount of wheat produced will be great. The farmers are now in the midst of their harvest."

Rev. B. R. Baxter informs the *Gazette* that from the product of ten cents' worth of turnip seed, of the "Six Weeks," or "Snow Ball" variety, received from James Vick, of Rochester, New York, he has this year sold $18.11 worth, had plenty for his family use, and still has on hand several bushels of small ones, which he purposes feeding to the hogs.

The following items we clip from the *Oregonian*, of the 8th inst:

A letter from Fifteen Mile creek, Wasco county, states, under date of August 5th, that the harvest is well along and grain will turn out well. The amount of hay saved this year is larger than usual. Grass on the range is short, but cattle are in good condition.

Many of the farmers of Grand Ronde and Powder river valleys are so busy in harvesting and caring for their grain that their wives have to do the marketing.

The Salem papers report considerable wheat as arriving at that place, but most of it is stored—farmers waiting for the price to reach $1 per bushel.

Joseph Douden, of Sam's valley, Southern Oregon, this year cultivated a crop of oats which averaged 125 bushels to the acre. Who can beat it?

Never since the first settlement of Benton county has there been such an acreage of grain to cut, and never were the farmers more intent on their work. Harvesting is all the go.

The grain crop on the Sound is unusually heavy this year. Farmers are now in the busiest part of their harvest.

No drought, chinch bugs, grasshoppers, locusts, potato bugs, weevil or caterpillars to hurt the crops or fruits of Oregon this season.

Seventy cents a bushel is the price for wheat at Salem, and sixty-five cents in the towns above.

A Washington county farmer has 600 bushels of new wheat in store at Corvallis.

The peach crop in Sonoma valley is much smaller than it has been for many years, owing to the curl leaf.

San Benito county claims to have 1,400,000 tobacco plants.

Send in Your Subscriptions for the Press.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Aug. 18th, 1874.

For Week Ending Aug. 4th, 1874."

Nozzle or Hose Sprinkler.—James H. Fowler, Oakland, Cal.

Car Coupling.—Thomas J. Hubbell, Yountville, Cal.

Trade-Mark.

Cigars and Tobacco.—The Consolidated Tobacco Co., Gilroy, Cal.

———"The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

San Francisco, Wednesday, August 19th, 1874.

There have been more changes in the general Produce market for the week than has been the rule for some time past, and we are pleased to note that these movements have been, for the moat part, upwards. It would be hopeless to expect any great rise in prices as matters now are. When the predicted upward turn does come, it will not be likely to be a sudden one, but steady and sustained.

The articles of Produce which have been moat active of late are the less important ones, to be sure—such as Dairy Produce, Eggs, Poultry, etc.—but of course these are the leading interests of individuals, and the improvement will be a matter of much consequence to them. In this connection we must not neglect to remark upon the enviable position assumed by the State Dairy Agency of the Granges. It is to this establishment, more than to any other cause, that prices realized are so favorable to the producer. While, on general principles, we all discountenance all such manœuvres as "corners" and combinations to affect the market, yet when these are put forward to our advantage the matter appears in an entirely different light. The agency, by securing in advance the bulk of certain articles in the market, gained control of qnotations, and used the power to put the latter well up, much to the satisfaction of the shippers.

As to the corner in Corn and Oats in the Eastern States, it is now pretty conclusively settled that the only persons hurt were the bear operators, and that in the end consumers will not really suffer. The excitement is now over. It did not affect this market in the least.

Receipts of California Produce during the week under review were as follows: Flour, 7,362 barrels; Wheat, 133,300 centals; Barley, 18,600 centals; Oats, 2,620 centals; Corn, 210 centals; Rye, 380 centals; Beans, 526 centals; Mustard Seed, 412 sacks; Flax Seed, 300 sacks; Potatoes, 15,220 sacks; Sweet Potatoes, 1,135 sacks; Onions, 730 sacks; Hides, 3,090; Wool, 402 bales; Hops, 22 bales; Hay, 1,637 tons; Straw, 30 tons; Wine, 25,430 gallons.

Barley—The stocks of old crop are now pretty well exhausted. New does not range quite so high as last week. Supplies have been very full.

Beans—The price of small White and Pea Beans has been reduced to 4c. All kinds show the influence of the incoming crop.

Beeswax—Is quiet at 25 @ 27½c ₱ lb.

Broom Corn—The price is as yet unchanged. A small invoice was received lately. The new crop will probably bring down quotations.

Buckwheat—Our quotations are nominal, as there have been no sales during the week. There is very little in this market.

Corn—Is slow of sale at unchanged figures.

Cotton—Is held at 20c for 1873. There is, of course, very little trade in Cotton here. In time it may be one of our staples.

Dairy Produce—Butter has been marked up again—this time about 2½c all around. Very choice samples will occasionally go about our top figure, 37½c. Indications are that the present scale of prices will hold—for a time, at least. California Cheese is perhaps a shade more in demand. It is very much in over supply, and naturally quite dull. No change in quotations for either State or Eastern. For the past three weeks the largest stock of Butter has been in the hands of the Dairy Agency.

Eggs—Have advanced largely for all kinds. The market is strong to-day at 40@45c for fresh California. Eastern and Oregon invoices also bring much better returns. Ducks' Eggs are 5c higher.

Feed—The buoyant tendency of Bran and Middlings is continued, with an advance of $1 ₱ ton in the former, and $2.50 in the latter.

Flour—Receipts and shipments are going on quite extensively. Quotations are shading off again. Extra, for export, may be had as low as 5 ₱ barrel.

Fresh Meat—There have been no changes since our last report.

Honey—Accumulated stocks have been somewhat relieved by shipments of considerable quantities East, and the tone has improved.

Hops—The prospect for fair prices is more encouraging. While our harvest will be up to the average in point of quality and yield, reports from the East and various Hop-growing districts of Europe indicate a shortness. A large contract was made a few days since at 20@22½c, and this is the usual offer made. Harvesting is now being attended to in the earlier counties. Receipts have not yet begun to come in largely.

Nuts—Are unchanged.

Oats—Prices a little stiffer.

Onions—Light supplies have caused an advance. Silverskins are held to day at 90c@$1. Sales of 50 sacks Pickle at $1.75.

Potatoes—There has been no change in prices except in Sweet, which are 50c lower ₱ cental.

Poultry—Market strong. Turkeys have advanced 2c ₱ lb; Hens and roosters, 50c ₱ dozen; Broilers, 50c ₱ dozen; Ducks, $1.50 ₱ dozen.

Provisions—Hams and Bacon firm.

Rye—Is in full supply and weaker, being 5c ₱ cental below last week's prices.

Seeds—There has been little business in Seeds, except in Mustard, a large amount of which came in.

Wheat—The same disinclination of holders to sell at present prices prevails. Wishing will not put them up. Sales have been but small. Quotations are slightly lower.

Wool—Is quiet, under light receipts. Nevada Wool sold during the week, brought 26@27c. Eastern markets are reported only moderately active.

DOMESTIC PRODUCE.

Wednesday M., August 19, 1874.

BEANS.		Pigeon Pt...	— @ —
Beans, sm'l wh. ₱ lb	4 @ —	Humboldt..	— @ —
do, butter	7 @ 7½	Petaluma ..	— @ —
do, large, do	6 @ 7	Mission	90 @1 15
do, bayo	2 @ 2¼	Salinas	90 @1 10
uo, pink	1½@ 2	Bodega	— @ —
do, pea	4 @ —	Sac. River	70 @1 00
do, Lima	5½@ 6½	**POULTRY & GAME.**	
BROOM CORN.		Live Turkeys, hens per lb	20 @ 22
Per ton	$100 @200	do gobblers	18 @ 20
COTTON.		Hens, per dz	6 00 @7 50
Cal. 1873, ₱ lb	— @ 20	Roosters, young, large	5 50 @6 50
DAIRY PRODUCE		Broilers, small	2 50 @4 00
Butter, Cal. choice ₱ lb	35 @ 37½	do large	4 00 @5 00
do, good	32½@ 35	Ducks, tame, doz	5 00 @6 50
do, inferior	27½@ 32½	Geese, per pair	1 50 @2 00
do, firkin	30 @ 32½	Hare, per doz	2 50 @3 50
do, pickled	30 @ 35	Snipe, Eng., doz	— @ —
Cheese, Cal. new	7½@ 14	Quail, per doz	— @ —
do, Eastern	12 @ 13½	Mallard Ducks	— @ —
EGGS.		do small	— @ —
Eggs, Cal. fresh	40 @ 45	Wild Geese, gray	— @ —
do, Oregon	30 @ 35	do white	— @ —
do, Eastern	25 @ 30	Doves, per dozen	100 @1 25
do, Ducks'	— @ 35	Prairie Chickens	— @ —
FEED.		Grouse	— @ —
Bran, per ton	— @18 00	Rabbits	1 50 @2 00
Middlings	— @30 00	do tame	6 00 @6 00
Hay	9 00@14 00	Venison, per lb	6 @ 10
Straw, ₱ bale	70@— 75	**PROVISIONS.**	
Oil cake meal	— @32 50	Cal. Bacon, Light	14 @ 15
Corn Meal	42 00@43 00	do Medium	— @ 13
FLOUR.		do Heavy	— @ 12½
Extra	5 00 @5 50	Eastern do	13½@ 14
Superfine	4 12½@5 00	Hams, Cal	15 @ 15½
FRESH MEAT.		do Whittakere	— @ 17
Beef, fr quality, ₱ lb	8½@ 9	do Duffield, ch	— @ 16
do, second do	6 @ 8½	do Plantation & Armour	— @ 15
do, third do	4½@ 6	do Boyd's	— @ 15½
Veal	4½@ 6	do Stewart's	— @ 15½
Mutton	5½@ 6	Eastern Should's	9 @ 10
Lamb	5½@ 6	do new hams	— @ —
Pork, undressed	6½@ 6¾	Cal. Smoked Beef	10 @ 11
do, dressed	9 @ 9½	Lard	13 @ 14
GRAIN, ETC.		**SEEDS.**	
Wheat, old	1 50 @1 65	Alfalfa	13 @ 15
do new	1 40 @1 55	Canary	5 @ 6
Barley, old	— @ —	Flaxseed	5 @ 6
do new	1 00 @1 10	Hemp	5 @ 6
Oats, choice	1 45 @1 60	Ky. Blue Grass	40 @ 50
do common	1 40 @1 45	Millet	12 @ 15
Corn, White	— @1 90	Muetard, white	2 @ 3
do, Yellow	— @1 85	do, Brown	3 @ 4
Buckwheat	2 75 @3 00	Italian Rye	25 @ 30
Rye	1 05 @1 15	Perennial do	30 @ 35
HOPS.		Timothy	13 @ 15
California, 1874	20 @ 22½	Sweet V Grass	60 @ 75
East'rn '73 ch'ice	30 @ 40	Orchard do	30 @ 35
MISCELLANEOUS.		Red Top do	30 @ 40
Beeswax, per lb	25 @ 27½	Hungarian do	10 @ 13
Honey in comb	20 @ 25	Lawn do	50 @ 60
do Strained	7½@ 10	Clover Red	— @ 20
Pulu	9 @ 10½	do White	60 @ 75
Onions	60 @1 00	Alsike	— @ 20
NUTS-JOBBING.		Esparto Grass in Packets	— 1 00
Cal. Walnuts	13 @ 14	**WOOL, ETC.**	
Peanuts per lb	8 @ 7	Spring, short, ₱ lb	22½@ 25
Chile Walnuts	10 @ 11	do cnoice Nort	25 @ 30
Pecan nuts	13 @ 15	Medium grades	18 @ 22
Brazil do	12½@ 14	Fall clip	18 @ 20
Coc'anuts, ₱ 100	9 00 @10—	Burry	14 @ 18
Aim'ds h'rd shell	10 @ 12½	Hlidee, dry	18 @ 19
do, soft	18 @ 24	do wet salted	8 @ 9
Filberts	18 @ —	Tallow, Crude	6 @ 7
POTATOES.		do Refined	7 @ 7½
Sweet, per cwt	2 00 @2 50		
Cuffee Cove	— @ —		
H. M. Bay	90 @1 10		

FRUITS AND VEGETABLES.

Wednesday M., August 19, 1874.

Oranges, Lemons and Limes are lower. With the exception of Australian and Sicilien Lemons, all kinds have fallen considerably during the week. A few days ago there was a shortness in the supplies of Figs, but the price has since been reduced. Tokay Grapes are now being received.

Dried Fruits are somewhat weaker, in view of the large quantities already put up or now being prepared, which will furnish heavy supplies to the local market.

There are no changes of importance in Vegetables. Prices remain about the same as last quoted. Receipts are coming forward freely.

FRUIT MARKET.		**DRIED FRUIT.**	
Tahati, Or. ₱ M	25 00@30 00	Apples, ₱ lb	6 @ 7½
Lorita, do	— @— —	Pears, ₱ lb	10 @12½
Cal. do	— @— —	Peaches, ₱ lb	10 @11
Limee, ₱ M	10 00@12 00	Apricots, ₱ lb	10 @12½
Cal. Lemons, ₱ M	30 00@35 00	Plums, ₱ lb	8 @10
Anetralian do	45 00@50 00	Pitted, do ₱ lb	15 @18
do per box	7 00@8 00	do Extra, ₱ lb	— @—
do Sicily ₱ b'x	15 00@18 00	Raisins, ₱ lb	5½@12½
Bananas, ₱ bnch	3 50 @5 00	Black Figs, ₱ lb	8 @10
Cocoanuts, ₱ 100	9 00 @10 00	White, do	10 @15
Pineapplee, ₱ dz	7 00 @9 00	Prunes	6 @ 8
Applee	2½@ 5	do German	16 @ 20
Cherrics	— @ —	Citron	30 @ 35
Blackberriee	6 @ 8	Zante Currante	8½@ 8½
do wild	— @ —	Dates	12½@ 14
Huckleberries	— @ 18	**VEGETABLES.**	
Strawberriee ₱ lb	8 @ 12	Asparagus	7 @ 8
Gooseberries	— @ —	Beets	— @ 1
Raspberriee	12½@ 15	Cabbage, ₱ 100 lbs	2 00 @ 25
Currants	1 @ 3	do new, doz	50 @60
do black	@ 18	Carrote, ₱ 100 lbs	1 00@1 25
Apricots	2 @ 2	Cauliflower, doz	50 @60
Plums	2 @ 15	Celery, doz	50 @65
Peaches, ₱ lb	3 @ 10	Garlic, ₱ lb	6 @ 8
Pearc, Eating	1 00 @1 50	Green Peae	3½@ 4
do Cooking	75 @1 00	Green Corn ₱ doz	15 @18
do, Bartlett	1 25 @1 50	Sum'rSquash, lb	4 @ 5
Crab Apples	5 @ 6	Marro'fat Sq'sh, tn 60	00@—
Nectarines	3 @ 4	Artichokes, ₱ doz	15 @25
Wat'rmel'n ₱ 100	15 00@20 00	String Beans, ₱ lb	— @ 5
Cantelo'e ₱ 100	6 00@15 00	Lima Beane	4 @ 5
Pomegran's, ₱ 1006	00 @7 00	Parsnips	12½@15
Figs	8 @ 10	Shell Beans	2 @ 6
Grapee, Bl'k H'g	5 @ 6	Peppers, ₱ lb	12½@20
do Muscat	6 @ 8	Okra, ₱ lb	25 @40
do Malavo'e	6 @ 8	Okra, Green	6 @ 8
do Sweetw'r	5 @ 6	Cucumbers, doz	6 @ 8
do Mission	3 @ 3½	Tomatoes	3 @ 5
do Rose of Peru	— @ 8	Egg Plant ₱ lb	4 @ 6
do Tokay	5 @ 6	Rhubarb	2½@ 3
do Morocco	— @ —	Lettuce	12½@20
do St. Peter	4 @ —		

LUMBER.

Wednesday M., August 19, 1874.

There is a fair amount of activity in the Lumber trade, and business is expected to improve up to the beginning of the rainy season.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$18 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref, M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	18 00
Plokets, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

PUGET SOUND PINE —Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal foot	1c
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾

REDWOOD—Retail.

Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	25 00
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

GENERAL MERCHANDISE.

Wednesday M., August 19, 1874.

Bags are a little weaker, selling at about ½c off from last week's quotations. Coffees are lower. In Fish, Oregon Salmon and Smoked Herring are slightly higher, but the general market is not at all strong. Two or three upward changes have been made in Paints. Tobaccos are steadily rising, the crops in nearly every section of the country having fallen short.

BAGS.	
Eng. Stand Wht	—13½@13¾
Detrick's Machine Sewed, 22x36 E	—@13
do 22x36, do E W	—@13¾
do 20x40, do A	—@13¾
Flour Sacks ½s	10½—@12½
" " ¼s	6½—@ 7¼
Stand. Gunnies	—
double seam	—@16
single seam	—@13
" Wool Sacks	65 —@—
Barley Bags 24x36	—@15¼
do 23x40	—@15½
do 24x40	—@16¾
do 28x36	—@17
Oat Bags, 24x40	16 @16½
do 28x36	— @17
Hessian 40-in. gds	9½—@10
do 45	10½—@11
do 60	— @15
CANNED GOODS.	
Aest'd Pie Fruits in 2½ ₱ cans	2 75 @ 3 00
do Table do	@ 2 75
Jams & Jellies	3 75 @ 4 25
Pickles ½ gl	— @ 3 50
Sardines, qr box	1 80 @— —
do hf boxes	3 20 @— —
COAL—Jobbing.	
Anetralian, ₱ ton	10 00 @— —
Cooe Bay	— — @10 00
Bellingham Bay	— — @ 8 50
Seattle	— — @11—
Cumberl'd, cks	22 00 @23 00
do bulk	18 00 @20 00
Mt. Diablo	6 25 @8 50
Lehigh	— — @19 00
Liverpool	11 00 @12—
West Hartley	12 50@—
Scotch	— @12 50
Scranton	15 00 @17 50
Vancouver'e Isl	11 00 @11 50
Charcoal, ₱ sk	75 @ —
Coke, ₱ bbl	— @ 60
COFFEE.	
Sandwich Island	— @ 22
Central Americ'n	20 @ 22
Costa Rica per lb	21 @ 22
Guatemala	21 @ 22
Java	28½@ 30
Manilla	22 @—
Ground in cs	— @ 30
Chicory	10 @ —
FISH.	
Pac. Dry Cod, new	5 @ 6
cases	6 @ 7
do boneless	11 @ 12
Eastern Cod	7 @ 8
Salmon in bbls	9 00 @9 25
do ½ bbls	4 50 @4 75
do 2½ ₱ cans	— @3 00
do 2 ₱ cane	2 65 @2 75
do 1 ₱ cans	1 75 @— —
Do Col. R. ½b	— @— —
Pick. Cod, bbls	22 00 @— —
do ½ bbls	11 00 @— —
Bos. Sm'k'd Her'g	40 @ 50
Mack'l, No.1, ½bls	8 00 @8 50
" Extra	— @9 00
" in kits	2 00 @2 50
" Ex mess	3 00 @3 50
" Ex mess. ½bs	—@12 00
Sm'k Herr'g, bx	50 @ 60
NAILS.	
Asecrted size, ₱ lb	4¾ @ 7
OILS.	
Pacific Glue Co. Neat F't No. 1	— @1 00
Pure	1 25 @— —
Castor Oil, No.1	— @1 75
do do No.2	— @1 60
Cocoanut	45 @ 50
Olive Plagniol	5 00 @ —
do Poseel	4 75 @— —
Palm	9 @— —
do Bagicalupi	— @— —
Linseed, raw	— @1 02
do boiled	— @1 07
China nut in cs	— —@ 95
do bulk	75 @ 80
Sperm, crude	— @1 40
do bleached	— @2 20
Coast Whalee	35 @ 40
Polar, refined	50 @ 55
Sperm	1 40 @1 50
Lard	1 00 @1 10
Coal, refined Pet	37½@ 40
Oleophine	— @ 34
Devoe's Bril't	25 @ 28
Long Island	— @ 34
Eureka	37½@ 40
Devoe's Petro'm	26 @ 29
Barrel Kerosene	20 @ 25
Olive	4 00 @9 50
Downer Keroee'e	35 @ 40
Gas Light Oil	— @ 34
PAINTS.	
Atlan. W. Lead	7½@ 12½
Whiting	— @ 2
Putty	4 @ 4½
Chalk	— @ 2½
Paris White	2¾@ —
Ochre	4 @ 5
Venetian Red	3½@ 5
Red Lead	7 @ 11
Litharge	10 @ 11
Eng. Vermillion	2 00@2 10
RICE.	
China No. 1, ₱ lb	6½@ 6¾
do 2. do.	5½@ 5¾
Japan	5½@ 6
Siam Cleaned	7 @—
Patna	— @ 6¼
Hawaiian	7 @ 7¾
Carolina	10 @ 10½
SALT.	
Cal. Bay, per ton	10 00@14 00
do Common	5 00@ 7 00
Carmen Island	11 00@13 00
Liverpool fine	20 00@23 00
do coarse	15 00@20 00
SOAP.	
Castile ₱ lb	10 @ 11
Local brands	5 @ 8
SPICES.	
Allspice, per lb	15 @ 16
Cloves	45 @ 47½
Cassia	22½@ 25
Citron	— @ 30
Nutmeg	— @1 07½
Whole Pepper	17 @ 17½
Pimento	— @ 15½
Gr'nd Allep'r	dz @1 00
do Cassia	do @1 50
do Cloves	do @1 50
do Mustard	do @ 25
do Ginger	do @1 00
do Pepper	do @1 00
do Mace	do @1 60
SUGAR, ETC.	
Cal. Cube per lb	11½@ —
Partz' Pro. Cube bbl or 100 lb bxs	— @ 11¾
do in 50 lb hxs	— @ 12
do in 25 lb bxs	— @ 12¼
Circle A crushed	— @ 11½
Powdered	— @ 11¾
Granulated	— @ 11
Dry granulated	— @ 11½
Hawaiian	— @ 8
California Beet	— @ 11½
Golden C	— @ 10½
do Rey'g grade	— @ 6½
Cal. Syrup in ols	— @ 5½
do in ½ bls	— @ 55
do in kegs	— @ 60
Hawaiian Molasses	10 @ 20
TEA.	
Oolong, Canton, lb	19 @ 25
do Amoy	28 @ 50
do Formosa	40 @ 80
Imperial, Canton	25 @ 40
do Pinguey	45 @ 80
do Moyune	60 @1 00
Gunpo'der, Cant	30 @ 42½
do Pingeuey	50 @ 90
do Moyune	65 @1 25
Y'ng Hy., Canton	28 @ 40
do Pingsuey	40 @ 70
do Moyune	65 @ 85
Japan, ½ chests, bulk	30 @ 75
Japan, lacquered hxe, 4½ and 5 lbs	45 @ 67
Japan do, 3 lb bxe	45 @ 90
do pl'n bx, 4½ lb	35 @ 65
do ½&1 lb paper	30 @ 55
TOBACCO—Jobbing.	
Bright Navye	50 @ 60
Dark do	45 @ 55
Dwa f Twist	57 @ 62½
12 inch do	57 @ 62½
Light Pressed	65 @ 75
Hard do	60 @ 70
Coun. Wrap'r	40 @ 50
Penn. Wrapper	20 @ 30
Obio do	7 @ 15
Virgi'a Smok'g	60 @ 95
Fine ct che'g, gr	8 50 @9 25
Fine cut chewing, buc'ts, ₱ lb	75 @ 90
Banner fine cut	— @9 00
Eureka Cala	8 75 @9 00
TURPENTINE.	
Eastern	60 @ 65

LEATHER.

Wednesday M., August 19, 1874.

City Tanned Leather, ₱ lb	25@29
Santa Cruz Leather, ₱ lb	25@29
Country Leather, ₱ lb	24@28
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@54 00
Jodot, 11 to 18 Kil., per doz	66 00@ 80 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Beaumerville, 15 Kil	60 00@— —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Rohert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 15
California Kip, ₱ doz	40 00@ 60 00
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Baoke, ₱ lb	1 00@ 1 25
Sheep Roane for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@— 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@— 5 25
Good French Calf Boot Lege, ₱ pair	4 00@— 4 75
French Calf Boot Lege, ₱ pair	4 00@— —
Harness Leather, ₱ lb	30@— 37½
Fair Bridle Leather, ₱ doz	48 00@ 72 00
Skirting Leather, ₱ lb	34@— 37½
Welt Leather, ₱ doz	30 00@ 50 00
Bnff Leather, ₱ foot	18@ 21
Wax Side Leather, ₱ foot	17@ 19
Eastern Wax Leather	—@— —

RETAIL GROCERIES, ETC.

Wednesday M., August 19, 1874.

In Groceries, Butter has advanced largely; Flour and Coffee have declined. Sugar is firm.

Butter, Cal. oh'ice	35 @ 40	Can'd Oysters, dz	2 0 @2 50
do common	25 @ 30	Syrup, S F. Gol'n	35 @ 40
Cheese, Cal., ₱ lb	12½@ 15	Dried Apples	8 @ 10
Lard. Cal., ₱ lb	12½@ 15	Dr'd Ger. Prunes	15 @ 17
Flour, ex. fam. bl	5 00 @6 00	Dr'd Figs, Cal	9 @ 10
Corn Meal, ₱ lb	2½@ 3½	Dr'd Peaches	— @ —
Sugar, wn. crsh'd	— @ 12	Oils, Kerosene	30 @ 35
do lt. brown, lb	7 @ 9	Wines, Old Port	3 50 @5 00
Coffee, Sbarboro's family gr'nd, ₱ lb	32½@ —	do Fr. Claret	1 00 @1 25
Coffee, green, lb	24 @ 32½	do Cal., dz. bot	3 00 @4 50
Tea, fine blk, 50, 65, 75	@1 00	Whisky, O.B., gal	3 50 @5 00
Tea, finst Jap, 55, 75, 90	@1 00	Fr. Brandy	4 00 @10 00
Candles, Admant'e	17 @ 25	Rice, lb	10 @ 12½
Soap, Cal., lb	@ 10	Yeast Powders, dz	1 50@2 00

AGENTS WANTED to canvass every town on the Pacific Coast for the Mining and Scientific Press, Pacific Rural Press, and the Illustrated Press. Experienced canvassers preferred. Good men can make large wages besides learning much and improving their talents

METALS.

Wednesday M., August 19, 1874.

The dullness in Iron and Steel continues. Oregon Pig sells in this market at $45 ₱ ton—a higher price than imported brands attain. Tin plates have declined seriously Quicksilver remains firm at $1.45 ₱ lb.

American Pig Iron, ₱ ton	— — @ 40 00
Scotch Pig Iron, ₱ ton	38 00 @ 42 00
White Pig, ₱ ton	— — @ 44 00
Oregon Pig, ₱ ton	— — @ 45 00
Refined Bar, bad assortment, ₱ lb	— — @— — 3½
Refined Bar, good assortment, ₱ lb	— — @— — 4
Boiler, No. 1 to 4	— — @— — 5½
Plate, No. 5 to 9	— — @— — 5½
Sheet, No. 10 to 13	— — @— — 5½
Sheet, No. 14 to 20	— — @— — 5½
Sheet, No. 24 to 27	— 08 @— — 09
Horse Shoes, per keg	7 50 @8 00
Nail Rod	9½@— — —
Norway Iron	— 8 @— — —
Rolled Iron	— 6 @— — —
Other Irone for Blacksmiths, Miners, etc.	— — @— — 4½
COPPER.—	
Braziers'	— 31 @— 32
Copper Tin'd	— 45 @— —
O. Niel's Pat	— 50 @— —
Sheathing, ₱ lb	— — @— — 24
Sheathing, Yellow	— — @— — 25
Sheathing, Old Yellow	— — @— — 12½
Composition Nails	— 24 @— —
Composition Bolts	— 24 @— —
TIN PLATES.—	
Plaoee, Charcoal, IX ₱ box	— @8 13 00
Plates, I C Charcoal	11 00 @8 11 50
Roofing Plates	10 50 @8 12 00
Banca Tin, Slabs, ₱ lb	— 32 @— — 35
STEEL.—English Cast, ₱ lb	— 20 @— — 25
Anderson & Woods' American Cast	— 10 @— — 17
Drill	— 18 @— — 22
Flat Bar	— 18 @— — 22
Plough Points	— 16 @— — 17
ZINC	— — @— — 11
Zinc, Sheet	— — @— — 11½
NAILS—Assorted sizes	— 5¾@— — 8
LEAD.—	
Pig, ₱ lb	— 5¾@— — 6
Bar	— 6½@— — 7
Sheet	— — @— — 9
Pipe	— — @— — 8½
QUICKSILVER, per lb	— — @ 1 45

S. F. RETAIL MARKET RATES.

Wednesday M., August 19, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

Poultry and Eggs are higher. Venison is becoming quite plenty. There is no further change in Meats. Fish are in good supply, and remain at about the same figures.

Spring Chickene	50 @ 75	Flounder, ₱ lb	— @ 15
Hene	62½@ 75	Salmon, ₱ lb	15 @ 20
Egge	— @ 50	Smoked	— @ 10
do Ducke'	— @ 40	Pickled, ₱ lb	— @ 6
do Farallones	30 @ 35	do Spr'g p'kl'd	15 @ 18
Turkeye, ₱ lb	25 @ 30	Salmon bellies	30 @ 35
Ducks, Can Bk, pr	— @—	Rock Cod, ₱ lb	— @ 10
do Mallard, pr	— @—	Cod Fish, dry, lb	8 @ 15
Tame, do	1 50 @2 00	do fresh	— @ 15
Teal, ₱ doz	— @—	Perch, s water, lb	— @ 10
Geese, wild, pair	— @—	Freeh water, lb	10 @ 15
Tame, ₱ pair	3 00 @4 00	Lake Big. Trout	25 @ 30
Snipe, ₱ doz	— @—	Smelts, large ₱ lb	— @ 10
Quail, per dozen	— @—	Small Smelts	12½@— —
Prairie Ch'k's, ea	— @—	Herring, Sm'kd	75 @— —
Pigeons, dom. dz	— @4 00	do freeh	— @— —
Wild, do	— @2 00	Pilchards, ₱ lb	— @— 15
Squabs	— @4 50	Tomcod, ₱ lb	8 @ 10
Hares, each	37½@ 50	Terrapin, ₱ doz	— @6 00
Rabbits, tame, pr	75 @1 00	Mackerel, p'k, ea	12½@— —
Wild, do, ₱ dz	2 00 @— —	Freeh, do lb	— @ 20
Squirrels do	15 @ 20	Sea Bass, ₱ lb	— @ 75
Beef, tend, ₱ lb	— @ 20	Halibut	50 @ 75
Corned, ₱ lb	8 @ 10	Sturgeon, ₱ lb	5 @ 6
Smoked, ₱ lb	— @ 15	Oysters, ₱ 100	1 00 @— —
Porterhouse St'k	— @ 20	Chesp, ₱ doz	50 @— —
Sirloin do	12 @ 15	Clams ₱ 100	— @ 50
Round do	8 @ 10	Mussele do	— @ 25
Pork, rib, etc., lb	— @ 15	Turbot	— @ 75
Chops, do, ₱ lb	15 @ —	Crabe ₱ doz	1 00 @— —
Veal, ₱ lb	10 @ 15	do Soft Shell	35 @ 40
Cutlet, do	12½@ 15	Shrimps	10 @— —
Mutton-chops, lb	12 @ 15	Sardines	10 @ 15
Leg Mutton, ₱ lb	10 @ 12	Anchovies	8 @ 10
Lamb, ₱ lb	10 @ 15	Soles	20 @ 25
Venieon	10 @ 15	Young Trout, bay	1 00 @1 50
Tongues, beef	75 @— —	Young Salmon	1 50 @2 00
do, do, smoked	— @1 00	Salmon Trout eal	00 @1 50
Tongues, pig, lb	10 @— —	Skate, each	10 @ 30
Bacon, Cal., ₱ lb	— @ 18	Whitebait, ₱ lb	— @ 15
Hame, Cal, ₱ lb	17 @— —	Crawfish ₱ lb	— @ 10
Hams, Cores' e c	— @— —	Green Turtle	— @— —
Choice D'ffield	18 @— —	do ₱ lb	— @— —
Whittaker's	18 @ 20		

FRUITS, VEGETABLES, ETC.

The retail Fruit and V

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes,

For sala hy MRS. ROBERT BLACOW, of Centroville, Alameda County, Cal., near Niles Station, on the Western and Southarn Pacific Railroad.

Thasa Shaep ara guarantead of pure dascent, from tha French Imperial Flock at Ramhouillat.

And ara equal, if not superior, to any of this hreed in size and quality of wool, and ara proved to he the heaviest shearers in the world. 12v6-3m



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BREEDER OF

Pure Blooded French Merino Sheep,

Has for sala a choice lot of Rams and Ewes, on tha Oristimba Ranch, six miles west of Hill's Farry, Stanislaus County, Cal. 22v7-3m

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—OF—

PURE BLOOD

—AND—

ALL GRADES.

For sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of tha State. For particulars, address

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El Dorado, El Dorado county,
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About three hundred Bucks, half and three-quartar bred Cotswold, and a faw Thoroughbreds, for sala at Low Prices.

REFERENCES:

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Orders left with the latter firm will receive prompt attention.

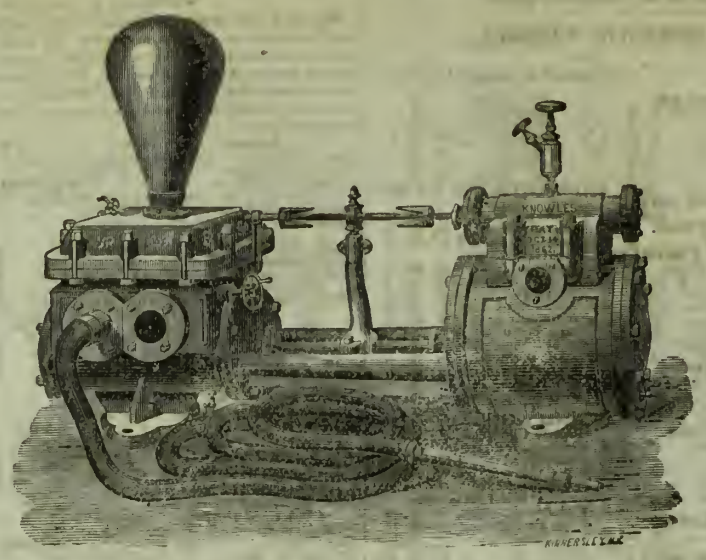
A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

Notice to Wool Growers.

Wa have for sale Pure-Bred and High Grada (up to 63-64ths) Angora Goats, as good and will sell as chaap as any party will sell like quality. We hava also for sale, Rams of the following hreeds and crosses: Pure-Bred Freuch Merinos, rams with Pure-Bred Cotswold and Sonth Down Ewes; also a cross with tha Texel and Spanish Merinos; a cross with tha Llucoln and Leicester; a cross with the Sonth Down and Cotswold; a cross with the French and Spanisu Merinos Our Rams are large, clear of scab and in good conditiou for service. They ara good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near tha Tres Pinos Depot, sevan miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

KNOWLES' PATENT STEAM PUMP.



It has no Cranks or Fly-Wheel, and has no dead points where it will stop, consequently it is always ready to start without using a starting-bar, and does not require hand-work to get it past the center. Will always start when the steam cylinder is filled with cold water of condensation.

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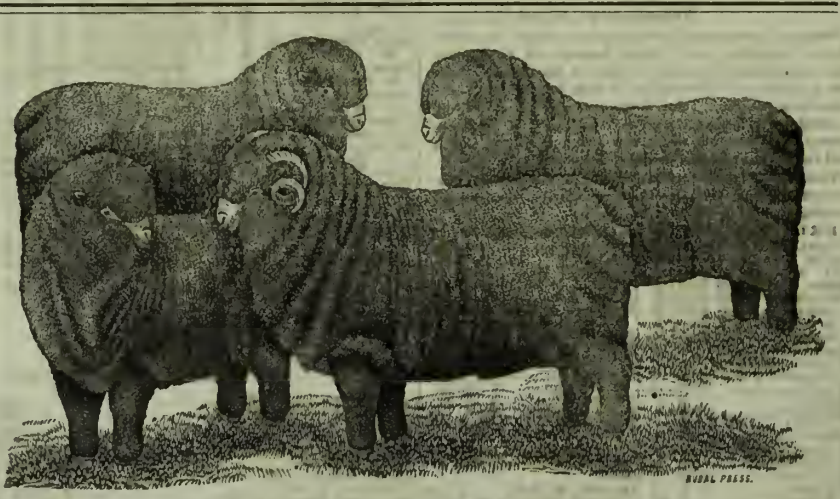
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I wish to call your attention to my flock of Spanish Merino Sheep, both Ewes and Bucks, imported during the last two years, and selected from the best flocks in Vermont. Unequaled on tha Pacific Coast for quality and size, many of them having taken first premiums both in Vermont and California. Should you or any of your friends require sheep of this quality, you will do well to call and examine this flock before purchasing elsewhere, as I intend to sell tham at greatly reduced prices from what they have formerly been sold.

My Flock Consists of 1,500 Sheep, 1,200 Imported and 300 of my own Breeding.

P. S.—This flock is not only tha finest but the largest flock of Imported Spanish Merino Sheep on the Pacific Coast. Thay have been selected from the flocks of the best breeders in Vermont, such as Stockwell, Sanford, Rich, Hammond, Saxton, Dean, Ellsworth, Ramley, Stickney, and others who are acknowledged to he among the best breeders of Spanish Merinos in America. 24v7-cow-4m



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Thoroughbred Stock Bred and Kept upon the MERINO RANCH



Situated at Niles, Alameda County, Cal., only fiva minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leava San Francisco at 3 o'clock P. M., and have an hour at tha ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors maka tha

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

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Our flock aro all Imported Sheep, and have no superiors in tha United States. We always hava on hand choice yonng RAMS and EWES, of all ages, for sala at Reasonahle Prices, giving time, if required, to responsible parties. City Office—315 California Street, San Francisco.

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Thoroughbred Jersey Bull Calves for Sale.

I hava now on hand twelva Thoroughbred Jersey Bull Calves, bred hy me from my last importatiou to California, and will sell them cheaper thau they could ha brought from the East.

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GANG PLOW.

Took tha Premium over all at tha great Plowing Match in Stockton, in 1870.

This Plow is thoroughly mada by practical men who havo bean long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as tha Best and Most Dasirable Gang Plow in the world. Send for circular to

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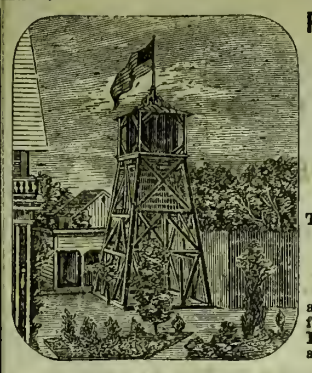
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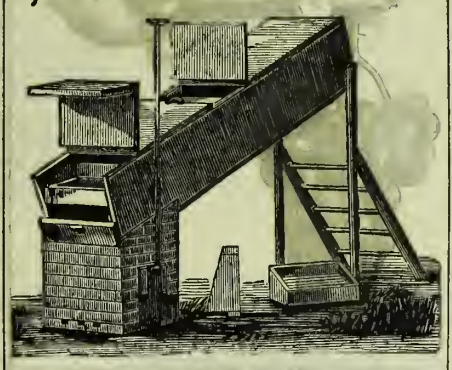
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SLUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

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Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, Etc.

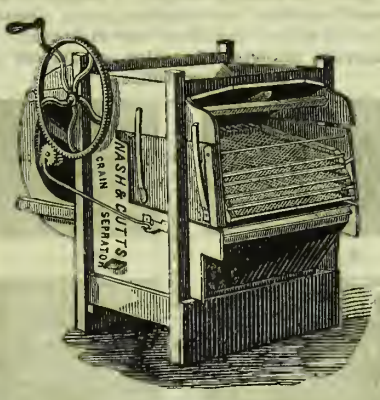
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THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

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Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

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Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

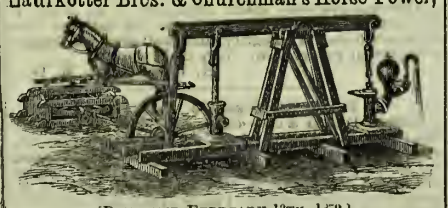
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

7v7-2m-3m Cor. J and 10th Sts., Sacramento.

THE ALDEN Fruit Preserving Company OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

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W. M. WHERRY, Vice President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

LANDS & HOMES FOR SALE

RANCHOS

FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STREET,
ap25-tf N. E. Cor. Montgomery.

Tobacco and Vegetable Land for Sale

AT A BARGAIN.—A farm of 100 acres near the thriving and rapidly growing town of Gilroy, Cal. This land lies on and along Carnedero Creek, and is distant from Gilroy six miles, by a good and level road Fully 25 acres of the tract are adapted in every respect for the cultivation of tobacco, now the most remunerative crop of that section of the country; 25 acres suitable for vegetables; good house of five rooms; young orchard and abundant supply of pure mountain water. Good market at all seasons of the year in Gilroy for vegetables and farm products. Apply to B. B. MINOR, 411½ California street. Room No. 4. ag1-tf

DAIRY RANCH FOR SALE,

Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Obispo. 20v7-3m

FARMING LAND,

TO LEASE ON SHARES.

1,000 ACRES,

Or any part of same, being levled and of similar character to that of SHERMAN ISLAND. Apply to

W. T. S. RYER,

No. 330 Pine street.....SAN FRANCISCO, CAL.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

CAMELLIAS.

We offer a large stock of these plants at low rates. They are unusually healthy and vigorous, and embrace the best white and colored sorts. Prices of the different sizes will be forwarded on application, as well as the Descriptive Catalogue. In ordering, please advise as to the mode of shipment.

We offer also Chinese Azaleas, Gardenias, etc., as well as the best and most rare Deciduous and Evergreen

Trees and Shrubs.

R. B. PARSONS & CO.,

7v8-1m Flushing, New York.

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m 304 California Street.



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of Imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,

1v8-3m 43 & 44 Cal. Market, S.F.

Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The RURAL PRESS—established Jan. 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfluities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy.	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast, that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the RURAL has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than has been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the RURAL PRESS.

The S. F. Market Reports

Will receive greater attention in the department of DOMESTIC PRODUCE than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the PACIFIC RURAL PRESS. We commence the new year with a regular circulation of

Over 5,000 Copies,

A far greater issue than that of any weekly on this Coast, independent of a daily publication. If our friends will continue to "help us help ourselves," we hope to reach a circulation of 8,000 this year, and do a correspondingly greater service of good. While we have the greatest advantages and can make by far the best weekly for

Agriculturists on This Side of the Continent.

We cannot expect one-half so large a circulation as journals in older and more populous districts. Consequently readers cannot rightly expect such a paper here at Eastern rates.

No Premiums But a Good Paper

Do we offer. A flashy chromo (or cheap map), with an ill suited paper, will hardly satisfy the farmers of this Coast, whose time is too precious for trifling. To many of you the benefit of a reliable and valuable paper should reach a hundred fold its cost, while to all a poor journal would be dear at any price.

Sample Copies Furnished Free

On receipt of stamp for postage.

Agents are Wanted

Who will do more or less active canvassing. To such we will furnish free samples and pay liberally for their services.

Terms of Subscription:

One year (payable in advance)..... $4.00
Six months..... 2.25
To Granges and Farmers' Clubs, furnishing club lists, $3 per annum.

DEWEY & CO., Publishers,
Office, No. 224 Sansome street, San Francisco.

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th. R. S. Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhibition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers, Mechanics' Institute, No. 27 Post street, San Francisco, California. In order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Williston, Secretary; J. B. Frisbie, Treasurer.

The First Annual Fair of the Bay District Fair Ground Association will be held at San Francisco, Cal., commencing on September 7th, and ending on September 12th.

The fourth annual fair of the Southern District Agricultural Society will commence at Los Angeles on Monday, October 26th, and continue six days.

The Northern District Fair will open at Marysville, September 14th, and continue one week.

The Eighth Annual Fair of the Sonoma and Marin District Agricultural Society will commence at Petalnma on the 14th of September, and end on the 19th of September.

Removal.

July 13th, 1874, the business office of this Journal was removed just one block east of our former location, to No. 224 Sansome Street, southeast corner of California, over the Bank of British Columbia, where we have secured large and elegant quarters. This removal is made in consequence of the sale of the building which we formerly occupied, to parties who will proceed immediately to demolish the present structure and erect a new and magnificent block in its place.

[Diagram Showing Location of Dewey & Co.'s New Offices.]



Hints to be Remembered.

A note dated on Sunday is void.

A note obtained by fraud, or even from one intoxicated, can not be collected.

If a note be stolen it does not release the maker—he must pay it.

An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.

A note by a minor is void.

Notes bear interest only when so stated.

Principals are responsible for their agents.

Each individual in partnership is responsible for the whole amount of the debts of the firm.

Ignorance of the law excuses no one.

It is a fraud to conceal a fraud.

The law compels no one to do impossibilities.

An agreement without consideration is void.

Signatures in lead pencil are good in law.

A receipt for money is not legally conclusive.

The acts of one partner bind all the others.

Contracts made on Sunday can not be enforced.

A contract made with a minor is void.

A contract made with a lunatic is void.

A COMPLIMENT.

PLAINSBURG, MERCED CO., CAL., June 22, 1874.

DEWEY & CO.—*Gentlemen:* I herewith tender my grateful acknowledgements for the energy, promptness and efficiency which you have displayed in procuring my patent.

Although you were entire strangers to me when I first communicated with you, I soon felt satisfied you were gentlemen of integrity, and shall always be happy to represent you as such. Very truly yours,

H. W. RUCKER, M. D.

CAMPO, SAN DIEGO CO., CAL., July 3d, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* To-day I received the patent and other papers of my animal trap, that you so successfully worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long. I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into your hands.

I remain yours truly, A. M. GASS.

FARM Laborers, Engineers, Teamsters, Blacksmiths, Millers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery steeet, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

We guarantee satisfaction. ag22-tf

"IF YOU don't like it, bring it back." That is the way all agents of the Blanchard Churn show their confidence in its merits. They are never brought back.

They are made only by Porter Blanchard's Sons, Concord, N. H.

NOTICE.

The Fruit Growers' Association will meet in San Francisco on Thursday, Aug. 27, at 320 California street, room 12. A full attendance is requested.

A. W. THOMPSON, Secretary.

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator-429 Montgomery street, San Francisco. 2v7-6m

GEO. F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

And Tree Seeds,

GARDEN TOOLS, TREES, PLANTS, Etc.

No. 317 Washington Street, San Francisco,

Between Battery and Front.

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GRAPE PICKER.



Price, $1 00 each.

GATHERS GRAPES WITHOUT DROPPING OR BRUISING THEM, AND GREATLY ECONOMIZES TIME. ☞ Send for one.

LINFORTH, KELLOGG & CO.,

Hardware and Agricultural Implements.

Nos. 3 and 5 Front street, San Francisco. 8v8-1m

IMPROVE YOUR POULTRY.

IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.



Oakland Poultry Yards,

Cor. 16th & Castro Streets, Oakland, Cal.

Young Fowls now for sale at reduced prices. Also a few of my imported Fowls in pairs or trios. Send stamp for illustrated circular, containing a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,

4v8-tf P. O. Box 659, San Francisco.

California Farmers' Mutual Fire Insurance Association.

Office, 320 California Street, - - - San Francisco.

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J. D. BLANCHAR, W. H. BAXTER.

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J. D. BLANCHAR, Pres't. W. H. BAXTER, Sec'y.

This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-ti

MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to

B. F. CLAYTON, San Jose.
Or C. J. CLAYTON,
10v7-6m Clayton, Contra Costa Co., Cal.

GRAIN & STOCK FARM FOR SALE.

A FINE FARM OF 140 ACRES;

Good Grain Land: all plowed and ready for seeding and promising fine crops, and 360 acres of good tule land adjoining; excellent pasturage; situated in Suisun valley, within a mile and a half of landing at Suisun City and one mile of a railroad station. Has a good house, barn, corrals and fences; also work-horses and a full assortment of agricultural implements, seed feed, etc. Price moderate and terms easy. Apply to BERRY & CAPP, 418 Montgomery street, Real Estate Agents. 8v8-1m

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

C. COMSTOCK, Sacramento, Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

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J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petalnma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

BENNETT & PAGE, San Francisco, breeders of Short-Horn Cattle.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

Mining and Scientific Press,

(Established in 1860.)

The oldest, largest and best Mining Journal. Devoted, also, to Science, Invention, Mechanic Arts and Industry on the Pacific Coast.

Subscription to the above, $4 a year; Sample Copies, post paid, 10 cts.—four for 25 cts. Address,

DEWEY & CO., Publishers,
No. 224 Sansome st., S. F.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, AUGUST 29, 1874. [Number 9.

Improved Churning Apparatus.

We illustrate this week a device invented by George Ridler, of Rickardsville, Dubuque county, Iowa, who intended to furnish a convenient means of operating a single churn, or any desired number of churns at once, in accordance with the amount of cream used and power to be applied. To the end of the driving shaft is attached a hand crank or a pulley, *A*, which is connected by a belt to a suitable motor. The shaft rotates in bearings in the frame work of the machine, and carries a large gear wheel, *B*, which, through a smaller wheel below, actuates a balance disk, *C*. To a crank pin on the latter are connected the rods, *D*, which, through the horizontal levers, pivoted to supports on the frame, communicate motion to the churn dasher shafts. The frame of the apparatus may, if desired, rest upon a platform, in which recesses may be made for the reception of the lower portions of the churns. The peculiar form of dasher represented in the foreground of the engraving is made by halving two bars to each other, and attaching them at their centers to the extremity of the dasher handle. The middle portions of the ends of the bars are cut away, and the arms thus formed are made V shaped upon the upper side, while they have grooves of similar contour on their lower faces. The under side of the middle portion of the dasher is concaved, in order to gain a better hold upon the milk, and to prevent spattering. In the cover is formed a chamber, of which the funnel shown forms an upward continuation. The object of the chamber is to receive the milk and fine butter which may be carried up by the dasher shaft. Its bottom is formed by attaching to the cover a plate, *E*, the under side of which is made convex, so as to scatter the milk that may be projected against it by the dasher. This plate is secured by screws and may be readily removed for cleaning, etc. Instead of the form already described, the dasher may be made of the shape shown at *F*, its upper side being conical and its base slightly concave.

In describing the churn the inventor says: When the apparatus is in operation, it can be seen at a glance the usefulness of my invention. It will make more and better butter than anything ever invented for the purpose of churning. It works with ease and quickness; a child five years old can churn with it, and no cream will be spilled, worked with the funnel top and save-all chamber cover. The improved eight-finger dash not only churns, but by turning the machine slowly after the butter is come, gathers it. We have been in the dairying business 40 years, and have tried almost every kind of churns, and found by experience that the up and down dash churn is the best we ever tried. We experimented with four gallons of cream; we churned it in a revolving churn, got all the butter we could, then put the buttermilk in a stone churn, worked with the machine and got a pound and a quarter of butter from the buttermilk; and we know it is impossible to make as good butter with a revolving churn as with the old fashion dash churn. Consequently my churning apparatus will pay for itself in one month with a dairy of six cows. A single machine will weigh about 50 pounds; it takes but little room, only 12x18 inches, and will do the churning for a dairy of a hundred cows, and would be an ornament to any dairy room, and is always ready for use. All you have to do is to put the churn on the platform and work the machine, and if the cream is of the right temperature you will get butter in five minutes.

Bad Weather in Europe for the Crops.—The *Mark Lane Express*, Aug. 17th, says: Bad weather has prevailed throughout the week, but farmers have looked sharp and secured the crops. There are no reports of sprouting, though much grain stacked is in poor condition, in consequence of high winds and low temperature. The same weather has prevailed on the continent. This will bring good samples to the front and increase the value of the old stock. There is little difference in values since last reports.

Horticultural Exhibition.

The horticultural exhibit has been arranged in four weekly shows. The first week's show comprises flowering plants, Australian evergreens, coniferae, hardy ornamental foliage plants, tropical plants, hardy climbing plants, ferns, greenhouse and conservatory plants, Japanese plants, rustic hanging baskets, etc. Among the flowering plants there may be noticed in particular Eucharis Amazonica; Cape jasmine (Gardenia Florida) Begonias, of various sorts; Dalechampia Boezliana; Scutellaria mocciniana, with its intense bright scarlet flowers; Lilium auratum; the favorite Gloxinias, of all shades and colors; Franciscea latifolia; Torenia Asiatica; double Chinese primrose; Calceolaria; Amaryllis; Clerodendron; Bouvardias, and many others arranged in groups. In the collection of coniferae are some very fine specimens or Araucaria Excelsia, Aracaria Cookii; A. Bidwllii; Crytomeria Japonica, all of which are grown out of doors in California.

The collection of ferns, by Miller & Sievers, is probably the best ever exhibited on this coast, containing about seventy-five specimens of select ferns, some of which are most remarkable in appearance. The staghorn fern of Australia, growing similar to the orchid and living chiefly on the moisture of the air; the birdnest fern (aspleninm nidus avis) from the Sandwich Islands, with its showy and robust bright green leaves and black midrib; Pulu fern, (cibotium glaucum, and cibotium Menziezii,) of the Pacific islands, is an attractive specimen and rarely met with.

Among the smaller ferns we notice, in particular, the Adiantum Farleyens and Adiantum Amabile, the two handsomest ferns under cultivation; also the Pteris Tri-color, and Pteris Argyrea, with richly-colored foliage; the Gymnogrammas, gold and silver varieties, all are most exquisite varieties and generally admired.

The group of tropical plants by R. B. Woodward, is a very imposing collection of palms, yuccas, bananas, ficus, elastica, aralia, pine apples, strelitzia, reginae and variegated dracoenas, mostly natives of the Pacific Islands and Brazil.

The exhibit of twenty specimens of Japanese plants is also very meritorious. They consist mostly of variegated foliage plants, and are all considered hardy in California.

The table of cut flowers looks brilliant. The display consists of about 100 varieties of dahlias; 50 varieties of gladiolas, and forty varieties of fuchias.

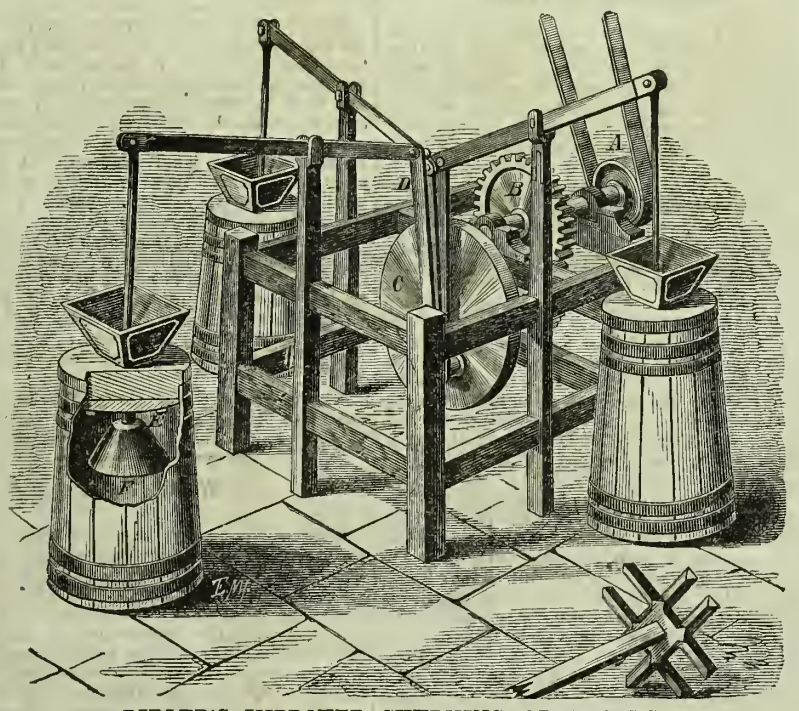
A pleasant feature is also the table arranged for rustic stands, aquariums, parlor fountains, fern cases, rustic baskets and ornaments for window gardening. Visitors should not neglect examining these handsome ornaments thoroughly. They are the best ever brought before the public.

The most attractive features for the coming week will be ornamental foliage, plants, fuchias, geraniums and plants indigenous to California.

As for fruit, it is arranged to have a grand show during the third week, when all will help.

Attrition Flour. — It is known that the more you grind wheat the more tasteless it is. The sweetest sugar is that which has been the least refined, and the less we cook beef the more it nourishes. In fine grinding we get flour very white, and the fancy is pleased; but it is tasteless and unhealthy. Besides, close grinding heats the berry (as millers express it) and the life is ground out of it, and it begets constipation through torpor of the colon, probably. To overcome this objection several processes have been tried to dispense with mill stones and their overheating. Among these may be mentioned the attrition or disintegrating process, now used by one mill in Chicago. Iron beaters radiate from a central axis and revolve with such rapidity that grain, passing in at the top, becomes flour as it leaves the beaters, and it is not perceptibly heated. We have a medical friend, who, at great expense, got a barrel of this attrition flour from Chicago. His large family suffered from habitual constipation; three-fourths of his patients also. Knowing that our bread has such effect, it occurred to him to try a change. The result proved his foresight. The bread was less white but twice as sweet. Constipation fled, and digestion improved. But $19 a barrel (on account of freight charges) is against it. The patentee is a Scotchman, whose ideas are impractical. Hence, only one mill is in the United States! But hence, also, some one has devised a much cheaper plan to do the same thing, and his talk encourages hope that before long we may have it on trial in San Francisco. The attrition mill in Chicago has lately donbled its capacity, which attests the growing popularity of the bread.

Mr. Charles Hoerohner, of Mokelumne Hill, has a pear tree that is rather pressing the season. One-half the tree is loaded with fruit, while the other is literally covered with blossoms.



RIDLER'S IMPROVED CHURNING APPARATUS.

Sustain Your Fairs.

The opening season of the agricultnral fairs is close at hand. Some of them will open before the next issue of the Press. Whatever part agriculturists may take in the State fair, they should not fail to do all in their power to insure the success of the county and district fairs in their localities. As exhibitors they can more effectually advertise their particular localities than by any other means. Here people can obtain the ocular proof of the natural advantages of the country, and can form a proper estimate of the industrial condition of the community. Without these annual exhibitions farmers hardly know what their neighbors, even, are doing. Exhibitors will receive due honor for excellence, and will be able to learn from those who are in advance of them. There will always be visitors from abroad, even at the most isolated localities; and their reports will have more weight with the outside world than any efforts to write up your country. Do not be timid about exhibiting your products. If you attend as a visitor, merely, you will very likely make up your mind when you get there that you could have brought along something that would have excelled in some particular department. One of the common incidents of such exhibitions is the dialogues that occur in front of stalls, pens, stands, etc., in which parties are heard to declare that they "can beat that." In many cases, probably, they could, and it is a pity they did not exhibit their products; in others they are not competent judges, and would be benefited by having their products submitted to the critical examination of others. But there are reasons for suspecting that these declarations in many cases are not made in good faith, parties merely wishing to depreciate the articles on exhibition.

People from agricultural districts and villages in the neighborhood of fairs should make it a point to attend. The time and money thus expended will bring a good return in wholesome pleasure and practical information. Fairs properly managed are beneficial to the country in every respect, and should receive the countenance and support of the community. If they are not properly managed, then take hold and have a thorough house-cleaning, and remedy the abuses promptly, instead of retiring in disgust.

Northern District Fair.—Attention of stock growers and others is directed to the announcement of the holding of the Northern District Fair at Marysville, commencing on Monday, September 14th, and extending through the week. As Butte county holds no fair the present season, we commend the Marysville programme to the favor of all interested. It will be seen that Blackbird is excluded; but it is possible that Butte may pick up Yuba with "Blackbird colt."—*Butte Record.*

New Warehouse—They are constructing a warehouse alongside the railroad at Tulare, on the block just beyond the stores. Its dimensions will be 84x135 feet, capable of receiving 2,000 tons of wheat. This reminds us that we made an error in stating the capacity of the warehouse being erected in Visalia. The capacity should have been stated at 3,000 tons. The Tulare building is as large on the ground as the one being constructed here.—*Visatia Delta.*

Speaking of the grain movement in northern Salano, the Vallejo *Independent* says: 36 car loads of wheat were shipped from Davisville last week, and as much more this. At least 16,500 tons of wheat will be handled at the Dixon yards this season. At Batavia 3,000 tons have been stored, 800 tons shipped, and 850 tons are in the yard, making 4,750 tons handled so far during the season; 940 tons of Grange wheat will be shipped from Batavia this week.

We were shown last week (says the Humboldt *Register* of August 21st) a specimen of mammoth barley, grown on Charley Wood's ranch, in Pleasant valley. He raised a ton of barley this year from 60 pounds of seed. Woods first obtained the seed of this barley from the craw of a wild goose, about three years ago.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Summer Fallow.

EDITORS PRESS:—I suppose you began to think I had forgotten you entirely, but such is not the case by any means. Let me explain. Last winter I could not plow, the ground being too wet and boggy. So I had a good deal of fallowing to do. Well, I fallowed; but not like my neighbors. I plowed and cross-plowed and got my land in good order for the ensuing year. Can you believe it? I am afraid you will say humbug, when I tell you there are melons growing on that fallow land—on these arid plains—without irrigation, as rank as you ever saw them grow on the river bottoms. Some of the species known as the pie melon, at this writing, are as large as your head, Mr. Editor. Well, the working of this land kept me busy until the hay crop came on. Next came the harvest of grain; and last a spell of severe illness, brought on by over-exertion, of which I am rapidly recovering. More anon.

W. T. EVANS.

Dry Creek, Stanislaus county.

More Wild Coffee.

EDITORS PRESS:—You requested me to send you some more of the wild coffee when ripe. I have squeezed this out of the pulp; it should be left to dry itself when the shells come off readily. This, though smaller, seems to be a real coffee berry and with cultivation I think will be valuable in time. No doubt the real coffee would thrive here, or in many parts of the State. I have received a number of letters from all sections of the State, making inquiries about it, one from a gentleman in Florida, who saw the article in the PRESS. Your correspondent at Shingle Springs wishes to know how the tree is cultivated. In coffee countries from the seed. The tree being an evergreen is difficult to transplant. I have burned and ground some; and, though lacking strength, it has the flavor of real coffee. Age and thorough drying and pruning will improve it.

Yours respectfully, L. W. SPALDING.

Jackson, Amador Co., Aug. 16.

Only a Little Sketch.

EDITORS PRESS:—Oh! how lovely, grand and beautiful it is here. Let me begin at the first and tell you all about how I came to be here. This morning I awoke and heard the dull patter, patter of drops upon the roof from off the branches of the trees that hang over the house. When I arose I saw that there was a very dense fog—almost a rain. Some would have said that it was a very dreary, dismal morning. We thought different, as it betokened a pleasant day for us; and it has been very pleasant. Before noon the fog cleared away, and "Old Sol" appeared in all his soft, warm, delicious radiance. Almost like one of our bright spring days; so different from our usual hot August days. About three o'clock I took my Greek grammar and algebra, and thought it would be so pleasant to go into the woods (where father and the boys were at work) to study, and here I am. But do you think I can study? Yes; but a desire for a knowledge of classical lore has no charms for me now. The book of Nature is open before me, and Nature's God is my teacher.

From the house I came down the hill, passing a great many different kinds of forest trees. The towering redwoods that lift their heads high towards heaven; the lofty fir tree, the tan-bark oak, the madrona with its smooth, bright cinnamon-colored bark and bright, green, shining leaves; the laurel, soft maple, and many other kinds too numerous to mention. There were a great many varieties of aromatic shrubs on all sides. Down, down, until I came to, oh! such a lovely spring in the side of the hill, just above the little babbling brook that winds its way like a silver thread between the hills on either side. The water of this spring comes bubbling up out of the rocky ground into a kind of semi-circular basin, scooped out of the rock in the side of the hill. The water is very cool, and clear as crystal; and it is supposed to be strongly impregnated with mineral substances, especially iron. All around the circular part are beautiful ferns of different kinds. One species is the Maiden's Hair, or trembling fern, as it is sometimes called; it is very beautiful. The stem is black, and the leaves very fine and of a bright green color. From the spring the water comes trickling down a rocky wall about two feet. This rocky wall is covered with bright green moss. A few steps and we come to the creek. Such a lovely little creek as it is! See the water dashing and splashing over the rocky bed and pebbles, as if chasing each other. How picturesque it is all along by the creek! But on I go to the other side until I come to a large redwood tree several hundred feet high and 17 feet in diameter. I look at it and vainly wonder how old it may be. Up the hill again until I come almost to the top; the thick brush meets me here and I can go no further at present. I find a nice seat and here sit down; open my book and think I will study. I glanced up and the view before me was so beautiful I thought no more of my book then. How much I wish that I was an artist and could sketch the picture before me. Above me, heaven's blue dome—Nature all around me. At my right, a little below me, stands a large redwood tree. Up this tree about 100 feet a large limb comes out 10 or 12 feet, then turns straight up 20 or 25 feet. When looking at it a few rods below it looks like a madrona tree growing on a redwood limb. Its leaves look like the Larson cypress, only of a very light green—almost white. It has at least the appearance of something strange and unnatural; a strange freak that Nature took, perhaps, to show her beauty and wonder. Before me, across the creek, I can see our house, the corn-field, and part of the orchard; and just beyond, the grain-field of our neighbor. This would make a most lovely sketch. A little toward my left is the vineyard, its green foliage covering the hillside; and, in imagination, I can see the large, purple bunches of grapes. Imagination now, but not when I've got there. Just over the vineyard, far away beyond, are the bay and hills of Monterey, which form a beautiful background to my picture. Close by me on my left is a large group of laurel trees. The breeze is laden with their spicy breath. There is an apple that grows on these trees, from which bay rum is distilled.

The sun begins to sink behind the hill, and I must return. With a thought of how wonderful and beautiful nature is, and how much more wonderful and beautiful must He be who formed it all, I retraced my steps.

SULIOPH.

Prospect Hill, near Santa Cruz, Aug. 22d.

HORTICULTURE.

Dimorphism in Fruits.

We have frequently met and heard of two varieties of fruits, apparently quite distinct, being found on the same tree, and not unfrequently we have heard the correctness of statements to that effect disputed. The circumstances have been attributed to budding or grafting; and to some it has never appeared possible that such a thing as bud-variations could possibly take place. It is not unusual to see variations of various kinds on plants. Leaves, shoots and flowers "sport" on the same plants, and why not? The instance of two distinct apples being produced annually on the same tree in the garden of Mr. Lee, at Clevedon, is now well known. The origin of the Scarlet Golden Pippin by bud-sports is also well known to ourselves; and a similar instance of two distinct pears being produced on the same tree in the garden at Badminton is also a well-ascertained fact which we have investigated. A new sample has appeared in France in the collection of our friend, M. Durand, of Bourg-la-Reine. It is thus described by M. Riviere, in the *Revue Horticole:*

"Among the apple trees we saw a young vertical cordon bearing two beautiful fruits of the same size, but each of different form and color. One was on a spur above a yard from the ground; its color is of a beautiful greenish yellow, golden toward the sun, with numerous white dots. It was slightly irregular in shape, the stalk almost wanting; and it exhaled a strong, very agreeable perfume. The other, produced on a spur higher up, was larger than the former, conical and regular in shape, washed and mottled with lively red, and with a violet bloom in some parts, a third only remaining yellow. Unlike the other fruit, this has no perfume. The variety on which this dimorphism has shown itself is Menagere, and the conical colored fruit bears a strong resemblance to Emperor Alexander."—*London Jour. of Hort.*

Neglected Culture.

The annual report of the New Jersey State Agricultural Society gives neglected culture as having the strongest retarding influence in that state on fruit culture and orchard planting. The old orchards, we are told, "are sorry sights to look at," simply for want of proper culture and manure. We know many such, that, to our knowledge, have not had a shovelfull of manure in 15 years, removing during this time not only what apples the trees bore, but also a cutting of hay once a year. This, too, by excellent grain farmers, men who would not think of planting a crop of corn or potatoes without a full dose of manure for each. This has been the great difficulty everywhere; but few of those who plant orchards, whether large or small, being willing to give them the care they bestow on annual crops.

No good farmer would think for a moment of planting his corn in a grass sod, and giving no cultivation—a treatment which has been very common for young fruit-trees. We are glad, however, to see of late years a great improvement in the management of newly transplanted orchards as well as of bearing ones, and landowners are learning that trees kept in vigorous and healthy conditions bring finer and higher fruit, and more of it, than such as are allowed to become enveloped in weeds, grass and brush.—*New England Homestead.*

Lime For Apple Trees.

A successfull pomologist of New Jersey writes the New York Herald that he once noticed that a tree standing in the immediate vicinity of his dwelling had all at once put forth with renewed energy, and he was at a loss for some time to define the cause. On examination he found that a quantity of lime, which had accidentally been spilled, and rendered worthless by becoming mixed with the refuse on the stable floor, had been thrown at the foot and around the tree, and to this, as the principal cause, he immediately accredited the revivement and renewed fructification of the tree. Taking the hint from the incident, he purchased twelve casks of lime and applied half a bushel to each of the trees in his orchard, and found that it produced immediate beneficial effects. Not the health of the tree only, but the quality of the fruit also was greatly improved. The *Herald* adds that it has known some farmers to make it a regular practice for a succession of years to throw caustic lime around their apple trees in the spring and summer.

In our own, on the farm, we found that leached ashes worked about the same result as given twice above. A pear tree close by a leach grew twice as rapidly as one a few rods way.—*Ohio Farmer.*

CUTTING FLOWERS.—Never cut flowers during intense sunshine, nor keep them exposed to the sun or wind. Do not collect them in large bundles, or tie them together, as this hastens their decay. Do not pull them, but cut them cleanly off the plant with a sharp knife—not with scissors. When taken in-doors place them in the shade, and reduce them to the required length of stalk with a sharp knife, by which the tubes, through which they draw up the water, is permitted to ascend freely; whereas, if the stems are bruised or lacerated, the pores are closed up. Use pure water to set them in, or pure white sand in a state of saturation, sticking the ends of the stalks into it, but not in a crowded manner. If, in water alone, it ought to be changed daily, and a thin slice should be cut off the ends of the stalks at every change of water.

INFLUENCE OF THE GRAFT ON THE ROOT.—At the last meeting of the Indiana State Horticultural Society, Mr. W. H. Ragan said: It is a fact that no intelligent nurseryman will gainsay, that varieties of fruit trees change, to a certain extent, the character of the root upon which they are grown. Yellow Bellflower and Prior's Red are good examples. A row of trees of either of these varieties, grafted or budded on as many different varieties of seedling roots as there are trees, each naturally having its own peculiar habit, will be found to have the character of root peculiar to the tree to which it belongs, although the roots are entirely of the seedling, and naturally differing widely from each other. Prior's Red root is uniformly branching and feeble. Yellow Bellflower as certainly strong, vigorous and fibrous.

NEW ROSE.—"General von Moltke." This new hybrid perpetual rose is advertised in England as the only real scarlet yet known.

Water Nuts.

Many of our readers have probably seen the Chinese nuts, which resemble very much a pair of horns. They are very peculiar in appearance, but are not uncommon in this city, where we sometimes see a bushel in a single lot. They are the fruit or nut of an aquatic plant which grows in lakes and streams and the species *Trapa bicornis* is cultivated by the Chinese and has an extensive sale in their country, being highly esteemed. Several of these nuts were presented to the Academy of Sciences at its last meeting, and Mr. Stearns remarked that they came from a plant (of which there are several species) known to botanists as *Trapa*, belonging to the natural order *Onagraceae.*

The specimens shown were the fruit of the *Trapa bicornis* (or two-horned), the propriety of the name being manifest. The nut is sometimes called the water chestnut. The Chinese call them *Long* or *Links.* Another species, *trapa natans*, grows in middle and southern Europe, middle Asia, and northern and central Africa, and the fruit or nut has four spires. *Trapa Bispinosa* is found in Asia and parts of Africa, and it is said also to be cultivated in Japan. In some of these countries this latter species is an important staple in the way of food to the population. The nuts are held in high esteem by the Hindoos, and are sold in all the shops in India. Mr. Stearns thinks it is quite likely that some one of the species might thrive well in this country, and it would be well for some of our enterprising Californians to experiment with the Chinese species, which are easily obtainable in this city. The nut is well known among us from the peculiarity in shape. Some of the nut-growers in the southern part of the State might try the cultivation of these nuts at small expense, and see what can be made of them. There would be a good market for the nuts in this city and State among the Chinese population.

IN 1873, about 8,000 American mowers and reapers were sold in Europe; and it is estimated that, during the present year, no less than 12,000 mowers will be sold abroad, representing a value of $1,000,000 paid to American manufacturers of this class of machinery.

STOCK BREEDERS.

Stock Raising a Necessity.

A correspondent writes to the *Iowa Fine Stock Gazette*, insisting on the necessity of farmers giving more attention to raising stock. We extract:

When our farms were new, say eight years ago, we could buy land for from $5.00 to $10.00 per acre in this section of Iowa. Perhaps we could then afford to content ourselves with preparing produce once a year for market, and let ourselves and capital remain idle one-half the time. But with land representing a value of $20 to $50 per acre, and a rate of taxation imposed upon this basis, we must make the farm yield a larger return in order to pay the increased interest and taxes and to enable us to compete in the markets of the world with the products of cheap land here in the West.

Some will say we must farm less land and farm better the remainder. This may accomplish something, but not enough. The great object to be secured is to make our farms as productive in the winter season as in the summer, and this can be done by proper attention to live stock. If our barns are filled with hay and grain which we can sell in the market at a price twenty per cent. above the actual cost of raising, and we can feed this to live stock before another crop and yield a return in flesh, wool, butter and cheese, of twenty per cent. more, it is plain to me that the productive capacity of our farms has been doubled. Such is the case, and farmers are manifesting a warm interest in the live stock question. And as we begin to see the benefits of feeding our hay and grain, and pursue a more systematic course of feeding, we see a marked degree in favor of thoroughbred over our common scrub stock.

When our land was cheap and soil new, we scarcely realized the fact that the thoroughbreds were so much superior to our common stock. Corn was cheap and stock also. But as grain advances in price, our self interest compels us to compare the value of the food we give with the amount we receive in return. No farmer can fail to comprehend the fact that thoroughbreds and their grades are so far superior to our common stock as to render satisfactory returns for the same amount of food consumed.

The Suffolk Breed of Hogs.

On this subject Hon. John Wentworth, of Chicago, Ill., one of the most careful, reliable and successful breeders of first-class thoroughbred stock in the Northwest, has this to say in an exchange:

After trying carefully all the other breeds, we gave the preference to the Suffolks, and we think all others will who try them as long and as impartially as we have. They make the most pork with the least food, and with the least bone. They are the quietest hogs. Give them enough to eat and they will never leave the premises. They lie down and remain so until they want more food. They make the least offal of any hogs, and they root about the least, even when short of food. For crossing upon other hogs they have decidedly the preference. Their cross upon the largest white sows make the best of Chester whites. Their cross upon the largest black or speckled sows makes the best of Berkshires, Polands, Poland-Chinas, and other dark-colored breeds.

It is a remarkable fact that the Chesters, Berkshires, Polands, Poland-Chinas, etc., as well as other breeds that have taken the most prizes, have been manufactured in this way. Our Suffolks are well haired, and run in our pastures and barn yards with our cattle, sheep, geese, ducks and chickens. They are as quiet as any animals we keep. As the Suffolk is not a new breed, nor recently made up from unknown crosses, but a long established English variety, it is therefore a true breeder. In them there is no breeding back to the original common stock. Their litters are not part good and part bad, but they are uniformly good. They breed even; each pig as good as another.

The object of the farmer is to get the most meat to the least bone, the most valuable matter in the hog upon the same food to the least portion of the valueless matter. The Suffolk may be small compared with the mammoth breeds, but he contains as much that is eaten as most hogs of double his weight, and which consume four times its food.

The great advantage of the Suffolk hog consists in the fact that if you do not like the breed, you can cross it profitably upon the common cheap hogs of the country, and make a breed to suit yourselves.

FOR some years, Lord Southesk has been breeding Herefords at Kinnaird, Montrose. They have been doing very well with him, although it was prophesied by some when he bought those whitefaces, that they would not prosper in a climate so far north. The Herefords are flesh-carrying animals, and a cross between them and the shorthorns is an admirable one for the butcher. Mr. John Thornton sells his lordship's stock in October. Mr. Thornton, we dare say, is more interested in the Teesdales than the whitefaces, but he has a fancy for both breeds. Being a shorthorn man, he will be anxious to prove how an English breed for feeding purposes—for fat stock shows—can be made available in Scotland. The Herefords of Lord Southesk have been exhibited successfully at exhibitions in England.—*London Farmer.*

Poultry Yard.

Temperature Required to Hatch Eggs.

A correspondent of the *English Mechanic*, who claims to have had great experience in artificial incubation, and who states that he has traveled over the continent of Europe, and in Egypt, to ascertain practical facts in regard to the subject, asserts that the temperature required to hatch eggs should vary according to the thickness of the shells. He says the highest success is only to be reached by particular attention to this point. For thick shells he gives an average heat of 110 degrees, as the proper temperatnre for hatching. For medium shells 100 degrees, and for thin shells 95 degrees. Experiments of our own in artificial incubation show that the latter temperatnre is several degrees too low for the eggs of any kind of fowl reared in this country. Various authorities give the temperature of the blood of a chicken as 111 degrees. During the act of incnbation, the temperature of the blood of fowls is somewhat raised, the animal becoming feverish. The temperature of eggs dnring the natnral process of hatching is maintained propably quite np to that of the normal temperature of the blood of the incnbating fowl. We have never snceeded in artificially hatching eggs in an average temperature below 110 degrees; and we believe that an attempt to hatch even the thinest shelled eggs with an average temperature of 95 degrees, will fail.—*Exchange.*

Transportation of Live Fowls.—The cruelty of confining fowls in low boxes dnring journeys of several days, calls for the intervention of Mr. Bergh. An animal cannot be made to stand long in a cramped position without great portnre. In boxing live fowls the most important thing is to have the box of such hight that the birds shall stand perfectly upright. The boxes nsed for this purpose are more apt to be low than narrow. For a cock of medium size, a box shonld be 12 by 15 inches, and 18 inches in hight; for a pair, 15 by 15 inches, hight the same. Sides, ends and bottom of the box should not be made air tight, for the air becomes impnre, even if the top is wholly of wire or lath; hence some opening shonld be made near the bottom. In cold weather these holes should be few and small, bnt in summer the more open the better. J. Boardman Smith says that he nses "a common cheese box 18 by 22 inches in diameter, with the cover supported 18 inches from the bottom of the box, by 4½ x4½ inch strips nailed through the box and cover, and clinched on the inside. A piece of coarse sacking is tacked around the box. The top of the cover furnishes a good, smooth surface for directions. Completed, the weight is from 6¼ to 8 pounds. Where express charges are from 25 cents to $1 per pound, this saving in weight of the box is quite an item."—*Live Stock Journal.*

Gapes in Chickens.—The editor of the Lancaster *Farmer* says: In a recent conversation with an experienced chicken grower, he informed us that he had been very successful in conquering that precarious disease in his young fowls by the application of air-slacked lime. As soon as a manifestation of gapes in his fowls appears he confines his chickens in a box, one at a time, sufficiently large to contain the bird, and places a coarse piece of cotton or linen cloth over the top. Upon this he places the pulverized lime, and taps the screen sufficiently to cause the lime to fall through. This lime dust the fowl inhales and causes it to sneeze, and in a short time the cause of the gapes is thrown out in the form of a slimy mass or masses of worms, which had accumulated in the windpipe and smaller air vessels. This remedy he considers superior to any he has ever tried, and he seldom fails to effect a perfect cure. He has abjured all those mechanical means by which it is attempted to dislodge the *Entozoas* with instruments made of whalebone, hog's bristles, or fine wire, alleging that people are quite as certain to push the gape worms farther down the throat of the fowls as to draw them out.

Value of Hens.—A curious statement has been made and published in a French paper in regard to hens, It reckons the number of hens in France at 40,000.000, valued at $20,000,000. Of these about one-fifth are killed annually for the market. There is an annual net production of 80,000,000 chickens, which in market yield $24,000,000. The extra value to be added for capons, fattened hens and the like, is put at $2,200,000. The production of eggs is reckoned at an average of 100 eggs per hen, worth $48,000,000. In all, it is reckoned that the value of hens, chickens and eggs sold in the markets of France is $80,000,000.

In the two French colonies of Martinique and Guiana, there are more than 6,000 acres nnder culture with annato, the annual produce being 3,000,000 pounds. The production of annato now exceeds the demand, as no fresh uses have been fonnd for this coloring substance.

The custom-honse returns show that the quantity of opium imported into the country, now nearly 250,000 lbs annually, is ten times more than it was thirty years ago; and it is the opinion of physicians and druggists that not more than one third of the qnantity is used for medical pnrposes.

The Dairy.

Cheese Factory Rules.

Dr. L. L. Wight, of Whitestown, Oneida county, N. Y., sends the following suggestions for the season of 1874, to all the patrons of his factory:

1. Milch cows should have free access at all times to good running water.
2. They should never be heated by being run, stoned or dogged.
3. The utmost cleanliness should be observed in milking, and by no means wet the hands in the milk while milking.
4. No can of milk should stand where it will absorb the barnyard or stable odor, or any other scent.
5. The milk should be strained and well aired immediately after having been drawn from the cows.
6. Some arrangement for quickly and effectually cooling it at all times is very desirable, and when the milk is kept at home over night, it is indispensable.
7. Scalding all vessels used about milk at least once a day with boiling water, and rinsing them in cold water at night, is essential.
8. Keeping the strippings at home is morally and legally as bad as watering.
9. The milk shonld be sent to the factory as soon after milking as possible.
10. No milk to be delivered at the factory after 9 o'clock P. M., or 8 o'clock A. M., in Jnne, July and August, and 8½ A. M., in April, May, September, October and November.
11. Any milk which does not habitually keep sweet and pure nntil 1 o'clock P. M., will be made into cheese by itself, and the cheese sold by itself, the furnisher or furnishers of snch milk receiving only the actual avails of his own milk. Such persons' milk will again be mixed with the good only when the manufactnrer is satisfied that a permanent reform is being made in the method of taking care of it.

Cream for Churning.

Julian Dannfelt, of the Academy of Agriculture at Stockholm, writing of a Swedish butter factory, remarks of the cream: "It should not be kept more that two days in the warmer part of the year, nor more than three days in colder weather, before being churned, otherwise it becomes bitter and acqnires an unpleasant taste, which is transmitted to the butter made from it, whose value is thereby much diminished." He adds: "It may be accepted as a positive rule that the fresher and sweeter the cream is, so much the finer is the butter made from it." On the other hand, two eminent authorities in the same place—Professor Alexander Muller and Dr. Eisendinck—a few years ago, after a long period of careful inquiry and experiment, came to the following conclusion: "The sonring of milk or cream, has, directly, little or nothing to do with preparing them for the churn. Its influence is, however, otherwise felt, as it causes the casein to pass beyond the gelatinous condition in which the latter is inclined to foam strongly at low temperature, and, by enveloping the fat globules, hinders them uniting together. On churning cream that is very sour, the casein separates in a fine granular state, which does not interfere with the gathering of the butter. Cream churned when slightly sour, as is the custom in the Holestein dairies, yields butter of a peculiar and fine aroma, and has the taste which Holstein butter has after keeping some time."

To Prevent a Cow Sucking Herself.—Take a hard stick—hickory or maple—about one foot long, and three-fourths of an inch in diameter; put a groove around the center, say five-eighths of an inch in width, and three-sixteenths of an inch deep; sharpen both ends so that they will gradually taper from near either side of the groove to a point; with a large awl pierce the cartilage or septum between the nostrils, as you would to put in a ring; force the stick through until the septum rests in the groove, and the cow has in her nose a contrivance that will prevent her sucking herself, and yet permit her to eat and drink with freedom. After a few months the hole may become enlarged so as to allow the stick to drop out, when a little larger one may be inserted. There is but little sensation in that cartilage, and there appears to be but little soreness after a short time.—*Rural Home.*

A Good Disinfectant.—A reliable home-made disinfectant may be prepared as follows: Dissolve a quart of salt in a gallou of water, and with the salt water slack a half peck of lime, which shonld be wet enough to form a kind of paste. For the purpose of a disinfectant, this home-made chloride of lime is nearly as good as that purchased at the shops and drug stores. Use it freely about sinks, cellars, gutters and out-houses, and in this way prevent sickness, suffering and expense.

A neat thing in hair-cutting in vogue among the Nagas, a tribe in British India, is described as follows: The operator inserts beneath the luxuriant locks of his customer a hatchet or knife, whereon he pounds with a wooden mallet nntil the edge shines through.

A recent writer on food says that a gentleman of his acqnaintance has for the last fifty years eaten daily two eggs at breakfast, making 730 per annum, or a total tor the whole period of 36,500 eggs.

The Horse.

Measuring the Strength of Draft Horses.

In the selection of draft horses there seems to be an entire absence of accurate scientific methods. Jndging by mere weight is absurd, and a person, no matter how much experience he may have, can no more accnrately judge the power of draft horses by the eye, than he can the speed of a racer. Then again, the farmers who buy draft horses are not generally first-rate judges, and therefore an accurate statement of the actual power of a horse on test should be given with the animal. Turfmen do not depend on the eye, bnt test speed by accnrate trials, and stamina by long distances.

Here is a chance for some live Yankee, having in mind the principle of machines for measuring the amount of force a man expends in lifting, to inveat an apparatus for measuring the power of horses. They should walk far enough to throw their full power into the collar; therefore movement in a circle would probably be the best method. This would also furnish a means of testing stamina; for the exertion could be kept up eight or ten minutes, as in a fonr-mile race.

Breeders will see that an animal must sell much more readily if accompanied by a statement that he has exerted force enough for a certain number of minutes to draw a load of a definite number of pounds. And by breeding to their strongest horses, prices can be obtained as profitable as those of pedigreed Short-horns or racers with public or private record. I trust some inventive genius will turn his attention to this point. The venture shonld pay well, as a good apparatus of this kind is something no town should be without, and the test of strength would cause as much excitement and rivalry in every small village as the test of speed at our large racing points.—*Live Stock Journal.*

Fistula is not Hereditary.—Fistula is produced by a bruise, the same as poll-evil, and the remedy is the same. Horses frequently bruise their withers in contact with some hard lump. The remedy is the same for both diseases. I have cured many cases of both. As soon as you are satisfied of the fact that it is fistula or poll-evil, cut it open, and in the first stages you find nothing but bloody water down next to the bone. All you have to do is to wash out with soap and water, and wipe dry; if suffered to remain in it will form a sack or membrane; the matter becomes thick and lumpy. Cut open, clean out, and if it is not of long standing, fill with saleratus, and in two days wash ont clean, and wipe ont dry. If it is of long standing, say three or four months, use blue-stone, well pulverized, insert to the bottom of the sack, and push it out with a stick made to fit the quill. If the sack is not destroyed, the matter will be watery and yellowish, otherwise it will have the appearance of matter from a rising in a healthy condition. You may have to repeat the application of blue-stone until the matter changes. All you have to do then is to wash out occasionally with a solution of blue-stone or lime water. Keep clean and dry. I propose to cure any case of poll-evil, and board the horse until he gets well, for ten dollars, provided it is not of more than three months' standing, and leave no scar. Always cut lengthwise—never cut across the grain of the flesh.—*Cor Journal of Agriculture.*

High Priced Horses.—We give below a list of high prices paid for horses in America:

Kentucky sold for $40,000; Norfolk, $15,000; Lexington, $15,000; Kingfisher, $15,000; Glenelg, $10,000; Extra, $10,000; Smuggler, $35,000; Blackwood, $30,000; Jay Gould, $30,000; Dexter $33,000; Lady Thorne, $30,000; Jim Irving, $30,000; Goldsmith Maid, $20,000; Startle, $20,000; Prospero, $20,000; Rosalind $20,000; Luln, $20,000; Happy Medium, $25,000; Clara G., $20,000; Pocahontas, $35,000; Edward Everett, $20,000; Auburn Horse, $13,000; Judge Fullerton, $20,000; Mambrino Bertie, $10,000; Socrates, $20,000; George Palmer, $15,000; Mambrino Pilot, $12,000; George B. Daniels, $8,000; J. G. Brown, 12,000; Flora Temple sold, when aged, for $8,000, for brood mare; $25,000 was offered and refused for Tom Bowling last summer; $30,000 was offered and refused for Harry Bassett in his three-year old form; $25,000 will not to-day buy Baywood or Asteroid; $40,000 was offered and refused for Woodford Mambrino, and $20,000 for Thorndale.

Blue Pigment of the Egyptians.—Fifteen centuries before the Christian era, the Egyptians appear to have been acquainted with the preparation of three distinct kinds of blue pigment, prepared from mixtures of sand, soda and lime, with oxide of copper. One of these fine colors has been lately examined by M. Fontenay, and by analyzing he has been able to reproduce them in all their qualities of brilliancy, permanency, etc.

A national exhibition of textile plants, and machines employed in their manufacture, will be held in St. Petersburg this fall. The Russian Government seems disposed to give special encouragement to the cultivation of fibrous plants and the manufactnre of textile fabrics.

Street Cleansing in New York.—In ten years the annnal expenditure for cleaning the streets of New York has increased from $13,500 to $1,000,000.

Miscellaneous.

Sonorous Sand.

A short time since Mr. W. R. Frink sent from the Island of Kauai, of the Hawaiian group, to the California Academy of Sciences, a bottle of sand which possessed some peculiar qualities. A sand drift exists there some 60 feet high, and by taking two handfuls of this sand and slapping it together a sound is produced like the low hooting of an owl—more or less sharp as the motion is quick or slow. A letter giving a description of its peculiarities accompanied the gift. Mr. Frink said:

Sit down upon the sand and give one hand a quick circular motion, and the sonnd is like the heavy bass of a melodeon. Kneel upon the steep incline, extend the two hands and clasp as much sand as possible, slide rapidly down, carrying all the sand yon can, and the sound accumulates as you descend until it is like distant thunder. In this experiment the sound was sufficient to frighten our horses fastened a short distance from the base of the drift. But the greatest sound we prodnced was by having one native lie upon his belly and another taking him by the feet and dragging him rapidly down the incline, carrying as much sand as possible with them. With this experiment the sound was terrific, and could have been heard many hundred yards distant. With all the experiments that were made, it seemed the sound was in proportion to the amount of sand put in motion with a proportionate velocity.

In order to ascertain if possible the cause of the sound prodnced by this sand, Dr. James Blake has investigated its structure nnder the microscope, and at the last meeting of the Academy of Sciences he stated that the facts he has ascertained fully explain the manner in which the sound is emitted. As the grains of sand, though small, are quite opaque, it was necessary to prepare them so that they should be sufficiently transparent to render their strncture visible. This was done by fastening them to a glass slide and grinding them down until one flat surface was obtained. This surface was then attached to another slide and the original slide being removed the sand was again ground down until sufficiently transparent. The grains were found to be chiefly composed of small portions of coral, and apparently calcareous sponges, and presented nnder the microscope a most interesting object. They were all more or less perforated with small holes, in some instances forming tubes, but mostly terminating in blind cavities which were frequently enlarged in the interior of the grains, communicating with the surface by a small opening. Several specimens of what appeared to be minute bivalve shells were also met with. Besides the elements derived evidently from living beings, these sands contained small black particles which the microscope showed to be formed principally of crystals of augite, nepheline and magnetic oxide of iron, imbedded in a glossy matrix. These were undonbtedly volcanic sand.

It would be impossible to give more than a general idea of the appearance of this sand under the microscope, except with elaborate drawings. The structure of the grains, Dr. Blake thinks, fully explains the reason why sounds are emitted when they are set in motion. The friction against each other causes vibrations in their substance, and conseqnently in the sides of the cavities they contain, and these vibrations being commnnicated to the air in the cavities, under the most favorable conditions for producing sound, the result is the loud noise which is caused when any large mass of sand is set in motion. There are, in fact, millions upon millions of resonant cavities, each giving out a sound which may well swell up to resemble a peal of thunder, with which it has been compared, and the comparison, Dr. Blake knows from those who have heard it, is not exaggerated. The effect of rain or dampness in preventing this sound is owing to the cavities in the sand becoming filled with water and thus rendered incapable of originating vibrations. The chemical composition of the sand, with the exception of the voloanic grains, is calcareous, being completely dissolved by chlorohydric acid, although it is probable that some of the *speculae* in the sponges are siliceous.

A Good Education.—The late Edward Everett condensed into a single brief paragraph his estimation of what constituted a good education. Here it is: "To read the English language well, to write with dispatch a neat, legible hand, and be master of the first four rules of arithmetic, so as to dispose of at once, with accuracy, every question of figures which comes up in practice—I call this a good edncation. And if you add the ability to write pure, grammatical English, I regard it as an excellent education. These are the tools. You can do much with them, but you are hopeless without them. They are the foundation; and unless you begin with these, not with flashy attainments, a little geology, and all other ologies and osophies, are ostentatious rubbish."

New Rubber Product.—Mr, John Mackintosh, whose name has become in England a synonym for a water-proof coat, has patented a process for mixing carbon with india-rubber in a peculiar way, and claims that the product is better adapted for a variety of uses in the arts than any compound before known.

Patrons of Husbandry.

The California State Grange Headquarters are at room 9, No. 320 California street, S. F.—General State Agent: I. G. Gardner, (Member of the Executive Committee). State Secretary: W. H. Baxter.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

The "Sun" Still Obscured.

The Colusa *Sun* appears to be very anxious to emit some light, but so dense a cloud hangs over it that only a few fitful rays are permitted to escape, and these, like many a "will-o-the-wisp," would lead the follower on to destruction. In a former issue we endeavored to dispel some of this gloom, but find by the last number of the *Sun* that the cloud composed of wheat ring interest still hangs over the editor's mind, and we conclude that "none are so blind as those who won't see;" and that "a man convinced against his will, is of the same opinion still." In the issue to which we refer, the *Sun*, in its giant struggle for light, says: "One person, speaking by authority, says that Morgan's Sons charter *for* Granges and let them have tonnage just as they get it, without any increase of price, while another says they give Grangers tonnage at current rates." And the *Sun* editor can't see for the *life* of him how these two propositions, which he says "are as different as day and night," can be reconciled. Now, we ask, what is there in conflict in these two statements? We repeat Morgan's Sons *do* charter *for* the Grangers, and they *do* give Grangers tonnage at current rates, and where's the conflict? Some of the Grangers have shipped by the chartered vessels, others prefer to ship through this firm at current rates, and who's hurt, and what's the matter?

Then follows the familiar sentence, which certainly must be stereotyped in the office for convenience: "We are earnestly working for the purity and good of the Order." "For the good of the Order," and yet every sentiment expressed is calculated to sow discontent and doubt in the minds of Patrons and so weaken their strength and benefit their enemies. The less the Grangers have of such friendship and such "earnest endeavors" in their behalf the better it will be for them. But the whole scheme is so transparent, and the object so plain, that no thoughtful farmer can be deceived by them. In a former number the *Sun* says "no such circulars as you refer to were ever received by any of the Granges of Colusa Co." If this be so, somebody is woefully to blame for leaving our Colusa brothers out in the cold. If the Bro. of the *Sun* would remember that in these attacks he is not only making war on Morgan's Sons but is impeaching, directly, the integrity and intelligence of the entire Executive Committee and all the leading Grangers in the State, he would certainly post himself more thoroughly on the subject upon which he seems so anxious to enlighten the Grangers. Why did he not attend the Council at Suisun where 150 leading Grangers, without one dissenting voice, after a most thorough discussion of this question most emphatically endorsed this firm of Morgan's Sons and the Executive Committee? And why don't he come to headquarters now and then and ascertain the truth in regard to these matters?

The Grange Fleet. — Three ships, loaded with Grangers' wheat, have passed the Golden Gate and are on their way to the markets of the Old World: 1, The Star of Hope, 2,000 tons, loaded by Dixon Grange; 2, Sexton, 1,500 tons, loaded by Stockton Grange; and 3, The W. R. Grace, 3,100 tons, loaded by several different Granges. The El Dorado is now lying in the stream, completing her cargo, which was nearly made up at Antioch. The City of Berlin completed her cargo on Tuesday, loaded by Modesto Grange. The Carrie Reed also completed her cargo on Tuesday, at Vallejo, loaded by Woodland and Davisville Granges. The Imperial went to Vallejo yesterday, and will be loaded by Solano and Yolo Granges. The ship Triumphant is being loaded at Oakland dock by Livermore Grange. The Poonah is being loaded at Stockton by the Grange company of San Joaquin. The policy of the farmers shipping at least a portion of their crop is evidently one of prudence.

The Granges' Bank:—At a recent meeting of the Directors, Mr. Alexander Watson, formerly inspector of the bank of British Columbia, was confirmed as cashier of the bank. The officers report everything as very encouraging. The success of the enterprise thus far has more than met the expectations of its friends. The shares are being rapidly taken, and bid fair to be all taken by the time the present wheat crop is disposed of.

The Salinas and Monterey Narrow-Gauge railroad is expected to be completed in about thirty days. The Grangers will put on a steamer to San Francisco, and load vessels direct for Liverpool with wheat this season.

A Word of Warning.

There seems to be an unusual tendency at the present time among farmers to send their sons to the cities to receive a business education. Now, a business education is an excellent thing, a very excellent thing. Even for a farmer it is of great value; but while our boys are acquiring this business education, they also in many cases, acquire another education which entirely unfits them for the farm. The change of life from the quiet monotony of the country to the ever-changing scenes, the bustle and the excitement of the city—from a life of labor to one of comparative ease; from 'every-day" clothes to genteel business suits—all these present a charm to the young which they cannot resist, and when their education is finished they find they have had such a taste for city life as to make the every-day humdrum life of the farmer unendurable. They can't lay off their fine clothes and soil their soft white hands. They can't give up the amusements, the excitements of the city for the "spade, plow and hoe." They have forgotten the fragrance of the "new-mown hay," and only remember the odor of the stable. They have forgotten the freedom and independence of the farmer, and only remember the long days of toil. The romance of real life is all gone. No, they can't give up the city. They make application to some bank or insurance office or mercantile firm for a situation as book-keeper; and then they wait and wait and loaf around the city, and smoke cigars, and maybe they drink something stronger than water. They find every situation crowded with applicants, from 100 to 300 for every position. This every President of every bank in this city will tell you. And still they linger around the city and form bad habits, and thus many of our best young men are ruined. Better stick to the farm *without* a business education than with that education to acquire such a taste of city life as to entirely unfit you for the noble calling of the farmer. We find every business college in the country full of students, and every business firm crowded with applicants for situations. Not one in 50 can be supplied. Now, while we repeat that a business education is a good thing, we also repeat that "too much of a good thing often spoils it."

One great cause of this evil is that many of our homes are not as pleasant and attractive as they might be, and the farmer's life is made too much a life of toil, too utilitarian, too prosy—too much of the useful, not enough of the ornamental, too much dull labor, not enough relaxation and enjoyment. And here come in the beautiful teachings of the Grange. Make your homes beautiful and attractive. Make them as cool and sweet and pleasant as possible. Plant shade trees and cultivate flowers. Don't be too hard on your boys. While you feed and clothe their bodies, also feed their minds with good mental food, and, above all, feed their hearts with that social food which the young heart craves. Select judicious companions for them. Give them a holiday now and then to visit their young friends and receive visits from them at their own homes. In this way cultivate in your sons such a love for home life that even the tinsel and glitter of the city cannot keep them long away from the "dear old home."

To Correspondents.—The favors of some of our friends are necessarily laid over for our next issue. This department of our paper is closed early in the week; and if our correspondents will bear this in mind, it will be an advantage to us in securing an early publication of information received, and will also prevent any disappointment on the part of our friends if their contributions do not appear as soon as they expected. We have on hand, among other communications, an interesting letter on "The Parasite in Alfalfa," which will appear next week.

The Dairy Produce Department. — Bro. Hegler reports everything progressing finely in this department. He is receiving consignments from the finest dairies on the coast, and business is steadily increasing. The early advance on the price of butter and eggs cannot fail to please the farmers, and there is no house in the city with better facilities for disposing of these articles to the best advantage, than the department on Sansome street.

Significant. — Resolutions are pouring in upon us from every quarter, denouncing the unwarranted and hasty action of the Regents of the University in the removal of Professor Carr. Should we publish them all, they would occupy our entire space. We therefore give a few as samples, and will endeavor hereafter to give a full list of the Granges passing such resolutions.

From Los Angeles.—The *Herald* of the 15th says: The Grange store is driving trade with a vim now-a-days. The first month's business aggregated nearly six thousand dollars, and the patronage has been steadily on the increase from the commencement.

Livermore Grange. — Bro. J. W. Clark writes, August 15th: We have shipped four hundred tons of wheat direct to Liverpool this week, and will keep up the rate as long as the Grangers have wheat to send.

Council Meeting.

Fourth regular meeting of Los Angeles and San Bernardino District Council, held August 11th, 1874, at Anaheim, California.

Council opened in form, Worthy Master T. A. Garey, of Los Angeles, presiding. Roll call shows 40 delegates present, representing the following Granges: Azusa, No. 94; Compton, No. 37; Enterprize, No. 38; Eureka, No. 66; El Monte, No. 43; Florence, No. 95; Fruitland, No. 72; Fairview, No. 39; Los Angeles, No. 31; Los Nietos, No. 44; New River, No. 42; Orange, No. 40; Silver, No. 41; San Bernardino, No. 61; Spadra, No. —; Vineland, No. 186; Westminster, No. 127. Total 17.

Granges in the district not represented, Riverside, No. 128, and Alliance, No. 75.

A large number of fourth-degree members were present from various portions of the district. Cordial greetings and perfect harmony in action were characteristic features of the meeting, which was the most interesting and important of any yet held by the Council.

The Centennial Committee, through its chairman, Brother Porter, of Florence, made a full report, stating that measures have been taken for a creditable exhibition of the industries of this State at the National Exposition in 1876.

The Legislature having failed to make an appropriation for this purpose, the committee recommend that measures be taken by the subordinate Granges in this district to create a fund to be called the Centennial Fund, to be deposited with the Treasurer of the Council, subject to the order of the Council, and to be used at the time of the Exposition in such manner as it shall direct. [The reports of this committee have received the marked approval of the Council, and at the last regular meeting Brother Porter was recommended for appointment on the committee of five, who were appointed by the Executive committee of the State Grange.—Sec'y.]

Committee on Guide Posts and Sign Boards reported very satisfactory progress. In compliance with the request of the committee, the Board of Supervisors have instructed the Road Commissioner to erect guide posts at proper places on the legal roads of the county. Many boards have already been put up. Report received and committee continued, with the addition of a third member—Brother Gibbs being appointed.

Committee on Agricultural Exposition also report encouraging progress, including a report of the action of the Board of Directors of the association, which held a meeting this day, taking vigorous action in perfecting plans for holding a fair this season. The Secretary of the Board was instructed to advertise until 8th September for proposals for a site for fair grounds, which action was heartily endorsed by the Council.

Standing Committee on Manufactures through chairman, Brother Southworth, report the steps taken to encourage the establishment of a paper mill in Los Angeles. The committee have apparently secured the co-operation of the city authorities of Los Angeles, the City Council having agreed to give the use of water in the event of parties wishing to use it making a reasonable investment in establishing a manufactory. And the prospect is very bright for having this addition made to our industries at an early day. Report adopted.

The following resolution, introduced by Brother Gordon, was unanimously adopted:

Resolved, That this Council hereby approves the resolutions in relation to the national Washington Monument fund, by the Azusa and El Monte Granges, and earnestly recommend the adoption of the same or similar resolutions by the several Granges of this district.

[The resolutions referred to have already appeared in the Pacific Rural Press, accompanied by favorable notice from State Secretary Baxter.]

The following preamble and resolutions, presented by Brother McComas, of Compton, developed a very strong feeling in the Council, and were promptly adopted by a unanimous vote:

Whereas, The University of California was originally established expressly for an agricultural college by an endowment made by the Congress of the United States; and,

Whereas, The Regents of the University at a late meeting passed a resolution, with but one dissenting vote, that of Regent J. M. Hamilton, Master of the State Grange, asking Professor Carr, of the agricultural department, to resign his position, with a view to substitute in place of said department a series of lectures, and thus retain *only in name* the grand central idea for which the University was established; therefore be it

Resolved, further, That we will, as Grangers, respect the recommendation of the National Grange, in regard to our national and industrial colleges, and resist, by every means in our power, any effort to subvert them to other than the specific purposes plainly indicated in the act of endowment.

The Secretary was instructed to furnish these resolutions, and also the action of this Council in regard to State University, for publication.

Worthy Master T. A. Garey delivered an earnest address, which received marked attention, and was warmly applauded. Brothers Stafford, Stanley and Evey were appointed a committee to secure lecturer for the next meeting. On motion, Council adjourned to meet in Compton, on the 2d Tuesday of November, 1874, at 10 o'clock, A. M.

J. F. Marquis, Sec'y.

A brilliant affair came off at San Luis Obispo lately in honor of the Granger County Council. There was a supper and a dance. Lieutenant-Governor Pacheco was present.

Ventura County Council.

The Ventura Council, organized in April, met at Saticoy, Aug. 4th. Seven sub-Granges were represented, one from Santa Barbara county, and six from Ventura; Milton Wason, Master, and E. B. Higgins, Sec'y. Resolutions to take steps necessary to organize a Grangers' Bank were passed and a move was also made towards a system of co-operation in the purchase of lumber and all kinds of merchandise and machinery.

At the next meeting, the 1st of September, it is expected that permanent steps will be taken in organizing the Bank.

F. A. Sprague, from Sespe Grange, was appointed to visit the different Granges and present the claims of the Grangers' banking system preparatory to the effort to be made in getting it into operation. There is capital enough to make a banking house a success in the county.

Mr. Sprague has accepted the agency of the Farmers' Mutual Insurance Co., and will make a point to present the subject of insurance to every farmer as fast as possible.

Mr. De Nure, Sec'y of San Pedro Grange, has also accepted the agency for the south side of the Santa Clara river.

The town of S.B. Ventura has just held a local option election. The saloon parties were triumphant. The end is not yet. The good to come from the effort will be in the future. The people will think and by thought and study will arrive at just estimates of the situation. The sale of liquors in this State is a tax equal to, if not greater than, that of any of the monopolies, and not having the semblance of truth, morality or utility in its form.

E. B. Higgins.

Saticoy, Aug. 17th, 1874.

[We would suggest to our brothers at the south whether it would not be better for all to unite in supporting and strengthening our bank here, until it is well established and then lean upon it for support in the establishment of local banks in different parts of the State. —Eds. Press.]

Grange Discussion at Santa Clara.

Editors Press:—Bro. Peebels led off in the last discussion in the Santa Clara Grange, on the question: "What is the best means of recuperating exhausted soils?" He referred to the character of the soil on the uplands, as well as that of the lowlands of this valley. While the former is liable to dry out in a dry season, the latter, in a long, wet season, would pack too much and the crop be light. The exhausted soils need rest, and the most economical way to restore productiveness, is to till every other year.

A member suggested pasturing as the best means of restoring unproductive soils. It was stated that in the dairy regions of central New York the land has materially improved by being constantly pastured for more than 30 years. Lately some of this land had been broken up and sown to wheat, and the crop was surprisingly increased.

A speaker thought pasturing the best aid for our lowlands, and fallowing for the uplands. But experience had proved that the fallowing must only be practiced occasionally, and it was believed that a safe plan would be to adopt a routine — alternately pasturing, summer fallowing and cropping, so as to keep up the life and the strength of the soil.

Irrigation in the region of the artesian wells had proved of good service, when needed for grain and hay, and always for the small fruits.

It was conceded that barn-yard manures, unless well rotted, as well as straw and stubble, are an absolute injury for a year or two, as they do not rot easily in our climate, and leave the ground loose and dry.

A member had noticed the benefits from burning stubble, which were apparent several years following.

The question was asked how this could be accounted for, as analysis had shown that straw contained only a small amount of fertilizing matter. As this observation was noted on the lowland, will it hold true on all soils? At this stage of the discussion it was closed for future consideration.

I. A. Wilcox, Sec'y.

The Grangers' Insurance Co.—This very important work is progressing finely. Applications are coming in rapidly, and Bro. Blanchard, the champion of the enterprise, begins to see daylight ahead. Our brothers do not yet half realize the importance and benefit this association is destined to be to the farmers. Where's Bro. Jolley with the Life Insurance plan?

Grand Master Adams, in a letter to a Minnesota paper, says: "I fully agree with you that our Order must not as such become a political organization, but I most earnestly hope that our members will be true to their duties as American citizens, and take an active and prominent part in moulding the institutions and laws of our country."

The new Grange warehouse at Salida, Stanislaus county, is about completed, and already large quantities of grain are being received for storage.

Letter from Santa Rosa.

EDITORS PRESS:—One of the most pleasant days Santa Rosa Grange has ever had was yesterday, the occasion being the address of Worthy Lecturer, J. W. A. Wright.

Neighboring Granges of the county, twelve in number, were invited to join us, and many representatives came. The good news that the Worthy Lecturer carries around for agriculturists, who are earnest enough to join the Grange, was never more gladly received than it was here yesterday. All are assured anew that the Order is capable of bringing about not only social and local benefits, but also the broadest home and foreign financial benefits. After the fluent address of the Worthy Lecturer was concluded, at 12 o'clock, the Grange of Santa Rosa and Bennett valley invited all the visitors to join them in a neighboring hall and partake of something good.

They Went.

There was table beyond table, each covered with luxury upon luxury—everything that fertile land, industry and hospitality could furnish, from the substantial meats, through cakes and wines to the peach and grape and luscious melon. But this feast of edibles was not all. After them came just enough toasts and responses—terse, witty and to the point.

Toasts.

"The signs of the times;" Leonard Goss, of Sonoma Grange. "Our Anniversary, the 4th of December;" Thomas Merry, of Healdsburg Grange. "The Patrons of California;" Wm. Mc. P. Hill, Sonoma. "Mind *versus* muscle;" S. T. Coulter, of Santa Rosa. "The ladies—our friends in need; our friends indeed. We may get along with them; we can't get along without them." Responded to by S. De Turk, of Bennett valley Grange. "Ladies of Santa Rosa Grange;" E. W. Davis. "Our duty to onrselves, our country and our God;" J. W. A. Wright.

Not a single toast given above but that the response to it was first-rate—funny when it ought to have been so, serious likewise.

I have no doubt that other Grange meetings of this sort have shown the same abundance of pabulum for both mind and body. I hope so. But at any rate, as there was left after dinner many a basket full unused, so there was also many a good word yet nnspoken on the lips of not a few.

But 2 o'clock had arrived; and all were to return to the hall for instruction. Here the Worthy Lecturer outdid himself. He was now serious, now witty and then serio-comic But that was all Wright. A vote of thanks was tendered to brother Wright, which he accepted with a touching response.

Public Exercises of the Evening.

According to notice given, a public meeting was held at Ridgeway hall in the evening.

It is a large and commodious hall and was well filled with Patrons, and friends, and those lukewarm and those prejudiced.

For an audience of mixed views about this Fraternity, the order and interest in the address of Worthy Lecturer Wright were perfect. His address was an exposition of the principles set forth in the declaration of principles of the National Grange.

He spoke with his habitual fluency and energy and control of an audience. The financial, educational, social, anti-political and anti-sectarian features were well figured forth by him. He held the unabated attention of the audience for nearly an hour and a half; and throughout the address and at its close was warmly applauded. If brother Wright remembers Santa Rosa and yesterday as he is remembered, then he must have a pleasant recollection with him always.

Thanks are due the Santa Rosa Grange and their committee, Messrs. Mills, Coulter and Davis, for the complete arrangements of the day and evening.

To-day the work goes on at Healdsburg. A new confidence in the principles of the Order, its management, its leaders and its fnture, is springing up at every post where the Worthy Lecturer pitches camp for a day and night.

Following is the substance of the address, from the Sonoma *Democrat* of August 22d: Brother Wright said he would endeavor to give an idea of the aims and pnrposes of the Grange—what they had done and what they proposed to do.

The mere recollection of the misrule, political corruption, and oppression by moneyed and party rings throughout our land for twenty years past, is sufficient to justify in every reasoning and candid mind a movement like the organization of the Patrons of Husbandry.

That gloomy past, which we wonld bury, brought us to the point where, in the opinion of more than one of our statesmen, we must have reform now or revolution hereafter.

Thanks to the good sense and patriotism of our people, and thanks to the Great Master who overrules our destines, the alternative which has clearly been chosen is reform—a peacefnl and irrepressible reform, which promises to accomplish more solid and lasting good for our entire country than could a score of bloody revolutions. From California to Massachusetts we hear the demand for reform; from Minnesota to Florida the same purpose animates our people. To accomplish the desired reforms there appears a general inclination to go back to the first principles, snch simple and pure principles as characterized our conntry and its founders in the better days of the Republic. By these principles we organize and educate our people, thus forming a surer foundation on which to build the superstructure required for the fnture.

And what is the medium which appears to have been providentially pointed out as the chief agency to furnish those first principles, and this all-pervading tie which offers a power for organization among the people more universal than any other of which man has yet availed himself—a power which, strange to say, we have never attempted to use before? It is Agriculture—the first, purest, best, and, where justice prevails, the most independent occupation of man.

He said that there were 2,000 Granges in Missouri, where the Order was the strongest, and nearly as many in Iowa. Kentncky has 1,300, and Tennessee 1,200. It was spreading in all the States of the Union; and at the meeting of the National Grange in St. Louis, 32 States and three Territories were represented. Their aim was to do good to all—injury to none. The Grange was the offspring of Masonry and Odd Fellowship, and would not disgrace them. Secrecy was necessary for business purposes. They could not touch partisan questions, for Grangers were of all parties; on local questions they were divided, as on the local option question. Progress is made in difference of opinion. We do all we can to influence the party to which we belong for good. Every officer of the Grange is especially prohibited from using his office to influence the political or religious views of any member. No Grange can discuss politics, hold conventions or nominate candidates. He denied that they wanted to injure local trade or enterprise. He had not heard of an instance where a local merchant had been injured by the Grange movement, but on the contrary they would be benefited, for their object was to do away, as soon as possible, with the credit system, which would be a relief to the merchants. He also denied that the Grangers were opposed to railroads; he wished that there were more of them. In Napa the Grangers had arbitrated with the railroad company and had secured a reduction of rates. He preferred this to regulating rates by law, and recommended it to all who suffered from high freights. The speaker gave an interesting account of the origin of the movement, which we give in full:

It was my good fortune, at the last meeting of the National Grange in St. Louis, to receive from the founder of our Order an explanation of what first gave rise in his mind to the Patrons of Husbandry. By the way of introduction, I will mention that Mr. O. H. Kelley, our acknowledged founder, a citizen of Minnesota, is both a Mason and an Odd Fellow, a man of most benevolent impnlse and most genial disposition. Being employed in the Agricultural department at Washington City, he was sent Sonth, soon after the close of the war, to get a just idea of the wants of Southern agricultnre, and report back to his Department. Throughout the Sonth he was met by Masons and Odd Fellows with that fraternal spirit which characterizes these two venerable Orders. They were constantly saying to him, "Kelley, talk to us as much as you please about the wants of agriculture and our common interest, but don't touch politics. Let politics alone." Impressed with the correctness of the principle, he followed their advice, and found that, as soon as his mission was understood, he was everywhere met as a friend and brother. The idea then occurred to him that could a secret Order be organized on the basis of agriculture, on principles as benevolent and even more universal than those on which Masonry and Odd Fellowship are based, ignoring political and religious differences, it would supply a want which other Orders could not supply; would form an organization needed for ages, in which the sons of toil throughout the Union could combine; and would be productive of vast good not only to the cause of agriculture, but to the country at large.

Deeply impressed with these convictions, on his return to Washington, he associated with him six other ardent sympathizers in his views: Wm. Saunders, one of the purest hearted of men, an experienced Scotchman, who has charge of the Government Botanical Garden, also J. R. Thompson, A. B. Grosh, W. M. Ireland, John Trimble and F. M. McDonald. These seven men, who at the session just closed were unanimously elected life members of the National Grange, as the joint founders of the Order, together matured the constitution and ritual, which we are now using, and with several other friends organized the National Grange at Washington, December 4th, 1867.

VISITOR.

Santa Rosa, August 19th, 1874.

GRANGE BULLETIN.—The Patrons in some portions of New York have adopted the plan of keeping a blackboard always in readiness at their meetings, on which are entered by the members as they come in, stock and other property for sale or exchange stock strayed or stolen, and such other information as they desire to bring before members. This is said to work admirably, and many sales and other transactions grow out of this mode of advertising.

THE Granges of California demand that the salary system of public offices shall be equitable throughout the State. The Sheriff of San Francisco county, the wealthiest county in the State, has a smaller income than the sheriffs of Calaveras and other counties, who receive from $10,000 to $40,000 a year in fees.

The Order in Los Angeles.

EDITORS PRESS:—The good work of the Grange goes steadily and surely onward, here as elsewhere. I have just returned from Rincon, in San Bernardino county, where I organized Rincon Grange, composed of honest, sturdy farmers, and their families.

We have now arrived at that point in our Grange history where the "sober second thought" has taken the place of the enthusiasm attendant upon its first appearance; hence the work we are doing begins to tell on the wrongs under which we have been smarting so long, and the beneficiary effect of our compact is beginning to be visibly apparent. Our Grange co-operative store has had the two-fold effect of not only helping the Patrons, but also in bringing down very snddenly the prices of groceries in the city generally.

We now see we are public benefactors indeed, our store holding all others in check.

Enclosed please find names of officers of Rincon Grange, the third in San Bernardino county and twentieth in this district. Yours fraternally, THOMAS A. GAREY.

F. M. Slaughter, M.; J. B. Wolkinshaw, O.; J. E. Harris, L.; George Lord, S.; J. M. Wood, A. S.; J. M. Hatheway, C; S. B. Matthews, T.; John Taylor, Sec'y; R. W. Rivas, G. K.; Mrs. M. M. Hatheway, Ceres; Mrs. S. S. Rivas, Pomona; Miss Flora Wood, Flora; Mrs. M. E. Wood, L. A. S.; Thos. A. Garey, Dep'y.

Organized August 15th, 1874.

FARMERS' WAREHOUSE.—The efficient superintendent of the Farmers' Union Warehouse, of this city, informs us that about 400 tons of wheat had been stored up to Thursday night. The last three days wheat has been coming in at the rate of 75 tons per day. The next few weeks will be lively, and Superintendent Ohleyer will have a task of it, if he does all he has started out to do. Henry Elmer will be the largest storer. It is thought he will store about 200 tons. The crop in this section turns out first-rate, and for cleanliness is more than average crops. The warehouse will be finished in a few days. All practical men who have come to look at this structure, pronounce it the most complete brick warehouse north of the bay. Commanding the best boat landing on the Feather, the farmers have most assuredly a valuable acquisition.—*Sutter Banner.*

VERY SIGNIFICANT.—Those who are skeptical enough to donbt the compactness and cohesive power of our organization, need only be referred to the significant fact that to-day not a bushel of wheat can be moved at present prices. This magic influence has passed along from one end of the vast column to the other. In vain have dealers endeavored to break our ranks by offering $1.10 and $1.15. They might as well "sing psalms to a dead horse" as to attempt to bny at these figures.—*Grange Outlook, Knoxville, Tenn.*

GRANGERS, ATTENTION! — There will be a meeting of the Council of Colusa county, at the hall of the Colusa Grange, on Wednesday, September 23d, at 1 o'clock, P. M. All the Masters of Grange s throughont this and neighboring counties are invited and particularly urged to be present, as matters of great importance will be discussed. All fourth degree members in good standing are also invited. J. F. WILKINS, Master County Council.

KEEP your Grange free from the toils of political managers, and yet, as citizens, do not hold yourself aloof from politics, any more than you would keep out of the army if your country called on you to do dnty as soldiers. It is just as essential that the government be kept pure in time of peace, as it is that the shores be kept free from invading armies in time of war.

ACKNOWLEDGMENT. — The P. of H. Relief Committee, of New Orleans, acknowledges receipts from this State, since July 17th, as follows: San Jose Grange, No. 10, $139.07; W. H. Baxter (for Azusa Grange), $24.00. The Committee, in returning thanks, say there will be no further necessity for assistance on account of the great overflow.

THE Patrons of Husbandry are not opposed to railroads or any other public institution, so long as such institutions are not used as implements of oppression. But like men of all classes, they will tolerate no robbery or oppression, in any form, or any guise, without at least a strenuous effort to preserve their freedom.

THE Grange has been peculiarly happy in uniting the whole family—father, mother, sons and daughters. This makes the Grange a home—the social feature which has contributed so largely to the almost miracnlous growth of the Order.—*Foothill Tidings.*

THE Patrons of Van Wert county, Ohio, had a picnic last week at which 1,625 teams were in a line.

ALAMEDA COUNTY COUNCIL, P. of H., will hold its regular meeting on Monday, September 14th, at 10 o'clock, at Haywoods. Every Grange should be represented.

THE Kansas Patrons' Insurance Company makes the three-years' rate on $1,000 $9 instead of $17.

THE Patrons of Tekemath, Neb., will build a woolen mill this season.

Vacaville Grange.

EDITORS PRESS:—At a regular meeting of the Vacaville Grange, No. 5, P. of H., held on the 22d inst., the following preamble and resolutions were unanimously adopted, and, by order, a copy is forwarded to you for publication in the RURAL PRESS:

WHEREAS, A member of this Grange at a former meeting introduced a set of resolutions calling in question the action of the State Executive Committee in employing a commercial agent to transact business for members of our Order, and reflecting upon the fair dealing and integrity of such agent; and

WHEREAS, After this Grange had refused to endorse said resolutions on account of sentiments therein expressed, the same in substance were published in the *Daily Morning Call*, as coming from a "prominent farmer and influential Granger," thereby disseminating sentiments at variance with the ideas of good Patrons and subversive of the best interests of our Order; therefore be it

Resolved, That we hereby expressly repudiate the sentiments contained in said resolutions, and that we regard any warfare waged against the Executive Committee of the State Grange, or our commercial agents, while engaged in the faithful discharge of their respective duties, as being directed against our Order itself, and contrary to good order and discipline.

OSCAR P. DOBBINS, Sec'y.

Vacaville, August 24, 1874.

Prof. Carr and the University.

EDITORS PRESS:—The committee of the Santa Clara Grange, appointed to report on Prof. Carr's case, presented the annexed resolutions, which were adopted by the Grange, though too mild in tone to meet the feelings of all:

Resolved, That the summary discharge of Prof. E. S. Carr, from the Department of Agriculture in our State University, is justly regarded with alarm by the industrial classes with whom he is most nearly allied, and who still deem him competent, faithful and practical as a teacher in that department.

Resolved, That the Regents of the University will fail to do do their legal and moral duty to the people, until they make the University an institution whose free, thorough, direct and practical education is given to those who intend to be farmers, mechanics or business men and women. The mind and hand should be educated together, and for the use which is intended to be made of them. I. A. WILCOX, Sec'y.

Commendatory Resolution.

At a regular meeting of Point of Timber Grange, held on Aug. 15th, the following resolutions were unanimously adopted:

Resolved, That the unqualified thanks of Point of Timber Grange, No. 14, P. of H., are hereby tendered to Bro. Kimball, of Antioch Grange, for his untiring efforts and final success in bringing to our doors an ocean vessel to carry away our surplus grain, thereby achieving a most signal triumph over the persistent and antagonistic efforts which have been made to defeat the project.

Resolved, That one copy be sent to Bro. Kimball and Antioch Grange; also one copy to the RURAL PRESS and *California Granger* each, for publication.

J. E. W. CAREY, W. S.

Point of Timber, Aug. 15th, 1874.

PAVING MATERIAL. — Jasper rock exists in quantity just above our rolling mill. One of our active citizens has opened it out on a large scale, and is supplying it to the streets of Oakland. It is nearly pure flint. The authorities of Stockton are about to put their streets in order with this material, which is better and cheaper than their own gravel. The price paid is $1.50 per ton, delivered at the Stockton wharves. It is used to macadamize. The Stockton papers speak of it as the best macadam material they have ever seen. They need a contrast of hard, smooth and enduring roadways. A sample of its qnality may be seen on the lower section of New Montgomery street, adjoining Howard street.

SAMPLE PEACHES. — Messrs. Bryan & Domingo, whose nursery is six miles below Freeport, on the Sacramento river, send to the RURAL PPESS a sample of the "Tinley peach," grown by them, trees of which they have for sale. It is a large, yellow, rich, free-stone peach; one of its peculiarities being a scarlet color, which lies near the skin of the fruit in its green state, but which penetrates the flesh and reaches the pit, when the peach is thoroughly ripe.

THE chinch bugs are making serious inroads on the corn crop of Brown, Pike, and adjoining counties in Illinois, and there is no calculating the extent of damage that will be sustained to this cereal; as the insects are seemingly just beginning to make their appearance. It may be safely estimated, say a good many farmers, that at least one-half of the corn crop will be destroyed.

FRIDAY morning, Frank B. Crane, of the old Briggs orchard, Marysville, forwarded a car of pears to Chicago by the express train. The freight on a car to Chicago is $900; to New York, $1,100. This price makes the railroad a partner in every fruit-shipping house in the State.

THE San Bernardino *Guardian* advises farmers in Southern California to pay less attention to the cultivation of the cereals, and more to the propagation of the tropical fruits, which always find a remunerative market.

A YOLO correspondent writes that not 100 tons of wheat have changed hands at Knight's landing up to date. Everybody is holding back.

FOUR hundred Angora goats were last week shipped from Liverpool to San José.

SIX hundred tons of wheat is the average amount received daily at South Vallejo.



The Mechanics' Fair—1874.

BY J. B. R.

Again has Time paused in his ceaseless flight,
And stooped with loving hand to deck the brow
Of this, the proud Pacific's Empress, with her right—
A fair-earned laurel wreath, intwined with olive bough

And smiles well pleased to see that she no more
Delights to lead her sons in war-like ways;
That o'er the teeming vale, or by the shore,
Are only heard the notes of peaceful lays.

That, conscious of her strength, she proudly turns
From dull, hard toils of such as feel them weak;
And tho' her anvils ring and forges glowing burn,
The reign of prosperous industry alone they speak.

And we, her grateful children, come to-day
To lay our deeds and labors at her feet;
The progress of another year display,
And hear the judgment that she deemeth meet.

The chained elements we captive bring
To do the biddmg of our Empress fair;
The stately steps of Progress, too, we sing
In chorus grand, attuned to music rare.

Old wrmkled Science comes with austere form,
His shy young sister, Flora, here to meet;
And feels again his pulses hounding warm,
So fair and beautiful a maid to greet.

He hrings his thousand engines, toys, and works of Art.
The labarinthine labors of his cunning hands;
His fair co-worker doeth well her part
By strewing fruits and flowers of this our sunny land.

We list the vaulted dome give sounding back
The mighty chorus of a country's pride;
We stand confused and lost in this a thronging track,
Awed hy the splendors dazzling us on every side.

Then let us gather, and with cheering words
Proclaim our gratitude for these our workers strong;
And swell the notes until the hills afar have heard,
And echoed hack our glad, triumphant song.

M. F. DAILY OFFICE, AUG. 17, 1874.

How Robert Smilee, Esq., Made a Day of It.

[Written for the PRESS by ADAM PERE.]

Bob Smilee was a farmer, and as farmers say, was "well to do"—that is, he owned his quarter section (which by the way was well watered and timbered); had a good part of it under cultivation; had six horses, eight cows, thirty-seven hogs, a few sheep and more chickens and turkeys than yon could well count. Bnt what was better than all other of Bob's possessions was his wife—Mrs. Smilee, or as he called her—"Lizzy." Now Lizzy was not a beautiful woman, neither was she by any means ugly. To use Bob's expression, she wss all "bizniz." As this particular quality of hers is what we will have to do with, we forbear giving you a further description of her, supposing that by the time you have read this sketch you will have formed your own opinion as to that.

But let me not forget to call your attention to an important fact right here, and that is, that out of all the profits occurring from their mutual agricultural pursuits, Mrs. Bob Smilee claimed as *her* specisl and individual share only what was realized from the sale of their poultry and eggs; and this she nndeniably and most positively claimed as *her own*. It was at that certain time of the year, when (as most farmers know) the coin in the purse runs low.

One Friday evening as Bob sat in the kitchen whistiug a lively accompaniment to the cheerful jingle of the snpper dishes that his wife was wasbing, he said, "Lizzy, what do you say to us cooping up a dozen or two of your chickens to take to market to-morrow? We need a few groceries, don't we?" "Well, now Bob," returned the wife, "you know them chickens are mine; and I've been doing without a new dress these two months, just a-waitiug for them to get grown up, so they would fetch a good price. Why don't you get your groceries of Scraggs & Co's., just the same as you have been doing all along? I'm sure they ain't particular about the money. When I was at town the last time, they wanted to sell you a lot of things on time."

"That's true, Lizzy," said Bob, "but then I hate to run in debt to 'em so much. I guess though I'll get what we need *this* time. But yon want the chickens caught anyway, don't you? You are going with me to town?" "Yes," said Lizzy, "I guess I might as well go 'long, I'd rather pick out my dress myself." So it was decided to "coop up" the chickens; and thereupon Bob and his wife repaired to the "hen-house" with strings innumerable, and after much parleyiug on their part as to which should be sold and which *not*, and much noisy remonstrance on the part of the whole roost (not to mention the belligerent attitude of the cock of the yard, and the vixenish cackling and clucking of motherly old "buntie), they at last had secure, in groups of three, four dozeu fat, plump chickens.

Early Saturday morning, just as the sun was peeping througb the cottouwood grove iuto the field of tall rye, across the road, and making the dew drops that still trembled on the bearded heads look like diamond settings, Mr. and Mrs. Smilee were trotting down the lane at a brisk rate, on their way to town.

Bob was unusually pleasant that morning; and Mrs. Smilee could scarce keep from blushing again when Bob would, in a lively and rolieking way, allude to a particularly interesting day, about tbree years past, in which they had started out with quick beating hearts, and at as early an hour, in search of that (at such times) most important of all officials, the village squire.

They jogged along over hills and through lanes as hsppy and merry as folk could well be; aud in an hour and a half drew up in front of Messrs. Scraggs & Co's. store. Mr. Scraggs, who had not yet done sweeping, was profuse in his compliments at their early arrival; but Bob merely remarked: "It's Saturday and we felt like making a day of it." Mr. Scraggs and Mrs. Smilee soon agreed upon a prioe for her chickens, and after much tugging and cutting at strings, there were forty-eight bloody-legged chickens limping sbout in Scraggs & Co's. poultry-yard.

Bob, after standing on one leg awhile and then chsnging to the other for a rest, in front of a great stack of dress goods that Mrs. Smilee was looking through, finally concluded that he did not know muoh about *such* things, and remarked to Mr. Scraggs that he would leave Lizzy to his mercy, as he wanted to run 'rounnd town a little. Mrs. Smilee, no donbt, thought that Bob was giving Mr. Scraggs a memorandum of the groceries they wanted, when he called that gentleman back to the desk at the further end of the store and held a short conversation with him. Whether she thought right we shall see.

After much hesitating as to whether she should take two cslico gowns (one light and one dark), snd some of that stripe to cut "bias" for trimming up in front and 'round the bot tom, or take one off that exquisitely figured jaconet, Mrs. Smilee at last decided that it were well for farmers' wives to dress plainly, and therefore ordered two patterns of calico, (not however, omitting to give positive instructions to "throw in" buttons snd thread.) This done she requested Mr. Scraggs to make out her bill, adding that she was going down town to visit a friend, and would settle when she returned. She had gone two blocks, when she hesrd a boisterous laugh proceeding from a building across the street; and—whether the voice was familiar, or whether from curiosity, I can't say—she looked in the direction whence it came. Now, just at that moment, Bob and an old chum of his emerged from behind the screen of a drinking saloon, walked out on the sidewalk, and, as if suddenly bethinking themselves of some business that called them down the alley that was bard by, walked that way at a brisk pace.

Mrs. Bob Smilee may have thought—and I believe she really did think it—that Bob had caught sight of her form and was not inclined to confront her, immediately after having been seated on a beer keg, lest she would detect some of the malt odor that might still be in his clothes.

But we really can't agree with her in that; for Bob had such an earnest look on his countenance, and hurried away as if there was something so very important to be attended to, *at once*, that it certainly could not have been as his Lizzy supposed. But Mrs. Smilee showed her "business turn" now, by turning rigbt about, and walking—yes, *trotting*—down to the corner, turning again up the other street, where she came np directly in front of Bob and his companion, who had by this time slackened speed to a lounger's pace. When they stood face to face.

Mrs. Bob Smilee very complacently remarked, "Mr. Smilee, siu't you 'most ready to go home?" I am sorry to say it, but it is a fact, that Bob was a little (just a *little*) confused, and stammered rather than spoke, "Yes-no-yes. Oh, Lizzy, this is Mr. Griggswell. Mr. Griggswell, this is Lizzy, my-Oh, yes-but I believe you are acquaiuted. Did Mrs. Griggswell come in with you?" Mr. Griggswell replied "No," as if he was also a little "put to." But Lizzy was in no wise disconcerted and repeated, "Mr. Smilee, ain't you 'most ready to go home?" Bob by this time had recovered his composure and replied, "Why, Lizzy, you don't want to go home a'ready? It's early yet, and you know I want to make a day of it. Here—you was going to call on a lady I thonght. You'll not get back from her house till after dinner."

"Where will I meet you then?" queried Lizzy.

"Well," said Bob, "let me see—I've got to go down to Dyers' to get that reaper sickle, and then to another store across the street from there, to get some things for our neighbor, you know, then—well, I'll meet you up at Scraggs' at three o'clock; how'll *that* do?"

Lizzy looked as though she was not certain that *that* would do, but she said "well," and walked away,

I am not positive that I know exactly what Bob meant, by the use of the phrase, "*make a day of it.*" But as he aud his friend straightway turned about and retraced their steps (though not without casting divers suspicious glances in the direction that Mrs. Bob Smilee went) and again entered the saloon, and called for drinks, aud then smoked, and drank again—I suppose he ment to imply that he was going to have a jolly good time, and perhaps not only make a *day* of it, but a *drunk* of it, also.

Be this as it may, it was not long till Bob had a dozen or more of his farmer friends about him, and what, with this one treating to beer, aud that one to ale, and another to "straight-lightning," and so on till all had treated each, and each, all, it is not to be considered at all miraculous that Bob shonld, by the hour he had promised to meet his Lizzy, be rather *top-heavy*, or, as it is more appropriately termed, "all right." At any rate, as Mrs. Smiley was promptly returning at the hour set, Bob (who was standing at the front of the saloon endeavoring to convince his friends thst there was no shade of doubt but that he *was* all right) for some resson, held his ground, and instead of running off down the alley as he had done before, called out to his companions, in a cracked voice, "Boys, d'y'e zee—that lady there?—I say—hic—do you zee—hic—her? Sheeze my—hic—wife—she *is*; and then to his wife, "Lizzy, oh Lizzy, make yon 'quainted with—hic—with my friends—hic—Lizzy." Lizzy didn't shriek and then faint, as she might have done with propriety, but with a firm step and a determined look walked up to Mr. Robert Smilee, Esq, and, grasping him by the arm, proceeded up the street with him, apparently to the great delight of his fellows. Bob was evidently non-plussed by the ooolness of his wife, and for a time accepted this coercive treatment as a matter of course. But, before they had reacbed Scraggs & Co.'s store, he grew obstinate, and persisted that there was no hurry, saying, "Lizzy, you *know* it; I say—hic—you *know*—hic—that I want to make a day of it—hic." Lizzy did not feel much inclined to dispnte him, or argue the point, right tben; therefore, after telling him to get the team ready while she went and settled with Mr. Scragg, left him. Nothing could have been more fully in accordance with Bob's designs, just then; and no sooner had Mrs. Smilee left him, than he (after staring wonderingly after her, and winking tremendous knowingly at the boys that had gathered 'round), staggered back toward the saloon, muttering as he went, "I said I—hio—was—*and*—I—hic—am—a-going to make a—hic—*day* of it;" and then in a very self-assnring tone, "*I'm* all right." But poor Bob was not so lucky as he might have been, and as many like him are.

It so happened that he met a fellow, who felt himself a little nearer *right* than Bob, and who, notwithstanding Bob's sputtering aud babbling, that he was *all right*, and was prepared to prove it, failed to be convinced of that fact; and, as Bob now tells it, they "fell to, and had a *right smart* brush, wherein there was no less than considerable blood spilt, and whereupon that same squire that Lizzy and me was talking about that morning, came along and collared us both, and clapped us into jail."

I see that, in giving Bob's rendering of this incident, I have got ahead of myself.

As I have already mentioned, Mrs. Smilee had gone into the store to settle with Mr. Scraggs. That gentleman informed her that he would charge the articles she had got to their account, as Mr. Smilee had drawn the amount that had been due her for her chickens, previous to going down town that moruing. I have have heard ladies say of themselves that they never gave way to anger, or allowed themselves to grow furious over anything. But as I was a witness to Mrs. Smilee's conduct when this informatiou was communicated to her, I don't belive that she would lay claim to such a completo control and composure of temper; for (if I may say it) she raged. Her unnsual sagacity euabled her to at once see through the trick that Bob had played upon her, and of course it hurt and irritated her. She was sn exception to the rule, that a lady will never own she has been outwitted by any one, especially by her better (I mean worse, but am forced to employ better, because of established usage) half. But, as the sequel will show, she was not so much outwitted as we might at first imagine. Well, as I said, Mrs. Smilee rsged; and, what was most unfortunate for poor Bob, her rage had just reached its climax ss the Squire passed the door witb Bob in charge, *en route* for the jail. Mr. Robert Smilee, Esq., had (and very naturally, too) by this time concluded that it was getting late—time to go home; and, strange to say, when his wife appeared on the scene, he gave way to a most plaintive whine: "Lizzy—hic—Lizzy! I want to go home—hic. Now—hic—Misser Squire, le'me—hic—go home. Lizzy, I've made a day of—hic—it; Lizzy, let's go home."

I verily believe you think that Lizzy, who was alresdy in a violent passion, at this broke forth in a torrent of wrathful epithets, such as—"You rascal, you! you drunken puppy! you-u-u-good for-nothing, no-account brute!" and I don't know what all of a like import; but no, she did not. She, in a very business-like, cool aud exceedingly deliberate manuer, told the Squire to proceed with his prisoner, and not allow him to bother *her*.

At this poor Robert's heart gave way, and he felt snubbed worse than a school boy who has just been the recipient of a wholesome flogging. But there was no mercy for him. As he was half-dragged and half-oarried up the street, he looked back and beheld his heartless Lizzy place her things in the wagon, jump in herself and drive rapidly homeward.

But before doing this Mrs. Smilee had told Mr. Scraggs that under penalty of her great displeasure he must see that Mr. Smilee served his senteuce out in jail; that under *no* consideration must he be bailed out; that she meant to let the law take its course with him.

About midnight of the third day from that time there was a very gentle, modest rap at Bob Smilee's farm-house door. Mrs. Smilee, who was alone, demanded to know who was there. A soft voice answered in a pleading tone, "Lizzie, it's *me*. I've made a *day* of it; and am now come home." That voice was Bob Smilee's; and four hours ago to-night Mrs. Smilee arose from her lonely couch and admitted to her arms a dejected and penitent husband, who has never since that, to him, memorable day been bent on *making a day of it*. There is a little Bob Smilee now, and almost any day, if you go out to Bob Smilee, Esquire's farm, you can hear little Bob hallooing, "Hurrah for ze Grange and ze loca'option, for za is ze tings for ze fa'mers!" And then, if you ask him what that means, he'll say, "But mamma says papa don't need any loca'option."

Not Much.

The story of the absent-minded man who, meeting his son in the street, shook hsnds and asked him how his father was, has been equaled by the forgetfulness of a Wisconsin farmer. This man drove to town to transact some business, and was accompanied by his wife. Leaving her at a dry-goods store, he proceeded to carry out his intentions. Having finished his business, he forgot all about the little circumtance of bringing his wife with him, and started home alone. Arriving there, he put his horses out aud proceeded to do the chores. In the meantime his wife had learned that her husband had left town withont her. Hiring a conveyance, she was driven home. She didn't wsit to take off her things, but seizing a press-board, made her wsy to the back yard. The husband was just seating himself on a milking-stool, and had opened a conversation with the family cow upon the subject of "h'isting," remarking frequently that it was "so boss." He was just getting settled down to business when a whistling sound, as of something rapidly clesving the air, came from the other side of the cow. It was the press-board, and the wife was at one end of it. An instant after, it fell with crushing weight upon his knees. The cow, having conscientious scruples about standing between husband aud wife, left very suddenly, and in her hurry, kicked the unfortunate man in the immediate vicinity of his vest pocket. The unhappy victim of circumstances scrambled up on all fours, when the press board again decended, striking him opposite to where the cow had left her tracks. His wife then asked him if he wonld ever forget her again, and his answer was plain and to the point, "Not much."

HOW HE CAUGHT IT.—A resident of New Haven, Connecticut, has given np steamboat travel, aud now, when he wants to go to New-York, he provides tickets by the railway. His preference for the latter method of locomotion came about in this wise; Not long ago he had occasion to go to the metropolis of the Empire State, and accordingly he started for the steamer's landing, with a carpet sack in one hsnd and a cane in the other, in what he supposed to be ample time. But when he came in sight of the wharf he observed the boat apparently swinging away from her moorings, and amid the shouts and jeers of the bystanders, he broke into a frantic run for the landing. The boat was eight or ten feet from the wharf when he reachcd the place where he had hoped to find a gsngplank, but nothing daunted, and trnsting to the momentum acquired during the run, he leaped into the air aud gained the vessel's deck. Not without accident, however. The carpet-bag struck one passenger so violently in the stomach that he doubled up like a jack-knife, and absorbed a whole flask of brandy in getting straightened out, while the cane struck another man in the face with sufficient force to suddenly induce him to get down on his knees to look after his hat. When he had recovered it the man who had occasioned all this commotion said to him in a tone of mingled apology and self-gratulation, "Well, I made it!" "Yes, you did," said the sore-headed passenger, "but, you durned old fool, this boat ain't going out, she's coming in."

WHEN two young people start out in life together with nothing but a determination to succeed, avoid the invasion of each other's idiosyncrasies, not carrying the candle near the gunpowder, sympathetic with each other's employment, willing to live on small means till they get large facilities, paying as they go, taking life here as a discipline, with four eyes watching its perils, and four hands fighting its battles—whatever others may say or do, that is a royal marriage. It is so set down in the heavenly archives, and the orange-blossoms shall wither on neither side the grave.

THE charming landscape which I saw this morning is indubitably made up of some twenty or thirty farms. Miller owns this field, Locke that, and Mauning the woodland beyond. But none of them owns the landscape. There is a property in the horizon which no man has but he whose eye can integrate the parts—that is, the poet. This is the best part of these men's farms, yet to this their warranty deed gives no title.—*Emerson.*

EVERY condition in life has its advantages and its peculiar sources of happiness. It is not the houses and the streets which make the city, but those who frequent them; it is not the fields which make the country, bnt those who cultivate them. He is wisest who best utilizes his circumstances, or, to translate it, his surronndings; and happiness, if we deserve it, will find us, wherever our lot may be cast.

LABOR is at once a bnrden, a ohastisement, an honor and a pleasure. It may be identified with misery, but there is also a great glory in iu. It bears witness at the same time to our native poverty, and to our manifold needs.

TRADE increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—*Lord Chatham.*

The Oyster Ring.

The pathway to reform is not strewn with roses.

I am reminded of this by a little incident.

I have always bought my oysters opened. Mrs. Perkins and myself are fond of oysters, and eat a great many of them. It occurred to me one day—last Sunday, to be more direct—that there existed monopolies in opening oysters that were hurtful to the public purse. Whenever I get hold of a notion of that kind I work it up. I worked this up; I brought home a half bushel of oysters in the shell, Saturday night, and put them in the cellar till morning, when they were to be opened fresh for breakfast. When the morning came I went down stairs and brought up the oysters, while Mrs. Perkins got ready a knife and pan. I wasn't quite dressed, because I was a little eager to profit by an experiment. Mrs. Perkins shared this earnestness in a measure, and was anxious to have me go to work at once.

It is said that the less a man knows about anything the more willingly he engages to do it.

I knew nothing about opening oysters; I had never opened one in my life. But what I lacked in knowledge I made up in zeal.

When everything was ready, I smiled at Mrs. Perkins and commenced.

I found the most difficulty with the first oyster. I looked some fifteen minutes for the hole in which to put the knife. But I couldn't find it. Mrs. Perkins, who had rather impatiently watched the survey, suggested that it might have fallen out, and would be in the basket. Mrs. Perkins was lightly costumed, and there was no fire in the stove. These things wore on her and made her ironical.

There was no use looking further for a hole in that oyster. I got out my jack-knife, which was sharp, and placing the point at what reasonably appeared to be a crevice, pushed firmly against it. If I had used a little more firmness it is more than likely that both the blade and handle would have passed through my hand. As it was, it was only a part of the blade, and I was enabled to pull it from the same side it entered. This was an unexpected advantage, and I hope I was sufficiently grateful, but it is doubtful.

Mrs. Perkins screamed when the blood flew.

"You are the awkwardest man I ever saw," she observed.

It was an easy remark. Ninety-nine women out of every hundred would have said it.

I tied up the wound in silence, and renewed my endeavors to gain an entrance, with zeal materially abated.

Pretty soon I missed part of one thumb, and the knife snapped in two, I thought over a few oaths I had heard when a boy, while Mrs. Perkins went for another knife.

They don't make knives of the material they used to. I was surprised to see them break as fast as they did before I got that oyster open. Mrs. Perkins was somewhat surprised herself. I think if I had not been bald there would have been considerable variety added to the performance.

I didn't break the last knife. It slipped over the edge of that cursed bivalve, and went across the apex of my knuckles with a ferocity almost human. It next went into the stove.

I went into the yard to think. Mrs. Perkins went up stairs for a cry.

When I came in I was accompanied by the axe.

The balance of those oysters came apart in two minutes.

And monopolies are better endured than cured.—*Danbury News.*

"A LATE well-known member of the Scottish bar, when a youth, was somewhat of a dandy, and somewhat short and sharp in his temper. He was going to pay a visit in the country, and was making a great fuss about his preparing and putting up his habiliments. His old aunt was much annoyed at all the bustle, and stopped him by the somewhat contemptuous question, 'Whar's this yon're gaun, Robby, that ye mak sic a grand wark about yer claes?' The young man lost his temper, and pettishly replied, 'I'm going to the devil.' 'Deed, Robby, then,' was the quiet answer, 'ye needna be sae nice; he'll juist tak ye as ye are.'"

AUNTY COMES OUT AHEAD.—A hater of tobacco asked an old negro woman, the fumes of whose pipe were annoying to him, if she thought she was a Christan. "Yes, brudder, I spect I is." "Do you believe in the Bible?" "Yes, brudder." "Do you know that there is a passage in the Scriptures that declares that nothing unclean shall inherit the Kingdom of Heaven?" "Yes, I've heard of it." "Well, Chole, you smoke, and you cannot enter the Kingdom of Heaven, because there is nothing so unclean as the breath of a smoker. What do you say to that?" "Why, I spects I leave my bref behind me when I go dar."

IT is related that an old English primer was printed, and the whole of the first edition sent out, in which, by the omission of the letter c in a single place, a solemn stanza was made to read as follows:

When the last trumpet soundeth
We shall not die,
Bnt we shall all be hanged
In the twinkling of an eye.

SAID a conscientious auctioneer: "Ladies and gentlemen, there is no sham about the carpets; they are gennine tapestry carpets. I bought them of old Tapestry himself."

YOUNG FOLKS' COLUMN.

The Fair.

A DIALOGUE.

Martha.

Oh, Mary, have you heard the news?
You now your spirits can amuse—
By going nightly to the Fair,
To notice and be noticed there—
'Tis open now—

Mary.

Why, deary me—
I'm just as glad as glad can be!
I've wished e'er since I married Snooks,
For some place to parade my looks,
Some place where I could fashion see,
And let the people look at me.

Martha.

The Fair's the thing—besides it's great,
To see the wonders of the State;
The arts, the products, industries,
And things of high and low degrees,
From silkworms cuddling in cocoons,
To engines, mowers, big balloons,
Hay-forks and reapers, threshers, spades,
Fly-traps and pictures, window-shades,
Machines for sewing, running gear,
Hops, malt and liquor, ginger beer,
And syrups which will sooth a child,
And make a crusty old maid mild;
Besides all sorts of female things
From morning-gowns to wedding rings;
Hats, capes, and trinkets, furbelows,
And *cetras* we must not disclose;
All these, my dear, and more beside
Can there be seen—so now decide—
Put on your hat and we will share
The pleasures of the Mechanics' Fair.

A Chapter on Manners.

It is a sign of bad manners to look over the shoulders of a person who is writing, to see what is written.

It is bad manners to occupy a seat while other people stand around without a seat.

It is bad manners to go into any person's house without taking off your hat.

It is bad manners to use profane language in the presence of decent company.

It is bad manners to use your own knife at meals in cutting off a piece of meat, or to use it on the butter dish—get a clean knife.

It is bad manners to go into any person's house with mud or dirt on your shoes.

It is bad manners to talk in company when others are talking, or to talk or whisper in church.

It is bad manners to talk in company to one or two persons about some subject which the others do not understand.

It is bad manners to stare at strangers in company or in the street.

It is bad manners to say "yes" or "no" to a stranger, or to your parents, or to aged people; let it be "yes, sir," and "no, sir."

It is bad manners to pick your teeth at the table, and bad manners to pick them with a pin in any company.

It is bad manners to comb your hair and brush your coat in the eating room.

It is a sign of low breeding to make a display of your finery or equipage.

It is bad manners to boast of your wealth or prosperity, or good fortune, in the presence of the poor, or those less fortunate than you are.

It is vulgar to talk much about yourself, and it is very low and vulgar to lie.

It is bad manners to stand in the middle of the pavement when people are passing, or to made remarks about those who pass.

It is bad manners to spit on the floor or carpet, or to spit at meals; and yet many people who think they are genteel do it. If you spit at meals, get up and go out. Children ought to be taught at school that spitting is mere habit.

A HOSPITABLE DOG.—"Our Frank" has been immortalized by the publication of his biography, although several interesting events were omitted in it, and among them the following instance of benevolent kindness and thoughtful consideration. Frank himself had the free run of the whole house, but an entrance by the front hall was prohibited to all his companions, and even to his especial associate, the brave mastiff that occupied the kennel. This privilege Frank clearly comprehended, and if any playmate presumed to follow over the threshold, Frank would at once turn upon and repel him. On a cold and stormy evening in winter Frank's quick and impatient bark was heard at the porch door. When it was opened, he immediately entered, accompanied by a little dog, all draggled with snow and mud, and trembling with cold. Frank conducted his guest through a long hall into the sitting room, and led him to the warm carpet behind the stove, which was always reserved for himself. The stranger was caressed and fed, which Frank witnessed with the most intelligent manifestation of delight and satisfaction. The next morning the waif departed, escorted by Frank, who had allowed him to partake of his own breakfast. How Frank picked up the suffering stranger, and from whence he came or whither he went, I never knew.

IF we stop the *first* lie, we stop all the rest. If we do not use the *first* profane word, we shall never use the *second*. If we are not disobedient the *first* time, we shall never be disobedient.

STREET Arab: "Box o' matches, sir?" Swell: "No; daren't smoke." Street Arab: "Buy a box, and I'll teach you!"

A PORTLAND boy had his hair cut off the other day, and immediately petitioned to have it "mended on to his face for whiskers!"

GOOD HEALTH.

IODIZED ALBUMEN.—M. Collas, in the *Bulletin General de Therapeutique*, describes a new process for the administration of iodine. Alcoholic solution has been found too irritant in many cases, and as the iodine acts on the alcohol, forming a hydriodic ether, the tincture is liable to vary in its conposition. Iodide of starch has been recommended, but this preparation is of variable strength, and has besides an unpleasant taste. Iodized albumen, M. Collas considers, obviates all these inconveniences, and can, without much difficulty, be formed into pills. The albumen is prepared by agitating actively an albuminous solution with iodine in very fine powder or in solution in some appropriate vehicle. The mixture is at first highly colored, blackish-brown, but this color gradually disappears in several hours of contact, and the preparation no longer strikes the violet color with starch. The product is then dessicated under gentle heat in an air bath, when it may be made into pilular mass. The dose is so arranged that each pill shall contain 5 milligrammes of iodine. The experiments by Professor Dolbeau have shown that iodine thus prepared has no bad effects whatever. It may be continued for several weeks without stomach trouble or other inconvenience.

RECOVERY FROM WOUND OF THE BRAIN.—Dr. R. F. Baldwin, in the *Richmond and Louisville Medical Journal*, adds another to the list of cases in which recovery has occurred after severe wound of the brain. A lad 16 years old was accidentally wounded by the discharge of a pistol in the hands of a companion a few feet distant. Upon receiving the shot the boy fell with violence, but did not lose consciousness. The ball, about the size of a buckshot, entered the right frontal bone an inch above the center of the eyebrow, and, passing through the brain, lodged in the occipital bone near the center of the occipital cross. A silver probe passed by its own weight to the center of the brain without touching the ball. As a precautionary measure he was bled, and Epsom salts were administered. The wound healed rapidly without any constitutional disturbance, and in 10 days he returned to his home. He is still living in good health, and has never suffered the slightest inconvenience from the accident.

CURE FOR RATTLESNAKE BITES.—In view of the numerous cases of rattlesnake bites being almost daily reported by the interior press, the following recipe from the Trinity *Journal* may prove of some benefit: A physician in Texas was recently bitten by a rattlesnake, and, in order to test the efficacy of iodine as a remedy, he waited until the swelling in his leg and the pain compelled him to lie down—about 20 minutes after being bitten—when he took half a teaspoonful of saturated tincture of iodine, repeating the dose in diminished quantities, at intervals of 15 minutes for an hour. He also applied the tincture to the wounds and the whole surface of the swollen leg; and in five hours the pain had so far subsided that he fell asleep and slept several hours. On waking, he was entirely free from pain, though his leg was fearfully swollen and tender to the touch. He used no other remedies, and in a few days was entirely well.

CURE FOR BURNS.—Comte de la Tour du Pui publishes the following for the benefit of the world at large. He says that a pretty strong solution of ammonia in water is an excellent remedy for burns in cases where the skin is not destroyed, and as "much trouble doth environ those who meddle with *hot* iron," our readers are peculiarly interested in such remedies. The count says, that having by accident taken hold of a crucible which was nearly red hot, he suffered great pain, plunged his hand into some ammoniacal water, and kept it some hours afterwards covered with a piece of linen soaked in the same; the pain was allayed almost immediately, and no blisters or suppuration occurred.

LEMON JUICE AS A LOCAL APPLICATION IN DIPHTHERIA.—In the clinical lecture by M. Bucquoy he expressed his preference for lemon juice, as a local application in diphtheria, to acids, chlorate of potash, nitrate of silver, perchloride of iron, alum or lime water. He uses it by dipping a little plug of cotton wool, twisted around a wire, in the juice, and pressing it against the diseased surface four or five times daily.

TO CONCEAL BAD TASTES OF MEDICINES.—The bitter taste of quinia, colocynth, aloes, quassia and other bitter medicines is said to be instantly removed by chewing a piece of licorice root. To disguise castor oil rub two drops oil of cinnamon with an ounce of glycerin, and add an ounce of castor oil. Children will take it and ask for more.

ETHER AND CHLOROFORM.—We are able to say that in the present state of science the medical man is responsible for every case of death occasioned by the application of ether, because a careful watching of the respiration is capable of preventing death, while the lethal effect of chloroform depends in part on individual predisposition, which the physician is unable to recognize.—*Schiff.*

THE Butte *Record* says that saleratus, applied immediately, is a sure cure for tarantula and scorpion bites.

An Artificial Face.

At a recent meeting of the Medical Society of London, a member, Dr. Hutchinson, exhibited a patient who had lost a large portion of his face by disease, and to whom the deficiency was supplied by artificial means in a way similar to that by which some of our dentists treat loss of palate, nose, etc.

The disease had resulted in the destruction of the superior maxilla, all the spongy bones, and also of the soft parts, including the nose, some of the cheek, the upper lip, and nearly all the soft palate. A rhino-plastic operation being deemed impracticable, the case was treated mechanically. To supply the lost parts internally an apparatus was constructed of vulcanite, bearing mineral teeth, which articulated with those of the lower jaw, and this was held in position by the vulcanite being adapted to the whole of the inner surface of the nasal fossæ, thus affording a hold by means of suction. For the sake of lightness the whole of the apparatus was hollow, while the outer surface was coated with soft gutta-percha; the floor of the artificial piece formed the roof of the mouth. Mr. Hutchinson had also made an artificial nose of vulcanite. This was fixed to the man's face by an elastic band which passed round the head. The junction was partially hidden by means of a moustache fixed to the upper lip, which was also artificial. Mr. Hutchinson comments on the fact that the man's occupation (he was a mason) and his position in life compelled him to treat the case in the simplest manner possible. Various delicate improvements in the shade of color, mode of attachment, and usefulness of mastication, could be made in the case of persons in a higher sphere of life, who would appreciate delicacy of manipulation.

CAMPHOR MEDICATION.—Camphor is a poison, and yet it is largely used by many families for alleviating pain and curing sores. It is a nervous irritant. If taken in small doses, its acts like alcohol and opium. In large quantities, it excites the nervous system even to the extent of camphor spasms and death. Camphor also acts as an irritant on the mucous membrane of the stomach, leading to constipation and ulceration. On these accounts it should not be used without the advice of a physician. Families easily get into the habit of running to the camphor bottle for every trifling ailment, until after a while insidious maladies break out whose origin is little suspected.—*Journal of Health.*

GURJUN OIL IN LEPROSY.—Dr. J. Dougall, of Port Blair, Andaman island, has published a report of his experience with gurjun oil in the treatment of leprosy. Of twenty-four cases under treatment during six months, he says that all have been decidedly benefited. The oil is administered internally in combination with lime-water, and is also applied externally to the affected parts. Gurjun oil is an oleo-resinous product of the *Dipterocarpus lævis* and other allied trees. Experiments with the new remedy are being made at the present time in London and elsewhere.

CROTON-CHLORAL IN FACIAL NEURALGIA.—In *The British Medical Journal*, Dr. F. B. Lee reports the case of a lady, æt. 32, who had suffered for years from attacks of facial neuralgia, had had several teeth extracted, had been blistered behind the ears, and had tried numerous other means without avail. He prescribed croton-chloral in three-grain doses every four hours. After the third dose perfect ease was experienced, and although three months had elapsed, there had been no return of the disease.

REASON WHY.—Nitrous oxide causes people to laugh who inhale it, because it introduces into the body more oxygen than can be consumed. It therefore deranges the nervous system, and, being a powerful stimulant, gives an unnatural activity to the nervous centers and brain. This derangement usually exhibits itself in a pleasurable excitement to those who inhale it—causing them to be merry, almost to insanity. It has therefore been called laughing gas.—*The Druggist.*

WHAT CANDY IS MADE OF.—The New York *Mail* says candy-eaters are welcome to the appetizing information that terra alba (which is nothing but plaster of Paris or gypsum) glocus, lampblack, sulphuric acid, aniline, verdigris, Brunswick green, gamboge, smalt, ultramarine, oil turpentine, Prussic acid, rotten cheese, fusel oil, chrome yellow, and other drugs and compounds are largely used in the manufacture of cheap candies.

THE beneficial effect of Alpine health resorts has been attributed to the greater abundance of ozone in the mountain air, and the theory is supported by recent investigations; but Dr. Haller, of Switzerland, says that though it seemed likely that as one ascended, an increase of ozone would be met with, yet at the highest accessible points there was no marked difference.

DIET IN ERYSIPELAS.—A very important department of the constitutional treatment is proper alimentation. A milk diet, with farinaceous pudding, rare cooked eggs, beef tea, then poultry and fish, will all in their proper place be useful, and assist much in promoting a speedy recovery.—*Pac. Med. Jour.*

COD-LIVER OIL IN CONSUMPTION.—When the patient is losing health and strength the oil is serviceable. The most agreeable preparation to take will do the most good.

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SAN FRANCISCO:

Saturday, August 29, 1874.

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National Sportsman's Association.

The time has been when the term sportsman was supposed to be depreciative of character; but that has past. The sportsman's clubs throughout the land have been of service to the country to an extent that cannot be estimated by money valuation. It is principally through their persistent endeavors that the game laws of the different States have been suited to the needs of the present time and to the demands of the future; and their watchfulness has done a thousand fold more than any official efforts in securing the efficiency of the game laws. The wasteful and almost willful destruction of game has been, to a great extent, stopped; and the streams of the country have been stocked with material that will furnish coming generations with a vast amount of wealth, comfort and pleasure. It is proposed now to hold a national sportsman's association at Niagara Falls, on September 9th, 1874. The benefits to be derived from the formation of such an association in providing for the protection of game in the partially settled and newly acquired territory of the country, will be apparent to all; and we hope California will be duly represented at the meeting at Niagara Falls; and that the sportsmen of our State will look out for the interests of game in the country at large.

SACRAMENTO shipped 550 tons of fruit to different points during the past week.

Agricultural Absurdities.

Notwithstanding the innumerable failures that are continually occuring on farms and in orchards and gardens, people will still persist in believing that in agriculture everything is sensible, sober and practical. They seem to think that common sense is the inseparable shadow of agriculture. It may seem cruel in us to endeavor to dispel this delusion—especially at this time, when agricultural orators are preparing their addresses for annual fairs; for these are nothing if not rigidly sensible.

But it is acknowledged by practical people that quite as much is learned by the failures in life as by its successes. If those who report their successes through the press and in farmers' clubs, would record the failures in their agricultural career, it would possibly do as much good, and would certainly establish an inexhaustible fund of amusement, for Folly has a country as well as a city residence, and divides her time about equally between the two. Let us follow her to her rural retreat and report some of her "carryings on" there.

The ear of society has been dinned with confessions of crime. The taste for such recitals may be ranked among those demands that are bound to produce a supply; and the sort of dramatic interest which they create is a premium which has drawn out confessions of crimes that were not committed, and induced a hideous over-coloring of criminality. Probably at the last day, when all crimes are unearthed, the number of fictitious confessions will outnumber the crimes that were hidden from mortal ken. But there has never been any premium on the confession of follies; consequently the resources of this vast field remain undeveloped. The unconfessed follies of city life have been ferreted out by detective satirists, though rural follies have hitherto been partially exempt from ridicule; but their time is coming. The failures that attend professional, mechanical and commercial efforts are duly accounted for; and often, too often, commented on in an unfeeling manner. Similar failures in agricultural efforts—and we venture the assertion that they are proportionately as numerous and as reprehensible as those of city life—are scarcely noticed; or, if noticed at all, they are attributed to natural causes. Thus the ill winds that are supposed to blight the farmer's crops preserve his reputation.

We do not propose, however, to disclose the solemnities of these hidden secrets; but it will do no harm to exhume some of the absurdities of agricultural life; and, as evidence that we lay no claim to infallibility, we will commence with an exposure of a little personal experience of an absurd character.

When the curculio first came to Central New York, and began to stick its nose into other people's plums, we were in possession of a good fruit garden, the plum trees being special favorites. Our fine egg-plums, bleekers, greengages and damsons went the way of all plums. That was a long time ago, about 30 years; but there was a good deal of agricultural nonsense afloat through the papers, even as far back as that remote period. We have seen a statement of the observations of some one who declared that instinct taught the curculio to deposit its eggs in blossoms hanging in such spots that when the poisoned fruit fell from the tree it would fall "on good ground;" wherein the worm, when it left its home in the pit of the fallen plum, could find a proper abiding place until it should take to itself wings and fly away. It was stated that in cases where portions of trees had hung over water, or over paved, boarded or graveled sidewalks, the fruit was never injured by the curculio.

The practical suggestion founded on these observations was, that the owners of plum trees should construct pavements or platforms of some kind under their trees, in order that the embryo curculio would have no hope of resurrection, if it should fall thereon. Being, even in those days, rather progressive, we at once adopted the plan, and commenced operations accordingly on two of our favorite trees. We excavated the top-soil to the thickness of a brick, and, determined to be thorough in the matter, we extended the excavation to the uttermost ends of the lateral branches of the tree. Then we paved the whole of this space with good, hard bricks; making a tight, neat job of it.

Well, what was the result? Why, the curculio paid no attention to it. The blackened plums fell to the pavement from these trees precisely as they fell to the ground from the others. We had misunderstood, or greatly over-estimated, the instinct of the curculio. It somewhat lessened our faith in these semi-sacred matters, and created a sort of cynical habit of observation which has resulted in the detection of a good many white lies concerning animal instinct. The pavement was allowed to remain about the trees a long term of years. Parties had predicted when it was placed there that it would kill the trees; but they were mistaken—the trees grew and bore their age as well as any in the garden. This has led us to observe the habits of trees in this respect; and we have come to the conclusion that trees receive very little nourishment from the surface soil, though the growth of anything else there is injurious to them. Where the roots go, there the tree gets its sustenance. We see trees of the most luxuriant foliage, of rapid and enduring growth, standing in city thoroughfares with no bare earth within many rods, the whole surface being covered, to the very trunk, with bricks or with flag or cobble stones.

We will give hereafter other agricultural absurdities—our own experience and observations; and here solicit the co-operation of our deluded or blundering brothers of the spade and plow.

Revival of a Foolish Practice.

In our agricultural exchanges a good many articles are given "about these days," on the subject of scalding milk before setting for cream. The writers of these articles treat the subject as though it were a novelty; when the process was in use before the parties now recommending it ever tasted milk. We shall not attempt to trace the record of this foolish practice beyond the limits of our personal recollections, but will state here that we practised it in our own little dairy 30 years ago. We gave it a thorough trial and discarded it.

Only two points can possibly be gained by scalding milk. The cream rises much sooner—thereby avoiding the necessity of skimming putrid milk during hot sultry weather—and in churning the butter "comes" quicker than with cream not scalded: thus saving time and labor in this irksome task. But these two points are gained at a sacrifice which will not justify the practice. It is impossible to make as good butter from scalded cream as from that which has been set in the usual way. We may escape the punishment of really *bad* butter, but we cannot pass through scalded cream into the blissful regions of *good* butter; we can only have a mediocre article. A late number of one of our exchanges warms up considerably on the subject of scalded milk. The writer goes into ecstacies over "Uncle Ben's," which was supposed to be made by some secret charm. But it somehow leaked out—the secret, not the butter—that Uncle Ben scalded his milk before setting. After the writer has divulged this important secret he settles back into an abhorrence of butter that is not thus fried by fire, and even quotes a little blank verse—extremely blank—to express his disgust. Now this is all "put on;" for there never was any butter made from scalded milk that deserved to be placed any higher than in the "ordinary" class.

As to the saving of time and labor in churning, we can only say that no good dairyman will for this trifling inducement lower his butter a grade in the scale of qualities. Besides, if the labor of scalding be considered, it will be found to very nearly offset that saved in churning; and if the care and labor which the process of scalding demands were bestowed upon the unscalded milk, attending to the conditions of the atmosphere while the cream is rising, skimming at the right time, churning before the cream has stood too long, and while at just the right temperature, there will be no need of scalding, or any other charm to make the butter come. Leave this matter to the woman of your house—the true guardian angel of the dairy—and she will soon get "the run of things," and become mistress of the situation. She will soon detect the changes in the cream, which the changes in the atmosphere, in the feed of the cows, etc., have produced; and the earnestness and practical sense of her sex will readily adjust things to suit the circumstances of the season. But in all these changes don't change your dairy manager too often.

We would especially request our California dairymen to keep cool in this scalding matter; it is a mere makeshift which is hardly excusable under any circumstances, and is entirely uncalled for here, where the condition of the atmosphere is such that milk can be allowed ample time to stand without fear of mould or putridity.

INFORMATION WANTED.—Bro. William Mullinax, of Petersburg, Pike county, Indiana, wants to hear of the whereabouts of his father, John Mullinax, who came to California in '57. Is 57 years of age. He is a practicing physician, a Baptist preacher and Free Mason. Bro. H. R. Crowe, of Coalfield, Kansas, wants information about land in California. We refer him to Bro. O.L. Abbott, of Santa Barbara, President of Grangers' Homestead Association. He is posted and can give the brother information that will be of great value.

HARVEST FIRES.—Reports still keep coming in of destructive harvest fires occurring during the harvest progress. A note from a subscriber informs us that on Aug. 17th a large portion of the wheat on the ranch of George Morres, of Potter valley, Mendocino county, was burned, together with Hughes' "Separator" threshing machine. The fire is supposed to have caught from a neighbor's threshing machine.

KANSAS STATE FAIR.—We herewith acknowledge the receipt of a complimentary ticket for the 10th annual fair of the Kansas State Board of Agriculture, to be held at Levaenworth, Sept. 7—11. We should like much to meet our Kansas friends on this occasion, but it is really impossible. Our best wishes, however, will be with them.

THE grain yield this year on the coast, from Half-moon bay to Pescadero, is larger than it has been before in seven years.

Exporting Fresh Fruit.

The matter of disposing of our surplus fruit is one to which the PRESS has given a good deal of attention, as its readers well know, and it is with extreme satisfaction that we observe evidences of this important business expanding and taking a systematic form. We see by the Grass Valley *Union* that some of the apple-growers of that place—one of the best apple districts in the State—are preparing to extend the business inaugurated last year, of sending apples to Nevada. Other movements in the trade of a semi-homelike character are noticed.

But it is upon the overland fruit trade that our principal reliance is placed. We gave last week an encouraging report on this subject, furnished us by parties in New York. The following extract from the New York *Tribune*, of the 14th inst., will be of interest as a description of the method of

Overland Transportation.

"The rapidity with which fruit can now be transported across the continent from California to this city, and the splendid condition in which it arrives in this market, has created for it a trade that is not only worthy of note, but it is to some extent surprising. The fruit, which at the present time consists of Bartlett pears, German prunes and plums, is first very carefully picked, and then turned over to the packers. It is next sorted with great care, and those which may be over-ripe, or in the slightest degree damaged, are picked out and laid aside for home use. During this process the fruit has to be very carefully handled, as the least abrasion would render it unfit for packing, the slightest unsoundness of one plum or pear imperilling the whole box. The fruit is then wrapped carefully in paper, each pear or plum by itself, and next packed in a box so tightly that it is impossible for the plums or pears to shake or knock against each other while en route to the East. Although so closely packed, the paper wrappers prevent any undue pressure or contact between the fruit. The boxes are made sufficiently open to admit the air, and yet the openings are not wide enough for any ordinary damage through handling the fruit. These boxes are eighteen inches long by twelve inches broad, and when intended for pears are twelve inches deep, rendering them capable of holding about 200. When intended for plums the depth is very little more than six inches, the box holding about the same number of that kind of fruit.

"The boxes having been thus packed are shipped East by means of the Diamond Refrigerator Line, along the Pacific railroad, and stowed away in cars constructed for the purpose. These cars have double walls of wood, the intervening space being filled with cork, the floor covered with zinc, and a roof in which is an ice-chest capable of holding several tons of ice. When the car is loaded, thick double doors close the cooling-chest, an ordinary railroad car-door then shutting the whole from the outside world. When thus closed the only air that can reach the contents of the car is through the air passages; a small but constant current passing under the eaves of the car into the ice chest, where it is cooled to a temperature of melting ice, from 35 to 36 degrees Fah. This cold air then sinks by its own weight through air passages along the sides and ends of the car into the receptacle or storehouse for the fruit, at the same time driving out, through ventilators in the roof, any air that might have been heated inside the car. The warm air thus driven out is made to pass again over the ice, and after being cooled falls as before into the receptacle. By these means a constant current of air of an even temperature is kept up—not cold enough to freeze the fruit, but sufficiently cold to prevent any change taking place in its condition. Whole car-loads of perishable fruit are thus consigned in California to persons in this city, and arrive in the market in an excellent condition. The cost of transit is very great, a certain car-load, consisting of 340 boxes of pears and 399 boxes of plums and prunes, having cost, for freight and charges alone, $1,200. But, as the fruit realized at wholesale, upon the average, about $5 per box, the shipment of a car of fruit at this time of the year proves to be somewhat of a profitable investment, the gross receipts being over $3,000 per car."

PERSONAL.—Our readers generally, and the friends of Mr. Wadsworth—our late associate—in particular, will be pleased to learn that there is every reason to believe that he is now in a fair way of recovery. He writes to a friend, that what was supposed to be incurable cancer, at or near the outlet-valve of the stomach, has proved to be simply a tumor, which is now being gradually dissipated under his present medical treatment.

THE SANTA CRUZ BEET SUGARIE.—A gentleman who went, last week, to Soquel, Santa Cruz county, to see the beet sugarie at work, reports that the beets will not be ripe before mid-September, and consequently the making of sugar will not begin before that time. The beets are small, and will yield probably 12 tons to the acre. They will cost by contract $3.50 per ton delivered. The sugarie will earn a good dividend.

THE Stanislaus county fair will be held on September 17th. Dr. S. F. Carr will deliver the address.

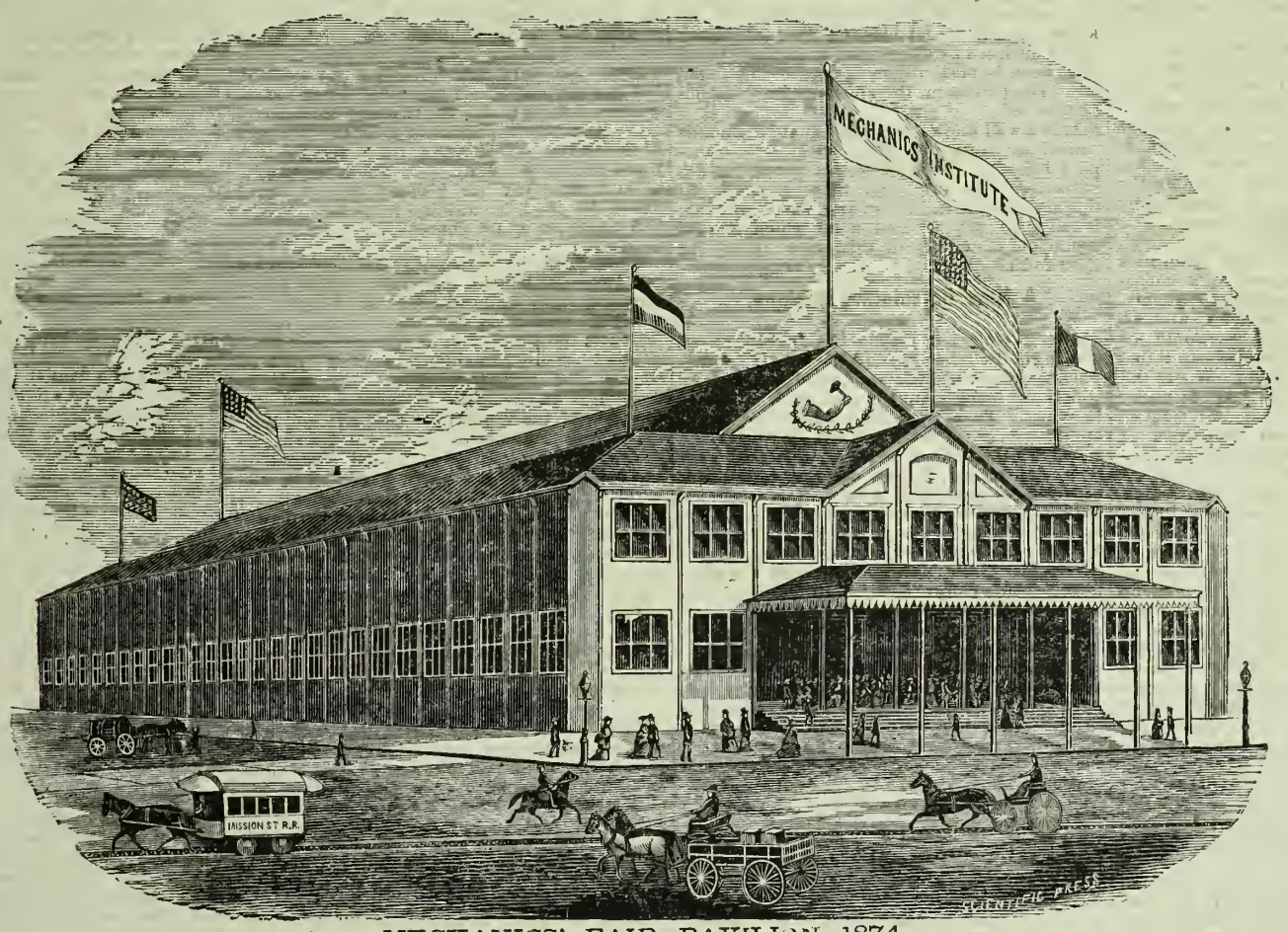
The Industrial Fair Building.

The Ninth Industrial Fair of the Mechanics' Institute, of this city, was formally opened this week. The building in which the exhibition is held is a spacious one, as the accompanying engraving ahows. The outside appearance, however, is not very elegant; but as the building is only a temporary structnre, this was not to be expected. The Institute has a lease of the property for five years, with tbe privilege of retaining possession of it the sixth year, if desirable. Tbe entrance for visitors is on Misaion street, the building running from Mission to Market on Eighth street. A portico has been constructed from the front of the pavilion jutting out over the sidewalk, forming a covered way by which visitors can enter from cars or carriages, withcut exposure to the weather.

The contract for its construction was awarded on the 7tb of May; and only abont three months ago mnch of the lumber of which the Pavilion is constructed was growing in the forests of Oregon. Many of the timbers were cnt to order, to suit the vast dimensions of the building. Some of these timbera measure 80 feet in length, 12x12 in., without a knot or flaw. The materials of which the structure is composed are as follows: 1,703,000 feet of lumber, exclusive of shingles, which were 1,398,000 in number; 190,000 bricks for foundation; 4,000 lbs. of iron bolts; 306 kegs of spikes and nails. The building contains 6,287,000 cubic feet, covering abont 4¼ acres of ground. The hight of the great exhibition building, from the floor to the arched ceiling, is about 90 feet. The first floor does not cover the whole area of the building, a wide space on the east side being appropriated to the display of horticulture.

The exhibition rooms of the npper floor or galleries extend the full length of the building; the west side being reserved for the art gallery. A promenade 16 feet wide extends around the front portion of the gallery, by which the entire circuit of the building can be made. Thia ia kept exclusively for promenading, and offers the most favorable point for forming a general conception of the size of the building and of the grand display on the main floor below.

Visitors to the Pavilion for the first time are naturally amazed at its immense size. The building is 545 feet in length by 200 in width. To the average mind, the simple statement that when two people separate in the Pavilion they have as much chance of meeting again as if in the streets of a strange town, will convey a better conception than the figures. The arrangement is admirable. A regiment of troops could easily march and counter-march on the open area of either of the galleries.



MECHANICS' FAIR PAVILION—1874.

The Great Industrial Exhibition.

The fair is now nearly under full headway. If the mechanical exhibitors here had exhibited a little of the promptness of the mechanic who constructed the pavilion, it would have been much better for the exhibition. He astonished the natives by coming in one week ahead of time; whereas, many of the exhibitors created some little astonishment by not coming in until a week's time of the exhibition had passed. But, thanks to the merits of the articles already offered, and to an enthusiastic but patient public, the fair is already in the full tide of success.

It could not be otherwise; for there is a spirit prevailing here that will ensure success. Those who are slightly cynical declare that a large portion of the visitors to the fair go there to see and be seen. Our readers have probably heard this accusation before, as applied to church-going and other commendable habits. It is one of the bores of this life; and probably in the life to come the sour cynic will inflict upon us his stereotype joke, declaring that people go to heaven "just to see and be seen."

But we claim that aside from the beautiful and meritorious articles that are declared to be on exhibition at the great pavilion, the thousands of visitors who throng its spacious floors daily and eveningly, are of themselves a sight well worth going to see. We have given in a former number of the PRESS a deacription of the interior of the pavilion as it came from the hands of the contractor. Now we have in the center of the first floor a basin of about 40 feet diameter, filled nearly to the level of the floor with bright, clear water. In the center of this is a cluster of rocks, and from theae rocks a fountain throws a jet of water to the hight of 90 feet—nearly up to the beams of the great arch. In the watera of the basin are a pair of sea lions, who are probably there just to see and be seen. The whole is surrounded by an ornamental railing, outside of which a sufficient number of chaira are placed to seat the three or four hundred people who are continually attracted thither. In all other parts of the well lighted building thouaands of visitora are examining articles on exhibition, gaily promenading, or taking a momentary rest in the chairs that are provided in different parts of the building. Then we have the muaic of the orchestra to enliven thia brilliant acene; and taking all these incidental attractiona, aa we said, aaide from the exhibition proper, we have a display which is well worth a visit from any one.

Those who are desirous of aeeing to the best advantage the most interesting classea of California productions; its beautiful women, its good looking and well deported men, its promising children and tbe free and pleasing manners and general good nature which characterize its people, will find an exhibit of theae articles here fully up to the standard of the industrial featurea of the fair. We have visited the fair on several occasions—on one of which the attendauce was estimated at 10,000 persons; and we have not seen au instance of ill-manuers, of offensive snobbishness, or of uncomfortable crowding. The only noticeable aubject of complaint is just a little of "the insolence of office" on the part of subordinate officers of the fair. This will undoubtedly wear off as they become more accustomed to the exercise of authority. One of onr city contemporaries very properly advises the managers to take down the notices, "beware of pickpockets," which are hung around in various places in the Pavilion. We would suggest an improvement on this; they should endeavor to take from the demeanor of their subordinates the air whicb implies that these vigilant officers consider the generality of the male visitors aa hoodlums, and look upon most of the ladies present as social evils. This is to be expected from the outside police; it is a great perquisite to their office; but really the remedy for these ills is getting to be about as bad as the disease.

In regard to the music, we confess that we approach the subject with fear and trembling; not being musically educated. Still the uninitiated in the musical art know what they like, and probably enjoy it when it is condescendingly given them, quite as exquisitely as do the favored few. Now, the great mass of visitors at the fair, who may justly be considered outside barbarians in regard to the world of written music, are williug to admit that the members of the orchestra there are masters of their art; but they would like to have the orchestrat while it is filling its bill of painfully difficul, pieces, just intersperse a little music. Visitors hoped that wheu tbe orchestra stand was lowered last week its occupants would lower their style of music accordingly; but they were doomed to disappointment.

By a special agreement between the orchestra and the fountain, when the former begins to play the latter at once ceases playing. At the premonitory beat of the drum, tbe fountain "hides its diminished head;" and at the close of the severe labors of the musicians in going through the intricacies of some difficult piece, tbe fountain breaks forth with a leap of ninety feet in hight; the water gladdening the musical as well as other sensea of the visitors, before it falls back among the rocks from whence it springs.

We bave spoken of the Expoaition thus far aa a whole, merely. Visitora generally view it in this ligbt; and as we wish to let our distant reader know what sort of a place we are taking them to when we deacribe the articles exhibited, we have deferred our special descriptions until our next issue.

Give the Seedsman His Due.

There are, no doubt, tricks in the seedsman's trade, as well aa in most others; and the public tribunal has already recognized two parties in this quarrel about bad seed; namely, the seed-seller and the seed-sower. But there is a third party, who is probably more culpable than either of the two mentioned above; we allude to the seed-grower.

It is the fashion to glorify the producer of anything; and to vilify all who stand between the producer and the consumer. This has given rise to some silly and reprehensible agricultural journalism. This portion of the press, generally, in its extreme eagerness to display its devotedness to the interests of the farmer, has been ready at all times to raise the cry, "Stop thief" whenever the seedsman comes before the public. They do not consider that the seedsman does not produce the seed; and that he is entirely at the mercy of the producer. Probably there is no merchantable article in which the buyer is more at the mercy of the seller than field and garden seeds. Viewing the subject strictly in a bnsiness light, we are hardly justified in aupposing that the seedsman would knowingly purchase bad seed, at any discount. If his pnrchasers did not detect the fraud his competitors would soon do so, and expose him at once. He is, however, exposed to some temptation from another quarter: tbe temptation to sell seed tbat has been injured by keeping. No seed improves by age. Some kinds, it is true, will keep for a long term of years without injury; others are only partially injured by age; while some classes of seeds are not reliable after being kept one season. Here the seedsman is often in fault, by a very natural unwillingness to sacrifice bis unsold stock.

Grass seeds come in for a good share of the anathemas that are hurled at the seedsman; and in this particular class the producer is more often to blame than in any other. Greediness prompts him to endeavor to secure a crop of hay and hayseed, at one harvest. But this cannot be done. The seed is not ready to harvest until the stalk is rendered unfit for hay; and the grower's eagerness to utilize the stalk and leaf lead him often to cut the grass before the seed has fully matured. This, with the temptation to palm off cheap varieties of seeds, leads tbe seed-grower to commit some sins that are unjustly charged to the seller. Besides, the seed-grower is liable to err in managing his crops of seed, and is not exempt from failure, caused by unfavorable seasons. It is desirable to have all seed mature as early in tbe season as possible; and it is often injured by a late spring or early autumn.

Much of the deterioration of garden seeds is owing to the fact that people use the first of the season'a producta, when the growth is vigorous, for marketing, or for their own tables in amatenr gardening, and reserve for seed that portion which maturea too late. A portion of the first growth ahould be appropriated to the next season's seed.

The farmer and gardener should keep an eye on the aeed-aeller, and compel him to look out for the seed-grower; for the latter is really the seedsman proper. Hia is trnly a responsible position. Thia bas not been properly recognized aa a legitimate businesa. If seed-growing were thoroughly understood, and practically and honeatly managed, there would be but little occasion for farmers and gardenera saving seed from their own crops; for where seed is the only object which the producer bas in view, we may reaaonably expect a better article than where the saving of seed is only counted among the incidentals of the aeason's cares and labors.

The Army Worm.—We sball never cease to admire the Yankee trick which was played on the army worms that attacked all parta of 1,200 acres of beets at the Sacramento Sugarie. The committee of 2,500 turkeya to whom the matter was referred, executed tbe commission so faithfully that no worm waa left to tell the tale of extermination. And now the Sacramento company's turkeys are enrolled aa bonorary members of the society for utilizing waste products. It has taught the world that even the pest of army worma may, by wise chemistry, be turned to profit. The beet crop waa saved and the turkeys fattened into a profit of 30 per cent.

Death to the Scale Bug.—Orchardists in this State and all other countriea having orange trees, will rejoice to hear that a remedy has lately been discovered to relieve them of that terrible pest, which, from repeated and protracted experimenta by a nnmber of the most prominent ranchmen in the vicinity of Loa Angelea, is pronounced an assured aucceas. The inatrument used to cause such a desired result is the Portable Babcock Fire Extinguisher, in which are put certain chemicals, in addition to thoae that accompany tbe machine.

The Louisville *Courier-Journal*, Ang. 17th, pubiished reports from correspondents from fifty counties of the State, representing 75 per cent. of the tobacco crop of the wbole State, which indicates an unparalleled failure of the crop. From aggregate estimates of the crop, it it ia deduced that under the most favorable weather the condition of the crops of 1874 will only be one-third of the annual average yield.

Splendid Hops.—We have just examined a aample of hopa grown by Isaac & C. T. Bird, of San Jose, and forwarded by them to W. H. Murray, of this city. We have frequented the hop yards of Wisconsin and Central New York in their palmiest days, but have never seen anything that will compare with these. They are ahead of even the celebrated "Palmer hop." which originated in Waterville, New York, and fully one-third larger than tbe average eastern hop. The hops are on the vines, the package weighing about 75 pounds, which has every appearance of being an average sample of the yard, and the vines have a remarkable clean and healthy appearance. Mr. Murray obtained these hops for the purpose of exhibiting them among "the products of California," at his stand in the Pavilion of the Mechanics' Institute.

Every variety of California fruit can now be found in tbe Austin, Nevada, market.

Berks County, Pa., Fair. — We have received the premium list of the twentieth annual exbibition of the Berks county Agricultural and Horticultural Society, to be held at Reading, Pa., September 8th, 9th, 10th and 11th, 1874.

Casks by Machinery.—We learn from M. Fulda & Sons, of the California Wine Cooperage Company, that they will soon have a new factory at work on Spear street, turning out stock for a large amount of work this season.

Sperry & Co., proprietora of the City mills, Stockton, shipped 10 tons of flour last Saturday to Boston by rail.

Miscellaneous.

A Laboratory Experiment, and What Came of it.

Sir Humphrey Davy, profiting by the results of Lavoisier's experiments, investigsted the nature of flame, and communicated the results of his study to a large audience gathered to hear him. Among other things he demonstrated that it was possible to produce a flame which, at a very high temperature, contained either free oxygen or unburnt carbon; that a large grate, with a limited supply of fuel, would generate the former, while a small grate, abundantly supplied with fuel, would give a flame devoid of oxygen, but in which combustible substances might be melted without fear of consuming them. Probably many of his hearers thought that while this discovery was very interesting, it was of small practical importance, and not worth the trouble of finding it out—not so all of them. In the audience was a young man named Cort, for whom these remarks had an especial interest. Up to that time the conversion of cast iron into malleable iron was effected by melting the pig metal with charcoal, and exposing it to a blast of air. By this process only small quantities were produced at a time, and the iron thus made was costly, even in the days of cheap charcoal. It was impossible to obtain the same results by the use of mineral coal, as the sulphur it contained would render the iron unfit for use. So the problem of cheap and abundant wrought iron remained unsolved until Cort, from the facts presented by Davy in his lecture, caught the idea of decarbonizing pig iron by allowing the flame to ply upon it without bringing the metal into contact with the coal. Profiting by the idea he devised the puddling furnace.

This invention gave us iron at a price which rendered possible its use in large quantities as a material of construction, and as a consequence we have railroads spanning continents, and radiating in vast and complex systems from the centers of trade. Where would be our modern systems of rapid and cheap transportation if we had not the rails? Where the rails if we had not the puddling furnace? Where the puddling furnace if we had no knowledge of the nature and properties of flame? Whence that knowledge had the element oxygen remained unknown? Thus we trace back through the principal events which mark the stages of its development; one line of progress beginning with Dr. Priestly's experiment with a handful of red oxide of mercury, and ending in the greatest triumphs of engineering, which were alone rendered possible by our knowledge of how to produce iron in any quantity needed at a cost which has enabled us within thirty years to build and equip 70,000 miles of railroad. With these facts in mind we can appreciate the justice of the gentle protest entered by the great Tyndall at the close of his series of lectures in this city, against the so-called practical spirit of the age, which meets the scientific investigator at every step with the question, Of what benefit are your discoveries? The question cannot be answered, for the benefits of every discovery are incalculable. Instead of thus discouraging scientific progress, let us rather encourage it by every means in our power, and honor those who discover nature's hidden secrets for the good which, though we cannot estimate it in advance, must certainly result to mankind from any contribution to the sum of human knowledge, however small and unimportant it may seem.—*Iron Age.*

Blue Sky and White Clouds.—The ethereal blue color of the sky is due to minute particles of matter which float in the air. Were these particles removed, the appearance of the sky would be dead black. It is a fact in optics that exceedingly fine portions of matter disperse or scatter the blue rays of light, coarser portions scatter red rays, still coarser portions scatter all the rays, making white light. The atmosphere is full of aqueous vapor, the particles of which diffuse white light in all directions. When these particles are enlarged, they become visible in the form of clouds. The vapor particles of the white clouds are supposed to be finer and lighter than those of the dark clouds. That the diffusion of light in our atmosphere, the blue coloring of the sky and the colors of the clouds, are due to the presence of matter floating in the air, has been conclusively proven by Tyndall. On passing a beam of sunlight through a glass tube, the beam is rendered brilliantly visible by the reflection of light from the dust particles floating in the air contained in the tube. But on removing the dust particles, which is done by filtering the air by cotton wool, or causing the air to pass over a flame, the beam of light is no longer visible in the tube.—*Ex.*

When tinued sheet-iron—technically termed tin plate—is washed over with a mixture of three parts of hydrochloric acid and one part of nitric acid, diluted with three parts of water, and then cleansed with pure water, there will be observed a peculiar somewhat mother-of-pearl-like appearance, due to the crystalline particles of tin, produced by the rapid cooling reflecting the light unequally.

It is estimated that the projected tunnel beneath the English channel could be driven and completely fitted up in five or six years, and at a cost of from $40,000,000 to $50,000,000.

Origin of the Diamond.

An ingenious theory is thus put forth by the *Scientific American:* A constant product of volcanic action, we know to be carbonic acid gas, which contains the basis of the diamond combined with oxygen—a gas capable of being liquefied by the pressure of a column of water less than fourteen hundred feet high, and the ancient South African Sea was several times that depth. We know that this same gas is frequently imprisoned in the soft mud of stagnant pools, where it lies unabsorbed, escaping as bubbles when the mud is disturbed. Is it not reasonable to assume that the less energetic discharge of this gas from the heated depths below the sea beds might be stopped in the muddy filling of the vents, where, liquefied by the pressure of the superincumbent water, it might remain until deprived of its oxygen by some process of Nature's chemistry, leaving the free carbon to crystallize as the sparkling gem so eagerly sought for by the miner?

This, of course, is a mere hypothesis, for we know of no process by which the oxygen could be so withdrawn; but in every other respect the supposition is based on known conditions, and there is apparently no other way in which the raw material of the diamond could be so readily distributed in crystallizable condition throughout these natural diamond factories. The matrix in which the diamonds are found is unquestionably of aqueous origin; and we know, from the vegetables and other substances found enclosed by diamonds, that they could have been formed only in the presence of water. The two seem, therefore, to be comtemporaneous.

It is a well known fact also that diamonds sometimes contain cavities enclosing a transparent liquid. We have seen it stated, but are not sure of the authority, that diamonds of this sort have been broken and their contents found to be carbonic acid; a fact which, if true, would add materially to this new theory of their formation.

A New Calculating Machine.

A short time ago (says a contemporary) we saw in the Reliance Machine Works, Philadelphia, a wonderful little mathematical machine, which was being manufactured in that establishment. There is nothing remarkable in the appearance of the machine, but there is in the result it achieves. It will add, subtract, multiply, divide, and, in fact, perform almost any arithmetical operation with perfect accuracy and perfect ease of management. It might be made of special service to politicians in office, for it understands "addition, division, and silence." As an example of rapid computation, recently before the Franklin Institute, the inventor, Mr. F. S. Baldwin, set up a multiplicand, consisting of eight places of figures and a multiplier, also composed of eight places, and performed the multiplication in a minute and a-half. The operator has simply to turn a crank. For instance, suppose the unit figure in the multiplier to be eight, the operator turns the crank eight times, then moves the multiplying gear one place to the left. The partial product is shown complete at each turn. The machine also proves its work by reversing the operation and turning the crank backwards until the starting point is reached. If correct, the product will then show a row of noughts. The machine has been used by a prominent railroad company for several weeks, and in a number of long computations has not made a single mistake, but has detected several mistakes in their prepared arithmetical tables.

Fire-proof Construction.—It must be strongly asserted, that, before a building can be fireproof, it should be best-proof, and that no building with any exposed metal forming an essential part of its construction can be so designated truthfully. Wherever iron is used, it should be protected either by good brick-work, sound plastering, or, if nothing better can be found for the purpose, solid wood-work round it. Wood-work, if really sound and solid, will resist for almost any length of time every possible effect of heat short of actual flame; even when flame has reached it, it is by no means destroyed at once, but, on the contrary, is sometimes found to last for hours; and wood protected on its under side by proper plastering, which will not fall down or crack on the application of heat, seems to be a powerful resister of flame. It is probably to the scamping now so common that we owe the diminishing use of timber as a material for the construction of buildings designed to carry heavy loads. Let this scamping only cease, let everything be as it represents itself to be, and either wood or some other heat-proof substance will be found to occupy a much more prominent part in the construction of our buildings than it does or ought to do at present.—*Builder.*

Hay Cutters.—A Missourian has patented an invention which consists in improving hay and straw cutters by the application thereto of a grinding plate that takes up the wear on the knife as fast as it occurs, a peculiar support for the cutter blade, and also novel means for operating the feed roll. These are said to cause the machine to operate with less labor and to cut the hay or straw more uniformly than is usual.

It is proposed to tunnel Mont St. Bernard. The whole work will cost about $12,000,000; the tunnel alone, $3,400,000.

Moulds for casting steel, having spring sides to allow for the expansion and contraction of the metal, have been introduced.

Salt in the Seas.

Many people imagine that the ocean water is naturally salt, and will be surprised to know that the salt comes from rocks, and is washed into the sea.

The sea depends on the disintegration of rocks on land for its saltness. It does not originate in oceans and seas. Rains wash it and hold it in solution as particles are liberated by violence, decomposition and gradual action of many natural forces. All streamlets and rivers, therefore, are constantly transporting salt to the sea. If there is more than can be held in solution, then it accumulates in masses at very deep points, which, in the revolution to which matter is subject, may again be a stratum of salt somewhere remote from where the mass was found. Thus the salt mines of Portland, and the vast horizontal beds of pure salt in Texas, as well as that mountain of rock salt in St. Domingo, were collected at the bottom of ancient seas, which are now dry land, remote from water.

There are places in Africa where the process of disintegration of salt from rock is regularly going on, but there is not water-power enough to force it onward to the sea. Hence the particles are spread abroad and mixed with the soil. The negroes of Northern Africa having discovered its distribution where there is no water to dissolve in the ground, leach it. In that way they separate the salt. By evaporating the water holding it in solution, an excellent article for domestic purposes is produced. Salt pervades the earth. It exists in the grasses and most vegetable products on which animals feed. In that way they derive enough in most countries to meet the demands of their natures. They require as much as civilized humanity. With them salt is necessary, as with ourselves, for keeping the organs of vision in good condition. Stop the supply, and blindness would ensue.—*Ex.*

Mud Spots on Varnish.—On this subject the *Carriage Monthly* remarks: High grade finishing varnishes, whether of English or American makes, possess their wearing qualities from the simple fact that they retain their elasticity or oily principle to a great length of time. The surface hardens sufficiently to resist dust and to admit of being washed, but the body of the varnish remains soft and sensitive, and mud allowed to dry on the surface of the varnish both stains it and extracts by capillary attraction the oil contained in the varnish. Each spot of mud, according to its size and shape, acts on the varnish immediately under it, but no further; from the fact that a suction is created by the evaporation of the moisture contained in the mud. Different kinds of soil act with more or less injurious effects. Sandy soil would have but a slight effect on a varnish which would be badly stained by more adhesive clayey soil, and the filth of a large city would be still more fatal to the gloss of the varnish.

Protecting Composition.—In answer to a correspondent, who asks how to make a composition for coloring and preserving gates, roofs and timber generally from the weather, the editor of the *American Builder* says: Melt 12 ounces of rosin in an iron pot or kettle; add three gallons of train oil and three or four rolls of brimstone; when they are melted and become thin, add as much Spanish brown (or red or yellow ochre, or any other color you like, ground, as usual, with oil) as will give the whole the shade wanted. Then lay it on with a brush, as hot and as thin as you can. Some days after the first coat is dried, lay on a second.

An Amusing Chemical Experiment.—Place five glasses in a row, then pour into the first a solution of potassium, the second a solution of corrosive sublimate, the third a small quantity of iodide of potassium and some oxalate of ammonium, the fourth a solution of chloride of calcium, and the fifth some sulphide of ammonium. Now pour parts of the contents of the first glass to the second, and a scarlet color will be obtained; next pour the second into the third, and the mixture will be colorless; again, pour the third into the fourth, and the contents will be white; finally, pour the fourth into the fifth, and the mass will be a dense black. Then you will have had two glasses of colorless, one scarlet, one white and one black.—*Ex.*

Desilverino.—It is sometimes useful to know how to dissolve silver without attacking copper, brass, or German silver, so as to remove the silver from silvered objects, plated ware, etc. A liquid for the purpose is simply a mixture of one part of nitric acid with six parts of sulphuric, heated in a water-bath to 106 deg. F., at which temperature it operates best. By this means the old silver attached to plated ware, old daguerreotype plates, etc., may be removed and saved without any necessity for wasting acids in dissolving a large amount of useless metals.—*Scientific Chem.*

Substitute for Ground Glass.—To half an ounce of white, hard varnish add two ounces of methylated spirit. Shake well up, and allow it to settle for an hour or two. Clean very carefully the plate of glass, and coat with the varnish. When dry, a semi-opaque film of exquisite fineness will be left on the glass, which answers well.—*Artisan.*

The man who has thoroughly mastered a scientific principle holds a key which opens many locks.—*Tyndall.*

Learn to Forge Your Own Tools.

The following sensible advice is from the Newark *Manufacturer:* Many mechanics have an idea that after they have mastered the more legitimate duties of the workshop they have learned all that is necessary, and can undertake anything in their line of business. Machinists particularly are prone to this error—a common one, by the way—and think that a knowledge of fitting and turning, once acquired, makes up for all other deficiencies. In reality, the self-styled finished mechanic is, paradoxically, the unfinished one; for he who acknowledges his shortcomings, and tries to correct them by obtaining all the information he can, will acquire a more thorough knowledge of his profession. Comparatively few machinists are competent to dress their own tools, or, indeed, handle the blacksmith's hammer on any work. How many times such knowledge would have been invaluable, we leave individuals to decide from their own experience. A simple weld, which they were unable to make, a faculty for dressing chisels without putting their own eyes in danger by striking the anvil instead of the tool, would assuredly have stood persons, ignorant of such details, in good service in time of need. Apprentices who go to the tool dresser to have the edges of their chisels or other instruments renewed, will do well to observe the process and inform themselves of it, instead of throwing coal at the helpers, or otherwise conducting themselves in an unruly manner. Observation and experience are twins, and no youth, or, indeed, any adult can hope to attain eminence or proficiency without paying some attention to the matters herein alluded to.

Cleaning Kid Gloves.—During the warm weather, kid gloves are easily soiled, particularly as the prevailing colors are quite light; and as it costs time and money to have them cleaned at the dyer's, we let our readers into the secret of cleaning them at home, which can be done just as well as if paid for outside. Take a little sweet milk and a piece of white or brown soap. Fold a clean towel three or four times, spread it over your dress, and spread out the glove smoothly upon it. Take a large piece of white flannel, dip it into the milk, then rub it upon the soap, and rub the glove downwards toward the fingers, holding the wrist of it by the left hand. Continue this process until the glove, if white, looks a dingy yellow, but if colored, looks dark and entirely spoiled. Now let it dry, and then put it on your hand, and it will be soft, smooth, glossy, and clean. Take care, however, to omit no part of the glove in rubbing it, and see that all the soiled parts are thoroughly cleaned. This process applies only to white or colored kid gloves. For black gloves that are soiled, turned white, and otherwise injured, take a teaspoonful of salad oil, drop a few drops of ink into it, and rub it all over the glove with the tip of a feather, then let them dry in the sun. White kid boots and slippers can also be cleaned by the first process to look "as good as new," and black kid boots and slippers can be restored to their pristine gloss by the latter method.—*Ex.*

Indestructible Paint.—One of the conditions most to be desired, and chiefly aimed at in the production of matter in certain forms, is indestructibility, and any material, either for constructive or decorative purposes, fulfilling this condition must inevitably meet with favor. In the natural order of things it would take a very long time—eternity, in fact—to prove the presence of this quality in any substance claiming to possess it. The application of tests, however, with a limited term of use may enable a fair conclusion to be arrived at, thus dispensing to some extent with the element time.

Cement for Attaching Labels to Metals.—Take 10 parts tragacanth mucilage, 10 parts honey and one part flour. The flour appears to hasten the drying and renders it less susceptible to damp. Another cement that will resist the damp still better, but will not adhere, if the surface is greasy, is made by boiling together two parts of shellac, one part borax and 16 parts water. Flour paste, to which a certain proportion of sulphuric acid has been added, makes a lasting cement, but the acid often acts upon the metals.

Rose colored Stain for Wood.—Monnier recommends steeping the wood for several hours in a bath of 1,200 grains iodide of potassium to the quart of water, and then immersing it in a bath of 375 grains of corrosive sublimate, when it will assume a beautiful rose-red color by chemical precipitation. It should subsequently be covered with a glossy varnish. The baths will not need renewal for a long time.

Babbitt Metal consists of 24 to 96 parts of Banca tin, eight of antimony and four of copper. This alloy of 24 parts of tin, eight of antimony and four of copper is called hardening; for lining the boxes 72 parts more tin is added, or simpler, one part of the hardening alloy melted with two parts of Banca tin.

Dim writing, nearly effaced by age, may be restored by the application of a solution of prussiate of potash of water. Wash the parts with a hair pencil, and the writing will appear if the paper has not been destroyed.

Blacking brass is simply done by plunging the brass object for a very short time into nitric acid, and then into the fire, when the acid evaporates and leaves the dead black, well adhering film of oxide of copper behind.

An Interesting Exhibit.

One of the most interesting and unique novelties in the Pavilion, is the representation on glass, of the New Almaden quicksilver mine. It is not only an exquisite work of art, but it constitutes the most palpable, truthful and comprehensive work of representing the underground workings of a mine which has ever been devised. No description can do it justice; it must be seen to be appreciated. The whole mine—its topography, with the trees, buildings, etc., thereupon, and all the shafts, tunnel's, drifts and ore-bodies below the surface are distinctly shown in a model of about twenty-six inches square surface by ten inches deep, just as it would appear to a clairvoyant who might possess the power, while standing upon the lower portion of the surface of the mine, to look directly through the earth and rock, and view collectively the entire underground work.

The model stands upon a pivot and may be turned so as to view more closely from any given point any particular portion or section of the mine. The direction and inclination or depth of the various tunnels, shafts, etc., are most distinctly and accurately shown. The ore-bodies, as they existed before being worked out, are distinctly shown in red color (the color of cinnabar), by which they are readily distinguished from the misty or light slate color of the country rock, and the blackness in which the dead openings have been made in various directions to reach the ore.

It is well known to quicksilver miners, and indeed to all who are thoroughly read up on this speciality of mining, that cinnabar ore never occurs in regular veins or lodes, like silver or gold; but is found in detached bodies or deposits. This fact is made strikingly apparent by the merest glance at the model on exhibition. Yet by gradually turning the same or passing around and viewing it from different directions, it will be seen that the main bulk of the ore-bodies bears a most striking general conformity to the abrasion of the surface.

This fact may afford some important hints for prospecting elsewhere among the quicksilver deposits which are now being so largely sought for in various portions of the State. This model thus represents the most perfect means for a careful study of the mine, and shows in a most striking manner the greater amount of uncertainty met with in mining for quicksilver over the search for precious metals, which are almost always found in more or less continuous veins. We believe this is the first attempt of this mode of mine delineation and will, no doubt, be generally introduced at mining schools for purposes of instruction, as well as for record and aid in practical mining explorations—a copy therefrom should form one of the first requisites for our School of Mines at the State University, or should be supplemented by similar representatives of three or four of our principal gold and silver mines. Much credit is due to the artist, Mr. Charles T. Healey, C. E., by whose painstaking skill this beautiful exhibit has been prepared and placed on exhibition for the general benefit of the public.

In order to enable the reader, who has not or cannot examine it in person, we will say that the model consists of twenty-six plates of glass about 26 inches long by 11 inches in width, set edgeways in a frame and one inch apart. Each inch representing one hundred feet, whether in hight, depth or length. To prepare the model the surface ground of the mine is first surveyed off for the topography by running lines 100 feet apart north and south, east and west. Similar and corresponding surveys are next made throughout all the underground workings. There are twenty-six plates of glass upon each of which one of the surface lines is drawn; whatever points in the underground workings these lines would cut if they were projected so as to form a sectional plane to the lowest explored depths are then depicted upon the glass in their proper position. When each plate of glass, thus, prepared is placed in its proper position in the frame, the observer is enabled to view from the ontside where each of the lines would cross, and of course the excavation between the points of crossing can all be shown as upon an ordinary map as sectional drawings. The whole thus placed together, the glass being transparent, enables the observer to view, as with a clairvoyant's eye, every exposed portion of the mine through a cubical space of about 2,600 feet in depth, from the highest point, which is as low as excavations have been made.

SMALLEST LOCOMOTIVE.—In an English journal, some three years ago, was an illustration of the "wee" locomotive "Topsy." It has 1⅜-in. cylinders and 1⅞-in. stroke, the coupled wheels being 4 in. in diameter. The weight of the engine, empty, is 54 lbs., or, say half a hundred weight. In steam the weight is 60 lbs. The "Topsy" draws a lode of eight little trucks up the line (which has an average inclination of 1 in 16, with a maximum gradient of 1 in 11, and there is one curve of 9 ft. radius), and in all respects conducts itself with the propriety of engines of larger growth. Discussion as to the comparative size of locomotives, big and little, brings this little giant again into notice.

The Fair as an Educator and Elevator.

One of the most important and suggestiv paragraphs in the excellent opening speech, pronounced on Tuesday by Col. Barnes, was his reference to the present social and political status of the farmer and mechanic—so changed from what it has been in years gone by. In alluding to the fact of the present great uprising among the industrial classes throughout the country, he remarked that, "the coming years will see destroyed whatever they deem hostile to their material interest and established by their consenting judgment, whatever may seem for their advancement. That state will be the wisest, safest, and happiest which gives to them such knowledge of the real principles of economic and mechanical science as shall guide, if it cannot control, their policy and direct their aims, and, while enabling them to sweep away their disabilities and wrongs, shall not suffer them to march under those early inspirations of uneducated liberty to an uncertain and ruinous goal." One of the most effectual means of thus controlling this newly developed element, and directing into healthy and legitimate channels the growing power of the industrial classes, is just such exhibitions as that which has now been inaugurated in this city. From the commencement of the industrial exhibition epoch the profound significance and value of such exhibitions have come to be more and more realized by both peoples and governments everywhere. Their beneficent influences are many and wide-spread; they advance human knowledge in every direction, and more than anything else serve to bring together, in friendly counsel and social converse, the heretofore too much antagonised elements of capital and labor. Through the universal language of the products of labor, the artisans of various sections hold communication, not only with each other, but as well, also, with that class of the community which more especially represents the moneyed interests, the relations between which and labor constitute the great and vital problem of the day. By the friendly greetings and words interchanged on the common platform of the exhibition room, ancient prejudices are broken down; unfriendly class elements are fraternized; generous rivalries in the peaceful field of industry are excited, and a better understanding is fostered between labor and capital.

It is gratifying to note the increased interest which all portions of the community are taking in these exhibitions, planned more especially in the interests of the mass of the people. They cannot be otherwise than largely promotive of both the material and moral welfare of the community, while they serve to give a more just appreciation of the true dignity of labor, and its paramount claims on the consideration of all as the sole basis of national wealth and power.

It is largely to the influence of these exhibitions, which have become so popular in this city, that our people have been educated up to so fully see the need of a great industrial school of art in our midst, and the gratification of which laudable wish has recently been so fully placed within our reach by the timely and munificent bequest of our distinguished fellow citizen, James Lick. Let us hope, with the orator of Tuesday, that the foundation thus laid will be builded on and strengthened until it shall give to our own State, at least, a race of skillful, theoretical and practical mechanics, whose labors shall bring honor and profit to the land of their birth.

THE DEEPEST WELL IN THE WORLD.—At about 20 miles from Berlin is situated the village of Sperenberg, noted for the deepest well that has ever been sunk. Owing to the presence of gypsum in the locality, which is at a moderate distance from the capital, it occurred to the government authorities of the mines to obtain a supply of rock salt. With this end in view the sinking of a shaft or well 16 feet in diameter was commenced some five years ago, and at a depth of 280 feet the salt was reached. The boring was continued to the further depth of 960 feet, the diameter of the bore being reduced to about 13 inches. The operations were subsequently prosecuted by the aid of steam until a depth of 4,194 feet was attained. At this point the boring was discontinued, the borer being still in the salt deposits, which thus exhibit the enormous thickness of 2,907 feet.

THE survey of a narrow-gauge railroad route from Nevada city to Colfax has been completed, and the report of the engineer submitted. He makes the distance between the two points 22 and three-tenths miles. The cost of construction is estimated at $411,132.56. A resolution has been passed by the Board of Directors not to commence the work until $300,000 of the capital stock has been taken, and in the event that it is not all taken within a few weeks, the charter be thrown up. Only $70,000 remains to be taken to complete this amount.—*El Dorado Republican.*

Woodward has discontinued the late cars on the Mission street line. Quarter past twelve is the last.

Fifty tons of fruit—five car loads—were forwarded eastward from Sacramento on Wednesday.

Take the Boys Around.

Parents should not neglect the opportunity which a Fair like the present affords of pleasantly interesting children in mechanical contrivances. A multitude of machines are here shown in operation, with the advantage of being removed from all that, in their usual working, makes them disagreeable to visit. The grime of the factory is left behind, while the machine puts its best foot foremost, and has the virtue of working quite as faithfully on its holiday as at any other time.

It is very easy to get boys into an inquiring frame of mind, by sauntering with them among the objects on exhibition, and exhibitors are, of course, only too glad to answer questions. The deplorable ignorance of the simplest mechanical laws by the disclosed queries of otherwise well educated men, shows how grossly this important branch of knowledge is generally neglected. California is destined to be among the manufacturing States, and the value that a knowledge of machinery will be to an ambitious young man, cannot be easily exaggerated. We hope, therefore, that fathers, even at the loss of leisure and inclination, will devote an occasional hour or two, showing the youngsters around among the machines. It may awaken an interest that will add much to the pleasure and profit of the lives of their sons.

ASCENT OF MOUNT SHASTA—REMARKABLE FEAT.—A party of tourists who lately ascended Mount Shasta performed a feat which has not often, if, indeed, ever been before accomplished. They made the trip from the camping-ground to the highest summit of the mountain, came back to the camping-ground, and went from thence down to Sisson's house, all in one day. The amount of climbing and fatigue involved in such a trip can only be appreciated by those who have ascended Shasta. The most remarkable feature of the matter was that four of the party were ladies, viz: Mrs. Churchill, of Yreka, Mrs. Cushing of Oakland, Miss Ellen Newhold, of this city, and Mrs. Sisson, wife of J. H. Sisson, the Shasta guide, and keeper of the house on the stage-road at the foot of the mountain. An unusually large number of tourists have made the trip to and ascended Mount Shasta this year. The view from the mountain is unsurpassed, and the region around it is one of the most thickly wooded, attractive, and beautiful in California. It is full of game and the rivers (the Upper Sacramento, the Pit and McCloud) are full of fish.

REPRESENTATIVE.—Taken as a whole the present Fair is a showing of the latent skill, industry and taste of the State with which she has every reason to be gratified. The design of making it thoroughly representative of California industry is being well carried out. Those who have watched the successive exhibitions of a similar character in this city, remark the great superiority of the present Fair and all its predecessors in the matter of prominence of home over foreign industry. This feature is one that has grown steadily since the first exhibition, and gives the best possible evidence of the progress the State is making in industrial pursuits. The degree of advancement reached, as evidenced by the exhibition, is exceedingly hopeful, and will certainly stimulate our people to still greater energy in their respective industries. This exhibition proves that in not a few branches we have fully caught up with many of the older communities of the Eastern States.

COAL.—Our coal burners are busily at work conveying this necessary article to the smelting works under the supervision of Mr. Prescott. We are glad to see the steady, business like manner with which this enterprise is being carried forward. There is no bombast—no extra assertions being made, but the work of getting ready for a run is being done silently and thoroughly. No doubt can exist that, when fairly ready, a start will be made resulting in the most complete and perfect success. This is of much more benefit to our people than dozens of columns of reports or newspaper articles, and assures us that what is being done will end a long suspense one way or the other, and will demonstrate, beyond a doubt, a fact we all desire to know, whether our ores are susceptible of treatment or not.—*White Pine News.*

ACCORDING to A. Fricke an emulsion of fat with water is obtained by shaking them together in a glass vessel whose sides are moistened with water slightl alkaline. Such an emulsion saponifies without heat, by mixing with an excess of caustic soda solution of 20° B. and stirring. On standing over night the soap collects as a cake on the top.

Two wine merchants from Bordeaux, France, have applied for space at the Centennial Exhibition. One has expressed an intention of exhibiting 50 different brands of Bordeaux wines. This is a good chance for California wine men to set up their bottles for comparison.

Real estate to the value of $340,000,000 in the cities of New York and Brooklyn alone is free from tax because it belongs to religious and charitable institutions.

Three models for the deep-water ship, to be built at Vallejo, have already been submitted to the ship-building company.

HELP FOR TOWN OR COUNTRY.

The long established and well-known Intelligence House of Crossett & Co. is now receiving numerous applications from the rural districts for supplying help of various kinds for Domestic, Farm, Mechenical work, etc., and are thus supplying a want that has long been felt in all parts of the interior of the State.

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22v6-1y President Board of Directors.

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Agricultural Notes.

California.

ALAMEDA COUNTY

Weather.—Livermore *Enterprise*, Aug. 22d: The weather has been very cold, windy and disagreeable for the last few days.

The Livermore flouring mill is overflowed with work.

Angora Goats.—There were shipped from this place on Monday last 393 fine Angora goats to San José.

Fine Sheep.—We were shown two large, full-blooded Merino bucks on Tuesday, by Mr. Peter Wilson, which he has just purchased from a gentleman at Niles'. Mr. Wilson paid $100 each, and intends placing them in his already large flock of Merinos. This gentleman has some of the finest blooded sheep to be found in the country.

From Sunol.—The Central Pacific Railroad Co. have reduced the price on grain shipments from here to San Francisco, from $1.80 to $1.30 per ton. At present our farmers seem to be storing their grain in anticipation of an advance in the market. Our warehouses are filling up very fast.

Haywood Notes.—The straw-burner of Mr. H. W. Rice has met with such favor that he has determined to build 15 more right away. The weather has been very unsettled and foggy for the past week. Grain is being stored in considerable quantities at present here. Farmers intend to watch the market pretty close.

AMADOR.

Weather.—*Dispatch*, Aug. 22: The weather remains unusually cool and pleasant for this season of the year.

Pear Syrup.—*Ledger*, Aug. 22: Mr. James Avis sent us a few days ago a sample of syrup made by him from pears, which to our taste is a very superior article. In flavor, it surpasses any of the syrups brought to this market, and in delicacy of taste is the equal of maple syrup. That sent us was made two years ago, but time does not seem to detract from its merits. Mr. Avis informed us he first ground up the pears in a cider mill, and then reduced the juice to syrup by boiling. From the real merits of the syrup for table use, persons having pears cannot do better than to reduce them to syrup.

A Watermelon, two feet nine inches long, is at the *Ledger* office.

BUTTE.

Grain.—*Record*, August 22d: The Parrott grant produced 33,000 sacks of wheat this season. It is the intention, we believe, of Mr. Parrott to ship his grain direct to Liverpool himself. Mayland Gray and Capt. Eddy have sold to the Sheridan mills 6,000 sacks of grain, it is said, at $1.40 per cental.

Warehouses.—Morse & Morse's new warehouse is filled, and they are building an addition. A. Bullard is receiving large quantities of grain at the Woodman warehouse. Rumor has it that a large warehouse will soon be erected here by the Grangers. Gen. Bidwell is erecting a new warehouse for the storage of grain. The building is to be 150x50 feet. The railroad track is to run to the end of it.

The Walsh grant, consisting of 19,000 acres, has been leased to John Fernell for a term of five years, for the sum of $38,000 per year, cash rental.

CALAVERAS.

The *Chronicle* has received some fine cucumbers, which average fully a foot in length, and several of them weigh ten pounds.

COLUSA.

Cotton.—*Sun*, Aug. 22: Andrew Rutland brought to town last Saturday some cotton, being from the first bale out in his field. He says his crop looks splendid and that he expects to gather at least a bale to the acre. If he does it will net him not less than $50 an acre. We know of quite a number of gentlemen who expect to plant another season.

Dull Times.—Times in Colusa present a dull appearance when compared with this time last year. This is mainly owing to the Grangers hanging on to their grain, but they are perfectly right in holding for high prices. It may be a little dull for the present, but after a while we will be compensated by an increased liveliness.

A fire occurred at Gus. Darge'a, on Butte creek, Colusa county, last week, destroying about 100 bushel of grain in stack. Cause of fire unknown.

CONTRA COSTA.

Harvest. — *Gazette*, Aug. 22: Though the larger portion of this year's grain crop has been threshed, yet considerable in all the western portion of the county is lying in the stack, and for the past week or more the dampness in the atmosphere has made threshing so difficult and wasteful, that the work has been suspended in many instances. Generally the wheat in this section has yielded better than was expected, though in some instances the turn-out has not equalled anticipations. Grain is coming forward rapidly for storage at the shipping warehouses, but very little has yet been sold in this section, or shipped as freight on producers' account

Big Threshers.—Three of the renters on the immense Gunn farm, in Colusa county, who farm several thousand acres each, have threshing machines of great capacity, which have been made expressly for them; and one of these machines turned off 5,528, and another 5,756 bushels in one day, last week, seven headers running to each machine, and one having a force of 78, the other 72 men. Some farmers of the vicinity, however, dispute the economy of the big machines, and claim they can thresh and separate 3,000 bushels a day with a common size machine fed from stacks, and a force of 16 to 18 men. Such reported work with a common separator, exceeds anything that is ever done in this section, so far as our knowledge goes; and, even with allowance for greater dampness of atmosphere here, from vicinity to the ocean, it is not altogether accountable that there should be such difference in the work of separators of the same class. 2,000 bushels being an unusual and extraordinary day's run for a separator here.

FRESNO.

Irrigation.—*Expositor*, August 22: Owing to the continuous legal warfare that is and has been going on between the various irrigating companies taking water from the north side of King's river, but little has been done toward perfecting the irrigating system in the eastern portion of Fresno county. While the system of irrigation in Fresno county is, to say the most, but in its infancy, we are convinced the day is not far distant when the face of the plains will be a network of canals. There is ample water in the various rivers of Fresno county to supply water to all the companies that are now engaged in canaling, and if they would bury their differences and devote their energies to a completion of our irrigating system, the results would be far more advantageous to all parties than the course which is now being pursued by some companies.

Sheep.—Manchester, the sheep man, arrived from Vermont with 130 head of choice Spanish Merino bucks last week.

HUMBOLDT.

Barley.—*Register*, Aug. 21: We were shown last week a specimen of mammoth barley, grown on Woods' ranch in Pleasant valley. He raised a ton of barley this year from 60 pounds of seed. If the average is anything like the sample shown us, mammoth is the proper name for it. Woods first obtained the seed of this barley from the craw of a wild goose about three years ago.

The farmers in Paradise valley are in the midst of their harvest. The crops are yielding much better than was anticipated.

Fruit.—Mr. Conard estimates his crops at 20 tons of peaches, 300 bushels of assorted apples, besides pears, plums, grapes, etc., in considerable quantities. He expects to clear this season $3,000 on his fruit crop alone.

MENDOCINO.

Fruit.—*Independent Dispatch*, Aug 22: Mr. N. E. Hoak, residing on his farm at the head of the Albion river, informs us that he will raise about 20 tons of fruit in his orchard this year, consisting of apples, pears, plums, peaches, quinces, crab-apples, and all other kinds of small fruit, including a large quantity of grapes—all in the woods, too. Our market is now abundantly supplied with the finest specimens of watermelons, muskmelons and cantelenps, at very moderate prices. Last week two or three wagons came up "from below," loaded with plums. After vainly trying to sell them at a remunerative price, they were offered at three cents per pound. From the fact that a large proportion of the residents of Ukiah valley now have an abundance of fruit for home use, it was difficult to dispose of them even at that low rate.

Hops.—The raising of hops has become an important item in agriculture in Ukiah valley, and we are informed by one of the leading hop raisers that the crop this year is at least 10 per cent. above an average in quality and quantity.

MONTEREY.

Grain.—*Democrat*, Aug. 22: A quantity of grain is going into Raymond's warehouse for storage. A telegram, dated Aug. 15th, reports a fire in the grain fields of Flint, Bixby & Co., which destroyed over $7,000 worth of wheat. The origin of the fire is a mystery, as the clippers were just leaving the field, having finished cutting. The supposition is that it originated from phosphorus. Renters are the principal losers.

NAPA.

Big Farming Enterprise.—*Register*, Aug. 22: A farming enterprise on a scale that lays in the shade most operations in that line, has just been entered into by our friend Mr. John Finnell, of Yountville, long resident and ex-Supervisor of this county. He has leased for a period of five years the celebrated Walsh ranch in Colusa county, 40 miles north of the town of Colusa, and 8 miles west of Chico, consisting of 20,000 acres, at a yearly rental of $40,000. In addition to this, he has purchased 1,900 head of stock cattle, 100 head of horses, 50 mules, 27,000 sacks of wheat, 1,500 hogs, and a quantity of hay and barley, etc., his purchase, aside from the rental, amounting to $74,250, or the transaction for the first year alone, $114,250. Walsh farm lies directly on the Sacramento river, having sixteen miles of river frontage, and two landings of its own. It would, if in a regular shape, make a body of land more than five by six miles in extent, and would take a couple of days, ordinary traveling, to ride over it for a tour of inspection.

The weather is very cold.

NEVADA.

Fine Vegetables.—*Transcript*, Aug. 22: Our market is supplied not only with choice varieties of fruit, but with the best kind of vegetables. The market to a great extent is supplied with vegetables raised in this vicinity. We noticed some potatoes which were being dug in a vegetable garden outside of town yesterday that were the finest we ever saw. They are large and as smooth as an apple. There is no reason why all we use should not be raised at home instead of bringing it from the valleys by teams. The vegetables raised here are of superior quality, and are as easily cultivated, and yield as bountifully as in any place in the valleys.

Sierra Valley.—Truckee *Republican*, Aug. 22: The having season has been good and the grass abundant. In places where the wild grass was winter killed the clover came in and grew luxuriantly. Vegetables of the hardier sort have done well and are plentiful, but oats and barley in places have suffered from frequent frosts. The wonderful yield of berries and seeds of the gardens in the valley, and those growing wild on the mountain sides, is very noticeable. Full blooming wild flowers of many varieties have ornamented large areas this season where only primordial leaves have appeared heretofore. One can scarcely believe without seeing that such sturdy, tough, short-limbed bushes as the manzanita are loaded to the ground with fruit. The service berry is quite as abundant as its relative in the Atlantic States, the whortleberry. The Sierra plum was never more abundant than this season, and they are gathered by the bushel. Exteusive "plumming" excursions are made by parties to gather these wild plums, which are considered a table delicacy, and for canning and preserving are considered superior to any of those which are cultivated.

Shipping Fruit.—Grass Valley *Union*, Aug. 22: C. R. Hill has made arrangements to ship fruit over the mountains this fall. If more of our orchardists were to do this there would be far less fruit lost by decay.

PLACER.

Farming.—*Herald*, Aug. 22: While Placer county boasts of her superior soil and climate for the production of all varieties of semi-tropical fruits, especially the grape, still there is loud complaining among our foot-hill farmers that they cannot make money. There are several reasons for this. The principal one of which is, that most of those on farms in these hills do not devote themselves exclusively to farming. Our soil and climate will produce nearly any kind of tree, vine or shrub that is known to horticulture. Whenever a farmer can be found in the foot-hills, who is industriously devoting his entire time and energies to the business, he is either making money, or getting in a fair way for it.

PLUMAS.

Paulin's Vineyard.—Cor. *National*, Aug. 22: This is one of the most extensive vineyards in the foot-hills, containing over 82,000 vines which are loaded down with the delicious fruit, consisting of eleven different varieties, among which we find the following: Fleming Tokay, White Muscat of Alexandria, White Chasasel, Black Hamburg and six other varieties of lesser note. Fruit trees of every description are to be found here.

SAN BENITO.

Hauling Grain.—Hollister *Enterprise*, Aug. 22: The streets are crowded every day by long teams loaded with grain, and the vacuum of our warehouses is rapidly filling up. It will take many a car to move the San Benito county grain of this season.

Grain Arrivals.—*Advance*, Aug. 22; The ranch teams are rolling in and marching up to the grain depots to unload for storage and shipment. Immense quantities of grain are already stored. The encouraging reports coming in from all parts of the county, warrant the belief that the total crop will be fully up to the million centals with which we are credited by the grain experts of San Francisco.

SAN JOAQUIN.

Wheat Yield.—*Argus*, Aug. 22: Mr. Huffman has given his lands as good cultivation as was possible under the circumstances, and reports the following: On fine hundred acres of summer fallow and winter plowed and sowed ground, he threshed out seventeen thousand bushels of wheat—an average of 34 bushels to the acre. Upon this five hundred acres the ground was plowed deep, and although the summer fallow was the heaviest, the deep, winter-plowed portion of the field made a good yield. Mr. Huffman also had a field of 300 acres of similar soil, plowed shallow and sown in good season, turn out from five to fifteen bushels to the acre of tolerably good grain. Mr. Huffman says that he is thoroughly convinced of the necessity of deep plowing and thorough culture before planting, and he is of the opinion that when land is summer fallowed and the plowing is deep and the soil well pulverized with the harrow and roller that it will produce a good crop every year, even though the season may be ever so dry and unfavorable. On a piece of railroad land cultivated by Hughes & Keyes, there was threshed thirty-seven bushels to the acre. The land is within a mile and a half of this place. On Fancher's land, six miles east of Merced, Messrs. Halterman & Whealand, on a field of sixty acres, threshed two thousand seven hundred bushels, making an average of 45 bushels to the acre for the 60 acres. The same firm, on a field of 700 acres, threshed 12,000 bushels of grain, making an average of over 17 bushels per acre for the whole field, a great portion of which was late winter plowed and sowed.

SAN LUIS OBISPO.

Point Sal.—*Tribune*, August 22: A new warehouse is in course of erection, for storage purposes. It will be sufficiently large to hold over 20,000 sacks of grain. This firm deserves the good will and support of all the people living in that section for their exertions in the way of improvement and increasing the facilities for the shipment of their produce.

SANTA BARBARA.

Guadaloupe. — Correspondence *Index*, August 20: Around the town are stacks of wheat and other grain ready for shipment to a market, and 8,000 to 10,000 acres planted in corn, beans, pumpkins, etc., which bids fair to produce an immence crop. There have been seeded about 40,000 acres of wheat, at least two-thirds of which have produced an average crop; and it is estimated by the leading merchants of the place, who are certainly well informed, being pecuniarily interested, that this valley alone will be able to export some 20,000 tons of grain this fall, the lands, where *properly seeded*, having produced a full crop of wheat and barley; and I may say that I have never seen better grain raised in the State.

SONOMA.

Petaluma Farms.—*Argus*. Aug. 21: There is no part of California which offers greater inducements for investments in land by men of large or small means than the vicinity of Petaluma. The fertility of our soil, the nearness to market, and facilities for shipment, immunity from failure of crops, as well as the variety of products and the low prices at which lands can be purchased, are considerations which are not overbalanced or equaled by any other portion of the State. Those who are acquainted with these conditions are unable to account for the low price at which lands in this vicinity can be purchased.

Crops in the Gnerneville section are fully up to the average. A great many of the farmers have cut their wheat for hay, for the reason that there being much teaming from the Redwoods their hay pays better than wheat. The corn crop is good. Mr. Kiethly has a field of about 20 acres of wheat that will average fully 40 bushels to the acre.

New wheat is arriving in Petaluma in moderate quantities. It is generally of good quality.

Corn.—*Democrat*, Aug. 22: Mr. Forsyth purchased, two years ago, the Reed place on the creek. His first crop was wheat, 30 bushels to the acre. This year he has a field of corn which will produce 50 bushels to the acre. It was sown the first of May; has had no rain. The ground was broken up in February, replowed in April, and twice cultivated.

SANTA CRUZ.

Artesian Water.—*Pajaronian*, Aug. 20: Mr. A. N. Judd, one of our Pajaro ranchmen, has lately sunk an artesian well on his premises, which gives a splendid yield of water. The auger reached a depth of 147 feet when the stream was struck, and the water flows several inches above the surface of the earth into a convenient tank. There are now numerous artesian wells in this valley, all giving excellent satisfaction, and the prospects are that they will become much more common during the next two or three years.

SISKIYOU.

Peached.—Yreka *Union*, Aug. 22: We have not seen any ripe peaches in town yet, though we hear there are some in some parts of the county. The cool weather that has prevailed for the last two or three weeks, and particularly, the cool nights, has no doubt operated adversely to the peach crop.

Large Hay Crop.—George Heard cut this year off his ranch in Scott valley, between 300 and 400 tons of hay.

SOLANO.

Vacaville.—Cor. Vallejo *Chronicle*, Aug. 22: The Vacaville fruit drying establishment is now running night and day, and turning out from 600 to 800 lbs. of dried fruit in 24 hours. They employ about 40 hands, mostly Chinamen. They undertook to work white boys in preparing the fruit, but they had not worked long before they commenced to show signs of laziness, and a disposition to make play of their work.

Small quantities of grain are being received for storage at the new warehouse.

SUTTER.

Preserving Fruit.—*Banner*, Aug. 22: Never before was there so much fruit being put up as now. Our tinners are drove to the utmost in filling orders for cans. The amount of plums put up will be large. It is safe to state that twice the amount of fruit will be preserved this year over any other.

Bright Ahead.—The drowning out of grain for many of our farmers last winter was a severe blow to them, but considering most of this land has been summer-fallowed, it is very probable that next year's crops and prices will in many cases at least more then compensate this year's loss.

TULARE.

Fruit.—*Times*, Aug. 22: Watermelons, grapes and peaches are very plentiful in the market now.

YOLO.

Movement of Wheat.—*Mail*, Aug. 20: The continuous string of wagons loaded with wheat moving to the warehouse indicates that the threshing is about over, and every farmer is working hard to have his wheat in store before the rains, or before the commencement of the State fair.

Farm Laborers, Engineers, Teamsters, Blacksmiths, Milkers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery steeet, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

We guarantee satisfaction. ag22-tf

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Aug. 26th, 1874.

The appearance and future prospects of the Produce market have slightly improved during the week. We cannot yet chronicle any startling advance in the market; but, as a rule, Produce of all kinds is held with a firmer feeling, and the prevailing tone is one of confidence. The quotations for the Cereals remain almost without change; in fact, such fluctnetions as have occurred have been quite moderate in extent.

Money is plenty—that is, comparatively speaking—and there are many inducements to holders to keep their atocks from passing at low rates. Whether the hold-off policy will turn out best in the long run of course remains to he proved: but there is no question about the strengthening influence in the present.

Receipts—Have been] larger during the past few days, except in a few articles, such as Flour and Hides.

Barley—Market rather weaker under heavy receipts.

Beans—Prices are still declining. Pea and Small White are ½c ₱ lb lower. No Butters in yet.

Broom Corn—Small receipts of new have come upon the market, and, as we predicted, have sensibly lowered the price. The season's crop is not a very extensive affair, after all. An exchange pnts it as not exceeding 350 tons, as compared with former yields of 500 to 700 tons.

Buckwheat—Is quiet with no sales of importance.

Corn—Is 5c. ₱ cental lower.

Cotton—Quotations nominal. The new crop will soon he gathered. Reports are extremely flattering.

Dairy Produce—No decline has taken place in Butter; though, of course, the present high rates cannot hold forever. California Cheese is slightly more active, thus hreaking the spell which has prevailed so long.

Eggs—Market very strong for all kinds.

Feed—An advance in Hay is noted. Bran and Middliugs are quite firm, with no expectation of re ceding. Straw is plenty, and sells here at 60@65c ₱ bale. Oil Cake Meal is quiet, and Corn Meal has shaded off a little.

Flour—Has declined. Best Extra now selling in large lots at $5.25 ₱ barrel.

Fresh Meat—A downward turn in Mutton is abont the only feature. Meats generally are weaker.

Honey—No changes.

Hops—The new crop is selling hetter than was anticipated. As reports from Eastern States and Europe become more authentic, the belief in short crops gains ground. Henco local holders are firm.

Nuts—There have been advances in California Walnuts and Peanuts and Brazil Nuts.

Oats—Receipts and transactions have heen large, hut prices remain as above quoted.

Onions—Market good.

Potatoes—Are ahout 5c. ₱ cental lower throughout the list. There are not many from the Sacramento river district ln market. Sweet Potatoes have fallen to $1.62½@1.75 ₱ cental.

Poultry—Is generally higher. Chickens of all kinds are 50c. ₱ dozen above last week's prices. Dncks have advanced $1.50 ₱ dozen, and Geese are also higher. Turkeys alone have not moved upward.

Provisions—Are held firmly for all kinds.

Rye—Has again fallen.

Seeds—The list shows a number of doclines. Alfalfa has fallen 2c., Canary Seed, 1½c., Flax Seed, 2c., Mustard Seed, 2c., Timothy, 5c. ₱ lb.

Wheat—Demand good at improved rates. Business is comparatively light, as heretofore explained. The condition of the Liverpool market is explained by the late improved reports from wheat-growing quarters.

Wool—Very choice samples will now bring 31½c ₱ lb. The improvement is principally in the finer grades. Latest New York dispatches say: California Wool has attracted more attentlcn the past week, prices being firm for all lots in good condition, and very extreme figures have been realized for the best. Some very choice lots have been sold at 42½@43c. The hulk of sales have heen ln the range of 33 @ 37c per pound. Sales are 574,000 lbs. Spring, at 27½ @ 43c; 16,000 lbs. Fall, at 25 @ 26c; 5,000 lbs. Scoured, at 72½c; 9,500 lbs. Pulled, at 48 @ 50c.

LEATHER.

WEDNESDAY M., Angust 26, 1874.

Leather is in rather better request, but the demand is principally for imported goods.

City Tanned Leather, ₱ lb	25@29
Santa Cruz Leather, ₱ lb	25@29
Country Leather, ₱ lb	24@25
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 13 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Beanmorville, 15 Kil	60 00@ — —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 15
California Kip, ₱ doz	40 00@ 60 00
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Backs, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@ 5 25
Good French Calf Boot Legs, ₱ pair	4 00@ 4 75
French Calf Boot Legs, ₱ pair	4 00@ — —
Harness Leather, ₱ lb	30@ 37½
Fair Bridle Leather, ₱ doz	48 00@ 72 00
Skirting Leather, ₱ lb	34@ 37½
Welt Leather, ₱ doz	30 00@ 50 00
Buff Leather, ₱ foot	18@ 21
Wax Side Leather, ₱ foot	17@ 19
Eastern Wax Leather	—@— —

DOMESTIC PRODUCE.

WEDNESDAY M., August 26, 1874.

BEANS.			
Beens. sm'l wh. ₱	3¼@	3½	
do, butter	—	@	—
do, large, do	—	@	—
do, bayo	2	@	2¾
do, pink	1½@		2
do, pee	3¼@		3½
do, Lima	5½@		6½
BROOM CORN.			
Per ton	$100	@	175
COTTON.			
Cal. 1873, ₱ lb	—	@	20
DAIRY PRODUCE			
Butter, Cal. choice ₱ lb	35	@	37½
do, good	32½@		35
do, inferior	27½@		32½
do, firkin	30	@	32½
do, pickled	30	@	35
Cheese, Cal. new	8	@	14
do. Eestern	12	@	13½
EGGS.			
Eggs, Cel. fresh	40	@	45
do, Oregon	30	@	35
do, Eastern	25	@	30
do, Ducks	—	@	35
FEED.			
Bran, per ton	—	—@18	00
Middlings	—	—@30	00
Hey	11	00@15	00
Straw, ₱ oale	—	60@—	65
Oil cake meal	—	—@32	50
Corn Meal	40	00@42	00
FLOUR.			
Extra	4	50@5	25
Superfine	4	00@4	50
FRESH MEAT.			
Beef, fr quality ₱ lb	8½@		9
do, second do	6	@	8½
do, third do	4½@		6
Veal	4½@		6
Mutton	4½@		5
Lamb	5½@		6
Pork, undressed	6½@		6¾
do, dressed	9	@	9½
GRAIN, ETC.			
Wheat, old	—	@	—
do new	1 62½@1		65
Barley, old	—	@	—
do new	1 05	@1	15
Oats, choice	1 45	@1	60
do common	1 40	@1	45
Corn, White	—	@1	85
do, Yellow	—	@1	90
Buckwheat	2 75	@3	00
Rye	1 05	@1	10
HOPS.			
California, 1874	22½@		27½
East'rn '73 oh'ice	30	@	40
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey in comb	20	@	25
do Strained	7½@		10
Pulu	9	@	10½
Oninns	60	@1	00
NUTS—JOBBING.			
Cal. Walnuts	14	@	15
Peanuts per lb	8	@	9
Cbile Walnuts	10	@	11
Pecan nnts	13	@	15
Brazil do	14	@	16
Coc'anuts, ₱ 100	9 00	@10	—
Alm'ds h'rd shell	10	@	12½
do, soft	18	@	24
Filberts	18	@	—
POTATOES.			
Sweet, per cwt	1 62½@1		75
Cuffee Cove	—	@	—
H. M. Bay	90	@1	05
Pigeon Pt	—	@	—
Humboldt	—	@	—
Petaluma	—	@	—
Mission	90	@1	10
Selinas	90	@1	05
Bodega	—	@	—
Sec. River	70	@1	00
POULTRY & GAME.			
Live Turkeys, hens per lb	20	@	22
do gobblers	18	@	20
Hens, per dz	6 50	@6	00
Roosters, young, large	6 00	@7	00
Broilers, small	3 00	@4	50
do large	4 50	@5	50
Ducks, tame, doz	6 00	@8	00
Geese, per peir	1 75	@2	00
Hare, per doz	2 50	@3	50
Snipe, Eng., doz	—	@	—
Quail, per doz	—	@	—
Mallard Ducks	—	@	—
do small	—	@	—
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	00	@1	25
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 50	@2	00
do Tame	5 00	@6	00
Venison, per lb	6	@	10
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medium	—	@	13
do Heavy	—	@	12½
Eastern do	13½@		14
Hams, Cal	15	@	15½
do Whittakers	—	@	17
do Dufield, ch	—	@	16
do Plankton & Armcur	—	@	15
do Boyd's	—	@	15½
do Stewart's	—	@	15½
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard	13	@	14
SEEDS.			
Alfalfa	12	@	13
Canary	4	@	4½
Flaxeed	3	@	4
Ky. Blue Grass	40	@	50
Millet	12	@	15
Mustard, white	1½@		2
do. Brown	2	@	3
Italian Rye	25	@	30
Perennial do	30	@	35
Timotby	8	@	10
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Clover Red	—	@	20
do White	60	@	75
Alsike	—	@	—
Eeparto Grass in Packets	—	@	1 00
WOOL, ETC.			
Spring, short, ₱ lb	22½@		25
do cnoice Nort	25	@	31½
Medium grades	18	@	22
Fall clip	18	@	20
Burry	14	@	18
Ilides, dry	19	@	20
do wet salted	8	@	9
Tallow, Crude	6	@	7
do Refined	7	@	7½

FRUITS AND VEGETABLES.

WEDNESDAY M., August 26, 1874.

The following kiuds of Fruit are now out of market: California and Sicily Lemons, Bananas, Strawberries, Currants, botb red and black, and Apricots. Grapes, Pears, Peaches and Apples are becoming much cbeaper, and the former especially are making a good showing. Melons are coming forward freely, and are much lower in price. The quality of the Muskmelons is unusually good, the flavor being particularly rich and spicy. So far, the Watermelons are rather inferior. California Fruits are constantly forwarded Eastward. Latest New York telegraphio advices state that they are more plenty, and that Pears and Plums sell at $3@6 ₱ box.

Dried Fruits are held without change in quotations.

Vegetables have been quite steady during the week. Rhubarb is now out of season.

FRUIT MARKET.			
Tahati, Or. ₱ M	30 00@35	00	
Lorita, do	—	—@—	—
Cal. do	—	—@—	—
Limes, ₱ M	10 00@12	00	
Cal. Lemons, ₱ M	—	—@—	—
Australian do	45 00@50	00	
do per box	5 00@ 6	00	
do Sicily ₱ b'x	—	—@—	—
Bananas, ₱ bnch	—	@	—
Cocoanuts, ₱ 100	9 00	@10	00
Pineapples, ₱ dz	7 00	@9	00
Apples, ₱ box	50	@1	25
Cherries	—	@	—
Blackberries	2	@	3
do wild	—	@	—
Huckleberries	—	@	18
Strawberries ₱ lb	—	@	—
Gooseberries	—	@	—
Raspberries	—	@	10
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	1	@	5
Peaobes, bskt	75	@1	25
do, ₱ box	1 00	@1	50
Pears, Eating	50	@1	50
do Cooking	40	@	50
Crab Apples	5	@	6
Nectarines	3	@	4
Wat'rmel's ₱ 100	6 00@10	00	
Muskm'l's ₱ 100	7 00@12	00	
Pomegran's, ₱ 1066	00	@7	00
Figs	5	@	10
Grapes, Bl'k H'g	2	@	4
do Muscat	4	@	6
do Malavo'e	4	@	5
do Sweetw'r	1½@		2½
do Mission	1	@	2
do Rose of Peru	4	@	5
do Tokay	6	@	8
do Morocco	—	@	—
do St. Peter	—	@	—

DRIED FRUIT.			
Apples, ₱ lb	6	@	7½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	10	@	11
Apricots, ₱ lb	10	@	12½
Plums, ₱ lb	8	@	10
Pitted. do ₱ lb	15	@	18
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½@		12½
Black Figs, ₱ lb	8	@	10
White, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	30	@	35
Zante Currants	8½@		8½
Datee	12½@		14
VEGETABLES.			
Asparagus	7	@	8
Beets	—	@	1
Cabbage, ₱ 100 lbs	—	@	2 00
do new, doz	50	@	60
Carrots, ₱ 100 lbs	1 00@1		25
Canliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	6	@	8
Green Peas	3½@		4
Green Corn ₱ doz	15	@	18
Snn'rSqnaeb, lb	4	@	5
Marro'fat Sq'sh, tn	60	00@—	
Artichokes, ₱ doz	15	@	25
String Beans, ₱ lb	—	@	5
Lima Beans	4	@	5
Parsnips	12½@		15
Shell Beans	2	@	6
Peppers, ₱ lb	12½@		20
Okra ₱ lb	25	@	40
Okra, Green	6	@	8
Cucumbers, doz	6	@	8
Tomatoes	3	@	5
Egg Plant ₱ lb	4	@	6
Rhubarb	—	@	—
Lettuce	10	@	15

LUMBER.

WEDNESDAY M., August 26, 1874.

There is nothing new to report of the Lumber trade. Business is fair, with good prospects ahead

CARGO PRICES OF REDWOOD.		PUGET SOUND PINE —Retail Price.	
Rough, ₱ M	$16 00	Rough, ₱ M	20 00
Rough refuse, ₱ M	12 00	Fencing and Stepping, M	37 50
Rough clear, ₱ M	32 50	Fencing, 2d quality, ₱ M	30 00
Rough clear refuse, M	22 50	Fencing, ₱ lineal foot	1c
Rustic, ₱ M	30 00	Flooring and Step, ₱ M	30 00
Rustic, refuse, ₱ M	24 00	Flooring, narrow, ₱ M	32 50
Surfaced, ₱ M	26 00	Flooring, 2d quality, M	25 00
Surfaced refuse, ₱ M	16 00	Laths, ₱ M	3 25
Flooring, ₱ M	30 00	Furring, ₱ lineal ft	¾
Flooring, refuse, ₱ M	20 00	**REDWOOD—Retail.**	
Beaded flooring, ₱ M	32 50	Rough, ₱ M	20 00
Beaded floor, refuse, M	22 50	Rough refuse, ₱ M	16 00
Half-inch Siding, M	22 50	Rough Pickets, ₱ M	18 00
Half-inch siding, ref, M	16 00	Rough Pickets, p'd, M	20 00
Half-inch, Surfaced, M	25 00	Fancy Pickets, ₱ M	30 00
Half-inch Surf. ref., M	18 00	Siding, ₱ M	25 00
Half-inch Battens, M	22 50	Tongued and Grooved, surfaced, ₱ M	32 50
Pickets, rough, ₱ M	13 00	Do do refuse, ₱ M	22 50
Pickets, rough, p'ntd	16 00	Half-inch surfaced, M	40 00
Pickets, fancy, p'ntd	25 00	Rustic, ₱ M	35 00
Shingles, ₱ M	2 25	Battens, ₱ lineal foot	¾
		Shingles ₱ M	2 50

GENERAL MERCHANDISE.

WEDNESDAY M., August 26, 1874.

Bags and Begging are considerably weaker. Last sales of English Standard Wheet Begs were at 13c. Coffee remeins sheky. Spices generally have advanced. Hawaiien Molasses hes been advanced. Other Syrups end Sugars are very firm. Tobaccos are high, and promise to go still higher.

BAGS.			
Eng. Stand Wht	13½@	13¾	
Detrick's Machine Sewed, 22x36 E	—	@	13
do 22x36, do E W	—	@	13¼
do 20x40, do A	—	@	14
Flour Sacks ⅛s	10	—@	12
" ¼s	6	—@	7
Stand. Gunnies, double seam	—15	—@	16
single seem	—13	—@	13
" Wool Sacks	65	—@	—
Barley Bags 24x36	—	—@	15½
do 23x40	—	—@	15½
do 24x40	—	—@	16½
do 25x36	—	—@	17
Cal Begs, 24x40	16	@	16½
do 28x36	—	—@	17
Hessien 40-in. gds	9½	—@	10
do 45	10½	—@	11
do 60	—	—@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ lb cans	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl	—	@	3 50
Sardines, qr box	80	@	—
do bf boxes	3 20	@	—
COAL—Jobbing.			
Australian, ₱ ton	10 00	@	—
Coos Bay	—	@	10 00
Bellingbam Bay	—	@	8 50
Seattle	—	@	11—
Cumberl'd, cks	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	19 00
Liverpool	11 00	@	12—
West Hartley	12 50	@	—
Scotch	9 50	@	10 00
Soranton	15 00	@	17 50
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	20	@	22
Costa Rica per ₱	21	@	22
Gnatemala	19	@	20½
Java	28½	@	30
Manilla	20	@	21½
Gronnd in cs	—	@	30
Cbicory	10	@	—
FISH.			
Pao. Dry Cod, new cases	5	@	6
do boneless	11	@	12
Eastern Cod	7	@	8
Salmon in bbls	9 00	@	9 25
do ½ bbls	4 50	@	4 75
do 2½ cans	—	@	3 00
do 2 lb cans	2 65	@	2 75
do 1 lb cans	1 75	@	—
Do Col. R. ½ b	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l. No. 1, ¼ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mess	3 00	@	3 50
" Ex mess. ½ bs	—@	12	00
Sm'k Herr'g, bx	50	@	60
NAILS.			
Assorted size, lb	4¾	@	7
OILS.			
Pacific Glue Cn. Neat F't No. 1	—	@1	00
Pure	1 25	@	—
Castor Oil, No. 1	—	@1	75
do do No. 2	—	@1	60
Cocoannt	45	@	50
Olive Plagniol	5 00	@	—
do Possel	4	@	—
Palm	9	@	—
do Bagicalnpi	—	@	—
Linseed, raw	—	@1	02
do bolled	—	@1	07
China nut in cs	—	—@	95
do bulk	75	@	80
Sperm, crude	—	@1	40
do bleached	—	@2	20
Ceast Whales	35	@	40
Polar, refined	50	@	55
Sperm	1 40	@1	50
Lard	1 00	@1	10
Coal, refined Pet	37½@		40
Cleophine	—	@	34
Devoe's Bril't	25	@	28
Long Island	—	@	34
Eureka	37½@		40
Devoe's Petro'm	26	@	29
Barrel kerosene	20	@	25
Olive	4 00	@9	50
Downer Kerose'e	35	@	40
Gas Light Oil	—	@	34
PAINTS.			
Atlan. W. Lead	7½@		12½
Whiting	—	@	2
Putty	4	@	4½
Cbalk	—	@	2½
Paris White	2¾@		—
Oohre	4	@	5
Venetian Red	3½@		5
Red Lead	7	@	11
Litberge	10	@	11
Eng. Vermillion	2 00@2		10
RICE.			
China No. ₱ lb	6½@		6¾
do 2. do	5½@		5¾
Japan	5½@		6
Siam Cleened	7	@	—
Patna	—	@	6¼
Hawelian	7	@	7¾
Caroline	10	@	10½
SALT.			
Cal. Bay, per ton	10 00@14	00	
do Common	5 00@ 7	00	
Carmen Island	11 00@13	00	
Liverpool fine	20 00@23	00	
do coarse	15 00@20	00	
SOAP.			
Castile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Allspice, per lb	15	@	16
Cloves	47½@		50
Cessia	22½@		25
Citron	—	@	30
Nntmeg	1 20	@1	25
Whole Pepper	20	@	22
Pimento	—	@	15½
Gr'nd Allsp pr dz	—	@1	00
do Cassia do	—	@1	50
do Cloves do	—	@1	50
do Mnstard do	—	@1	25
do Ginger do	—	@1	00
do Pepper do	—	@1	00
do Mace do	—	@2	00
SUGAR, ETC.			
Cal. Cube per lb	11½@		—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12¼
Circle A crusbed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	11½
Golden C	—	@	10½
do Reyg rade	—	@	9½
Cal. Syrup in tins	—	@	5½
do in ½ bls	—	@	55
do in kegs	—	@	60
Hawaiian Molasses	25	@	27½
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperiel, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@1	00
Gnnpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@1	25
Yng Hy, Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, isoquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	45	@	55
Dwarf Twist	57	@	62½
12 inch do	57	@	62½
Light Pressed	65	@	75
Hard do	60	@	70
Conn. Wrap'r	40	@	50
Penn. Wrapper	20	@	30
Ohio do	7	@	15
Virgi'a Smok'g	60	@	95
Fine cut cbe'g, gr	8 50	@9	25
Fine cut chewing, buc'ts ₱ lb	75	@	90
Banner fine cut	—	@9	00
Eureka Cals	8 75	@9	00
TURPENTINE.			
Eastern	60	@	65

METALS.

WEDNESDAY M., August 26, 1874.

Quicksilver is firm at $1.45 ₱ lb. Trade in Iron is improving. Tin Plates have recovered somewhat.

American Pig Iron, ₱ ton	—	@	40 00
Scotch Pig Iron, ₱ ton	38 00	@	42 00
White Pig, ₱ ton	—	@	44 00
Oregon Pig, ₱ ton	—	@	45 00
Refined Bar, bad assortment, ₱ lb	—	@	3½
Refined Bar, good assortment, ₱ lb	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5½
Sheet, No. 14 to 20	—	@	5½
Sheet, No. 24 to 27	— 08	@	— 09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	— 9½	@	—
Norway Iron	— 8	@	—
Rolled Iron	— 6	@	—
Other Irons for Blacksmiths, Miners, etc	—	@	4¼
COPPER.—			
Braziers'	— 31	@	— 32
Copper Tin'd	— 45	@	— —
O. Nlel's Pat	— 50	@	— —
Sheathing, ₱ lb	— —	@	— 24
Sheathing, Yellow	— —	@	— 25
Sheathing, Old Yellow	— —	@	— 12½
Composition Nails	— 24	@	— —
Composition Bolts	— 24	@	— —
TIN PLATES.—			
Plates, Charcoal, IX ₱ box	13 00	@	14 50
Plates, I C Charcoal	12 75	@	14 50
Roofing Plates	11 50	@	14 00
Banca Tin, Slabs, ₱ lb	— 31	@	— 33
STEEL.—Engiieh Cast, ₱ lb	— 20	@	— 25
Anderson & Woods' American Cast	— 10	@	— 17
Drill	— 18	@	— 22
Flat Bar	— 18	@	— 22
Plough Points	— 16	@	— 17
ZINC.			
Zinc, Sheet	— —	@	— 11
NAILS—Assorted sizes	— 5¾	@	— 8
LEAD.—			
Pig, ₱ lb	— 5¾	@	— 6
Bar	— 6½	@	— 7
Sheet	— —	@	— 9
Pipe	— —	@	— 8½
QUICKSILVER, per lb	— —	@	1 45

RETAIL GROCERIES, ETC.

WEDNESDAY M., August 26, 1874.

The decline in Four is the only marked change in Groceries.

Butter, Cal. oh'ice	35	@	40
do common	25	@	30
Cheese, Cal.	12½@		15
Lard, Cal., ₱ lb	12½@		15
Flour, ex. fam. bl	5 00	@5	50
Corn Meal, ₱ lb	2½@		3½
Sugar, wn. crsh'd	—	@	12
do lt. brown, ₱ lb	7	@	9
Coffee, Sbarboro's family gr'nd, ₱ lb	32½@		—
Coffee, green, ₱ lb	24	@	32½
Tea, fine blk, 50, $5, 75	@1		00
Tea, finst Jap, 55, 75, 90	@1		00
Candles, Admant'e	17	@	25
Soap, Cal., ₱ lb	—	@	10
Can'd Oysters, dz	2	@2	50
Syrup, S F. Gol'n	35	@	40
Dried Apples	8	@	10
Dr'd Ger. Prunes	15	@	17
Dr'd Figs, Cal	9	@	10
Dr'd Peaches	10	@	—
Oils, Kerosene	30	@	35
Wines, Old Port	3 50	@5	00
do Fr. Claret	1 00	@1	25
do Cal., dz. bot	3 00	@4	50
Whisky, O.B, gal	3 50	@5	00
Fr. Brandy	4 00	@10	00
Rice, ₱ lb	10	@	12¼
Yeast Powders, dz	1 50@2		00

S. F. RETAIL MARKET RATES.

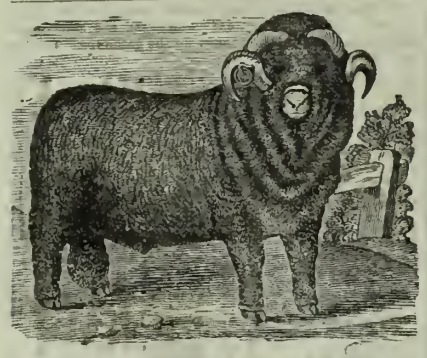
WEDNESDAY M., August 26, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

Chickens are higher. Poultry of all kinds, and also Eggs, are well up in price. Meats and Fish are unchanged. Small Birds and Venison make up the game list. The latter is very plentiful.

Spring Chickens	50	@	75
Hens	75	@1	00
Eggs	—	@	50
do Ducks'	—	@	40
do Farellones	30	@	35
Turkeys, ₱ lb	25	@	30
Ducks, Can Bk, pr	—	@	—
do Mellard, pr	—	@	—
Tame, do	1 50	@2	00
Teal, ₱ doz	—	@	—
Geese, wild, palr	—	@	—
Tame, ₱ pair	3 00	@4	00
Snipe, ₱ doz	—	@	—
Quail, per dozen	—	@	—
Prairie Ch'k's, ea	—	@	—
Pigeons, dom. dz	—	@1	00
Wild, do	—	@2	00
Squebs	—	@1	50
Hares, each	37½@		50
Rabbits, tame, pr	75	@1	00
Wild, do, ₱ dz	2	00	@ —
Squirrels do	15	@	20
Beef, tend, ₱ lb	—	@	20
Corned, ₱ lb	8	@	10
Smoked, ₱ lb	—	@	15
Porter House St'k	—	@	20
Sirloin do	12	@	15
Round do	8	@	10
Pork, rib, etc., ₱ lb	—	@	15
Chops, do, ₱ lb	15	@	—
Veal, ₱ lb	10	@	15
Outlet, do	12½@		15
Mutton-chops, ₱ lb	12	@	15
Leg Mutton, ₱

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambonillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

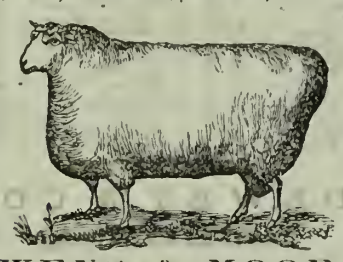


SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,
eow El Dorado, El Dorado County, Cal.

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

U. S. LIVE STOCK EXCHANGE,

S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

ALFRED S. MOORE. W. L. THWING.

ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.

7v8-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

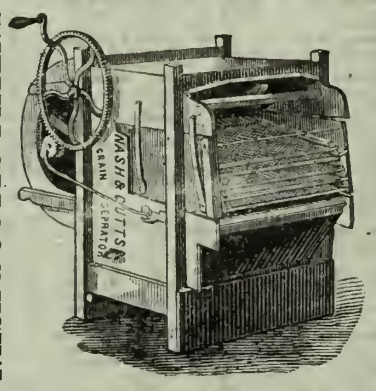
Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT GRAIN SEPARATOR AND FAN MILL.



THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars address

NASH, MILLER & CO.,
No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

GRAPE PICKER.



Price, $1 00 each.

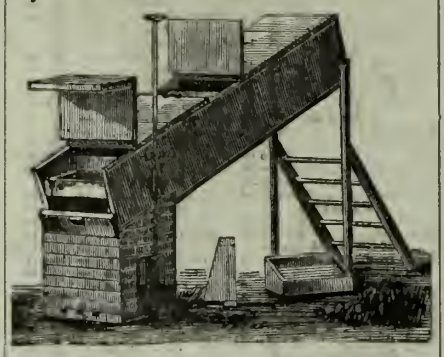
GATHERS GRAPES WITHOUT DROPPING OR BRUISING THEM, AND GREATLY ECONOMIZES TIME. ☞ Send for one.

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Hardware and Agricultural Implements.
Nos. 3 and 5 Front street, San Francisco. 8v8-1m

Brittan, Holbrook & Co., Importers of

Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

Ryder's American Fruit Drier.



It is claimed no Drier can equal, and it is guaranteed no Drier can excel the AMERICAN in the excellence of its work. We suit this Drier to the wants of Farm and Factory. We make one series, Nos. 1, 2 and 3; one line of trays, capacity, say of apples, 8, 12 and 20 bushels per day of 12 hours; prices, $100, $125, $150. Factory Series, Nos. 1, 2 and 3; capacity, 25, 40 and 60 bushels per day. Again we make a Double Factory over one Furnace with capacity over 100 bushels per day. Two of these Driers should turn off at least 1,200 pounds, or over half a ton per day. The prices given include the right and every item of expense to commence work, and are all constructed to be portable. Every variety of Fruits, Vegetables, Cereals or Meats can be cured on this Drier for the home or foreign markets. The company have established depots in all the principal Eastern cities for the sale of Fruits, etc., prepared for the market on this Drier, and prices will from time to time be given to parties interested. This Drier took the first premium and silver medal at the Fair of the Maryland Institute, held at Baltimore in 1873. Send for Circulars. Farm, County and State Rights, and Driers complete with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

THE CELEBRATED

SLUTHOUR PUMP,



Now manufactured in the East, in the most perfect manner. Guaranteed in every particular, surpassing any other in the market, for Farm, Ship, Irrigating and Mining purposes. Our large Force, properly mounted, makes a most effective Fire Engine.

KIPP'S UPRIGHT ENGINE, the cheapest and best we could find in the East.

CHASE PIPE CUTTING AND THREADING MACHINE, a most perfect hand or power machine. One boy against two men with any other in use. Has the highest testimonials. It cuts a thread and makes nipples for all sizes of pipes from ⅛ to 2 inches, and only $150. Also, Metal Ornamental Goods, Fountains, Vases, Statuary, etc. Send for Circulars.

J. M. KEELER & CO.,
Commission and Forwarding Merchants.

Agents for Eastern Manufacturers, 306 California street, San Francisco.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

Tobacco and Vegetable Land for Sale

AT A BARGAIN.—A farm of 100 acres near the thriving and rapidly growing town of Gilroy, Cal. This land lies on and along Carnedero Creek, and is distant from Gilroy six miles, by a good and level road. Fully 25 acres of the tract are adapted in every respect for the cultivation of tobacco, now the most remunerative crop of that section of the country; 25 acres suitable for vegetables; good house of five rooms; young orchard and abundant supply of pure mountain water. Good market at all seasons of the year in Gilroy for vegetables and farm products. Apply to B. B. MINOR, 411½ California street. Room No. 4. agt-tf

Agricultural Articles.

O. CREGO. S. C. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET..... .....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

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IMPORTERS OF

WAGON AND CARRIAGE MATERIAL,

BODIES, CARRIAGE PARTS,

Wheels, Axles, Springs & Carriage Hardware.

SOLE AGENTS FOR THE PACIFIC COAST FOR

Clarke's Adjustable Phæton Sunshades.

☞ Send for price list.

ALSO AGENTS FOR

Woolsey's Patent Wheels,

The best and handsomest Wheel made, having great strength and a fine finish. There is no other wheel that has the metallic-shouldered band; and it can be repaired as easily as the common wood wheel.

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WATERHOUSE & LESTER,
122 and 124 Market street, and 19 and 21 California street, SAN FRANCISCO.
17, 19 and 21 Seventh street, - - SACRAMENTO.
21v7-3m

MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to supply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

H. C. SHAW,

STOCKTON, CAL.

Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
14v7-3m Box 95, Stockton, Cal.

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo. F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements.

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rates. Storage taken at lowest current rates. 4v8-tf

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Shipping---Vessels Up.

FARMERS' LINE.

THE SPLENDID IRON SHIP,

CITY OF YORK,



1255 Tons. A 1.

AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY.

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co.

RODGERS, MEYER & CO.,
212 Battery street.

au215-tf

IMPORTANT TO FARMERS!

X Line to Liverpool.

DIRECT.

The New A 1 Clipper Ship

.....

Is intended to sail with dispatch.

Freight taken in lots to suit shippers,

Apply to E. E. MORGAN'S SONS,

320 California Street,
San Francisco.

DAIRY PRODUCE

DEPARTMENT

OF THE

CALIFORNIA STATE GRANGE,

P. OF H.,

414 & 416 Sansome St., Cor. Commercial,

SAN FRANCISCO, CALIFORNIA.

J. H. HEGLER, Manager.

We are now prepared to handle and dispose of all Dairy Produce, Eggs and Poultry.

This house is under the immediate control of the California State Grange; the Business Manager a thoroughly practical farmer and dairyman, Master of Bodega Grange and General Deputy for California for the organization of Granges in any part of California. Special rates to members of the Order; though any one may sell through our house and avail himself of our mode of doing business.

In shipments give plainly the name and P. O. address. Any persons wishing legitimate information concerning our business should write to the house, and are cautioned against accepting for facts many rumors now current. All sales guaranteed. ja31-tf

CAMELLIAS.

We offer a large stock of these plants at low rates. They are unusually healthy and vigorous, and embrace the best white and colored sorts. Prices of the different sizes will be forwarded on application, as well as the Descriptive Catalogue. In ordering, please advise as to the mode of shipment.

We offer also Chinese Azaleas, Gardenias, etc., as well as the best and most rare Deciduous and Evergreen

Trees and Shrubs.

R. B. PARSONS & CO.,

7v8-1m Flushing, New York.

H. K. CUMMINGS. 1858.

H. H. HALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the prodncer.

4v23-1y

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,

1v8-3m 43 & 44 Cal. Market, S.F.

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G, Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf **SAMUEL HILL, General Agent.**

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HOME SEWING MACHINE.

This machine is manufactured after an experience of twenty years. It contains within itself every known improvement. **It is the best** because the **simplest, easiest to understand** and by far the **lightest to run**, and the equitable adjustment of all its parts makes it the **most durable** Machine in the market. Take the INTERESTED STTEMENTAS OF NONE, but

EXAMINE for YOURSELF.

SEND FOR A CIRCULAR.

It uses a **Shuttle, Straight Needle, Two Threads**, and makes a stitch alike on both sides.

E. W. HAINES, Agent,

17 New Montgomery St., Grand Hotel Build'g, S. F.

We also continue to sell another machine, the

HOME SHUTTLE SEWING MACHINE.

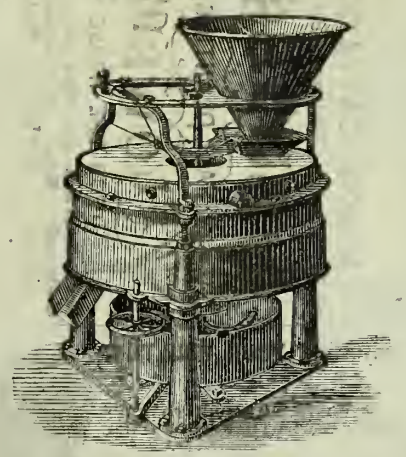
Price, $45.

Mme. Demorest's Reliable Paper Cut Patterns. Send for a Catalogue. 15v7-eow-6m

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MANUFACTURER OF

FRENCH BURR MILL STONES AND PORTABLE MILLS.



General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. 13v7-3m-2am

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LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

10v7-3m **304 California Street.**

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JOHN DANIEL & CO.,

Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.

21v2-1y

FREE to all applicants—my Nursery and Bulb Catalogues. F. K. PHŒNIX, Bloomington, Ill. 7v8-1m

FARMERS write for your paper.

POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 29th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, O. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

GEO. H. TAY & CO.,

614, 616 and 618 Battery St., S. F.,

OFFER FOR SALE

IRON PIPE,

BLACK and GALVANIZED.

PUMPS—LIFT AND FORCE.

RUBBER HOSE, ETC.

STOVES and RANGES,

THE RICHMOND RANGE,

THE HENRY CLAY,

THE EMPIRE CITY,

THE ALVARADO.

THE MONITOR, wrought iron body, cast Iron top and hearth, will cook for 50 to 500 men; an excellent stove for large ranches during harvesting season.

AND A GREAT VARIETY OF

COOKING STOVES AND RANGES, FARMERS' BOILERS AND CALDRON KETTLES.

Ralph's Patent Oneida Cheese Vats.

DAIRYMEN'S GOODS,

MILK PAILS, PANS, CHEESE HOOPS, ETC.

BABBIT METAL.

Wire for Fencing and Baling.

ALSO, METALS, HOUSE FURNISHING HARDWARE, JAPANNED GOODS, ETC., ETC.

22v7-3m

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, ETC.

For Sale, wholesale or retail, by

B. F. WELLINGTON,

(Successor to E. E. Moore).

425 Washington St., San Francisco. 22v7-1y

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

LANDS & HOMES FOR SALE

RANCHOS

FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,

542 MARKET STREET,

ap25-tf N. E. Cor. Montgomery.

DAIRY RANCH FOR SALE,

Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Obispo.

20v7-3m

FARMING LAND,

TO LEASE ON SHARES.

1,000 ACRES,

Or any part of same, being levied and of similar character to that of SHERMAN ISLAND. Apply to

W. T. S. RYER,

No. 330 Pine street.....SAN FRANCISCO, CAL.

GRAIN & STOCK FARM FOR SALE.



A FINE FARM OF 140 ACRES;

Good Grain Land; all plowed and ready for seeding and promising fine crops, and 360 acres of good tule land adjoining; excellent pasturage; situated in Suisun valley, within a mile and a half of landing at Suisun City and one mile of a railroad station. Has a good house, barn, corrals and fences; also work-horses and a full assortment of agricultural implements, seed feed, etc. Price moderate and terms easy. Apply to BERRY & CAPP, 418 Montgomery street, Real Estate Agents. 8v8-1m

THE NEW WINCHESTER

REPEATING RIFLE,

(Model of 1873.)

San Francisco Agency.



The Winchester Repeating Arms Company, of New Haven, Conn., have recently made still further valuable improvements on the celebrated Henry Rifle, which now make it, beyond doubt, the most magnificent weapon in the world. They have just introduced this beautiful arm upon the market, and their San Francisco Agency is fully supplied with all the various styles, together with cartridges for the same.

In the manufacture of the new gun, iron mountings (blued or case-hardened), have been substituted for gun metal or brass, thus increasing the strength of the arm and decreasing its weight. It is also now so constructed as to carry a Central Fire Cartridge holding one-third more powder than used in the cartridge of the model of 1866, thereby greatly augmenting the power and accuracy of the weapon.

THE SPORTING RIFLE

Has a Set or Hair Trigger which can be used at will—set or not set, as preferred. All the arms have a sliding lid which covers the opening in which the Carrier Block moves up and down. This lid, by the action of the Carrier Lever, is always open when the gun is fired, and closed by hand when the firing ceases, thus protecting the lock and inner works of the gun from dust and rain.

Various other improvements, which it is not necessary to mention in detail, by which the strength of the several parts is increased and the general appearance of the gun improved, have also been made.

There is now a greater variety of the Sporting Rifle than heretofore. They can be had with a length of barrel (round or octagonal) ranging from 24 to 30 inches, fitted with Globe and Peep Sights, or any other kind in use.

The Carbine is now made with all the improvements above referred to, except the set trigger.

The Sporting Rifle and Carbine will also be made as Extra Arms, Gold, Silver or Nickel Plated, plain or beautifully engraved.

MILITARY ARMS.

Still further improvements have been accomplished which overcome all objections heretofore raised against the Repeating Rifle as an army gun. It is safe, certain and effective in fire, whether used with deliberation or during excitement in action, and no more motions are required than in operating the old model gun.

More extended and minute particulars concerning the new gun can be had by writing or applying to the San Francisco Agency for circular.

CARTRIDGES.

The trade is notified that the Shells of the Central Fire Cartridge for the new gun can be reloaded, and that the Winchester Repeating Arms Company are manufacturers of every description of Cartridge used for Carbine, Rifle and Pistol of any make, and that the Company have a full stock constantly on hand at their San Francisco Agency

JOHN SKINKER,

Sole Agent for Pacific Coast,

NO. 108 BATTERY STREET, SAN FRANCISCO.

NOTE.—Also Agent for the Dupont Powder Company and Eagle Safety Fuse Manufacturing Company.

eow-hp

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Are without exception the most desirable for family use. They are the LIGHTEST RUNNING Machine in the market, and sew from the thinest to the thickest material with equal facility.

These machines have, since their invention, stood at the head of the list in public favor, and the recent improvements to them have increased their superiority still more. Buy no Sewing Machine until you have tried these.

WHEELER & WILSON MANF'G CO.

E. W. HARRAL, Agent,

20v7-4m-15p 427 Montgomery street, S. F.

PATENTS & INVENTIONS.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Aug. 25th, 1874.

For Week Ending Aug. 11th, 1874."

Suspension Buckle. — Christopher J. Weldon, San Jose, Cal.

Trap for Sinks and Basins. — Chas. W. Garland, San Francisco, Cal.

Bracket for Dentists' Chairs.—Geo. W. Gray, Albany, Oregon.

Grain Separator.—John T. Hicklin, Olympia, W. T.

Door Spring. — John Steed and Charles Nash, San Francisco, Cal.

——*The patents are not ready for dallvery by the Patent Office until some I4 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., In the shortest tima possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect secnrity and in the shortest time possible.

The Express Washing Machine.

Among the new Inventions on exhibition at the pavilion, is the Express Washing Machine, patented by W. B. H. Beach, of New York, and manufactured by L. J. Beam, of Suisun. This machine is a perfect washer, leaving absolntaly no rnbbing to bo done by hand; washes everything from the fineat article to the largest and coarsest. It is easily operated. The spring gives all needed pressure, leaving absolutely nothing to be done but moving the rubber backward and forward, making it the easiest washer in use. It is time aaving, labor saving, clothes saving; washes in half the usual time. The clothes are moved over revolving rollers, consequently there is less wear than on a wash-board. Very convenient, complete for washing, splendid for sudsing, and by removing the washing apparatus the box is just the thing for rinsing, thus saving the expense of tnbs. These machines have been thoroughly tasted, and have proven an entire success.

Among the many useless inventions in this line, it is refreshing to find something possessing real merit. Nearly every back yard contains from one to four rejected washing machines, but the Express has never been thrown aside. The machine is very durable. The rollers play on iron gudgeons set in brass boxes. Price, $17.00. Rights for sale. ag29-It*

Our Agents.

Our Friends can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by londing their influence and encouraging favors. We intend to send none bnt worthy men.

L. P. McCarty—General Agent.
W. H. Rattenberry—California.
Chas. W. Otis—Contra Costa County.
Chas. T. Bell—Alameda, Santa Clara and Santa Cruz Counties.
J. W. Anderson—Orange and Santa Ana, in Los Angeles County, Cal.
Hoon Alston—San Luis Obispo, Sau Bernardino and San Diego Counties.
Jas. Kearney—Amador, Calaveras, Tuolumne and Mariposa Counties.
B. Goodwin—Sacramento County.
S. G. Crawford—Nevada, Sierra and Plumas Counties.
J. G. Kelley—For Washington Territory.

A Good Binder for $1.50.

Snbscribers for this journal can obtain our Patant Elastic Newspaper File Holder and Binder for $1.50—containing gilt title of the paper on the cover. It preserves the papers completely and in such shape that they may be quickly fastened and retained in book form at the end of the volume, and the binder (which is very durable) used continuously for subsequent volumes Post paid, 25 cts. extra. It can be used for Harper's Weekly and other papers of similar size. If not entirel. pleased, purchasers may return them within 30 days. Just the thing for librarles and reading rooms, and all who wish to file the Press lambp

Mining and Scientific Press,

(Established in 1860.)

The oldest, largest and best Mining Journal. Devoted, also, to Science, Invention, Mechanic Arts and Industry on the Pacific Coast.

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No. 224 Sansome st., S. F.

AGENTS WANTED to canvass every town on the Pacific Coast for the Mining and Scientific Press, Pacific Rural Press, and the Illustrated Press. Experienced canvassers preferred. Good men can make large wages besides learning much and improving their talents

NOTICE.

The Fruit Growers' Association will meet in San Francisco on Thursday, Aug. 27, at 320 California street, room 12. A full attendance is requested.

A. W. THOMPSON, Secretary.

One of our most valued exchanges is the Pacific Rural Press, published by Dewey & Co., San Francisco, California. Every number contains a vast amount of general news from the far west, besides much valuable information in the way of Granga news.—*The Farmer's Friend, Mechanicsburg, Pa.*

Roses may smell as sweet if called by another name, but a counterfeit article is not as good as the genuine. Be sure that you get a genuine Bianchard Churn. They are made only by Porter Bianchard's Sons, Concord, N. H.

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator-429 Montgomery street, San Francisco. 2v7-6m

Wednesday Afternoon is the latest we can insert any notice in the Rural Press. Communications should be received during the week previous to publication.

THE PACIFIC RURAL PRESS has a larger Circulation than any other Pacific Coast Weekly, independent of a daily issue.

Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The Rural Press—established Jan. 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our Home Circle department, which from the first has been a popular feature of the Rural.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfluities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast, that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the Rural has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than has been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the Rural Press.

The S. F. Market Reports

Will receive greater attention in the department of Domestic Produce than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the Pacific Rural Press. We commence the new year with a regular circulation of

Over 5,000 Copies,

A far greater issue than that of any weekly on this Coast, independent of a daily publication. If our friends will continue to "help us help ourselves," we hope to reach a circulation of 8,000 this year, and do a correspondingly greater service of good. While we have the greatest advantages and can make by far the best weekly for

Agriculturists on This Side of the Continent,

We cannot expect one-half so large a circulation as journals in older and more populous districts. Consequently readers cannot rightly expect such a paper here as Eastern rates.

No Premiums But a Good Paper

Do we offer. A flashy chromo (or cheap map), with an ill suited paper, will hardly satisfy the farmers of this Coast, whose time is too precious for trifling. To many of you the benefit of a reliable and valuable paper should reach a hundred fold its cost, while to all a poor journal would be dear at any price.

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Agents are Wanted

Who will do more or less active canvassing. To such we will furnish free samples and pay liberally for their services.

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The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

Ask for LEA & PERRINS' Sauce, and see name on wrapper, label, bottle and stopper.

Wholesale and for export by the Proprietors, Worcester; Crosse & Blackwell, London, &c., &c., and by Grocers and Oilmen universally.

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Young Fowls now for sale at reduced prices. Also a few of my imported Fowls in pairs or trios. Send stamp for illustrated circular, containing a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,
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For Sale.

About 200 Head of Dairy Raised Calves,

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The Progeny of the Best Dairy Stock in the State.

Apply to, WM. EVANS,
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MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrate Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to

B. F. CLAYTON, San Jose.
Or
C. J. CLAYTON,
10v7-6m Clayton, Contra Costa Co., Cal.

Breeders' Directory.

Parties desiring to purchase Live-Stock will find in this Directory the Names of some of the most reliable Breeders.

Our Rates.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

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R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

C. COMSTOCK, Sacramento, Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

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CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

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A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petaluma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Aldarneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

BENNETT & PAGE, San Francisco, breeders of Short-Horn Cattle.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., Importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blood Bad French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS. Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

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GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

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DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

Angora Goats and Thoroughbred Cattle.

I will sell at public sale, without reserve, on Friday, September 25th, 1874, at 12 o'clock M., on the State Agricultural Society's Fair Grounds, THIRTY-THREE HEAD OF PURE BRED ANGORA GOATS. Also, one Jersey Bull, one Ayrshire Cow, one two-year-old and two one-year-old Ayrshire Bulls. Pedigrees guaranteed. Terms Cash. ROBT. BECK.
Sacramento, August 24th, 1874. 9v8-td

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, SEPTEMBER 5, 1874. [Number 10.

Mohair.

The Angora goat still has its true friends, though it is not worshiped as a sacred animal, as it was, apparently, a few years since. The delusive form which the subject assumed in its early stages was unfortunate in several respects. As a brief business delusion, it deserves to be classed among the most unreasonable of the hobbies that have run away with our impatient people. The failures growing out of it, it is true, have not been of a disastrous character, any farther than as a waste of energy, and causing discouragement and lack of confidence in new enterprises generally; though this is really in itself a disaster.

It is hardly to be wondered at, from a business standpoint, that the importers and breeders of Angora goats should encourage, or should at least make no effort to dispel the delusion that the possession of an Angora goat would insure a fortune in a few seasons; but sales that impoverish and disgust the buyer are of no profit to the seller, in the end. But the impoverished and disgusted purchasers of Angora goats have but little claims to our sympathy; for they, in their turn, were but pandering to this somewhat trickish delusion. It was from the progeny of the animals, and not their fleece, that owners looked for profit. In many things it is easier to produce than to dispose of the product; and, in the matter of mohair, especially, the services of the manufacturer and the dealer in the raw material are more needed at the present time than those of the breeder. The business is without form and void. Even when mohair becomes a staple product in this country—and this will undoubtedly happen in due time—we must expect fluctuation in prices, to an extent fully as great as in wool; but this uncertainty would be far more satisfactory than the present chaotic state of the business.

In regard to the present surroundings of this product the San José *Mercury*, of Aug. 21st, speaks as follows:

"The present rate of increase of Angora goats on this coast, both in regard to number and grade, indicates that California will soon derive an immense revenue from the sale of mohair, if not from its manufacture either into threads or fabrics, or both. At the present time the huge herds of Landrum & Rogers, of Watsonville, Lewis & McCracken, of this county, together with the smaller flocks scattered here and there over the State, have been brought very near perfection. Indeed, it has been pretty thoroughly demonstrated that the California fleece is superior in quality and heavier per goat than that in the animal's native country. We make this statement from the figures. The Asiatic fleece brings in the European market from 75 cents to one dollar per pound. In 1871 Butterfield & Sons shipped to Philadelphia some 3,000 pounds of fleece taken at random from flocks throughout the State. This consignment was graded by the dealers into five classes and brought the following prices per pound:

1—Fine, not kempy	$1 20
2—Low, " "	1 10
3—Fine, kempy	80
4—Low, "	70
5—Shorts and breech	40

This makes an average price in gold coin here of 85 cents per pound. The following year another shipment was made at the same figures. Since that time the goats have been so much improved by breeding, that kemp is almost unknown, and the fleece takes a much higher grade, the third and fourth class being merged in the first and second."

There are reasons for suspecting that in this, as in some other industrial efforts, we have been the victims, in a degree, to foreign prejudices, and, possibly, of foreign interests. Among the American people there is a lack of mutual confidence and concert of action. The very air we breathe is filled with foreign preferences and prejudices, taking the form of clannishness—depreciating and, indirectly, hindering advancement in industrial, artistic and social matters; and especially pervading American journalism, from our heaviest quarterlies to our lightest dailies. Nothing is considered worthy the commendation of this foreign partiality, only in so far as it approximates the same class of productions "at home." This charge, however true it may be, will probably be considered of too trivial a character to deserve serious notice, being simply irritating; but those who have given the matter due attention declare that the prevalence of this foreign partiality is seriously detrimental to American enterprise. As a people we have been sufficiently willing to accept and apply the benefits of foreign experience; but much that is not at all transplantable has been crowded upon our notice, and we are supposed to be stubborn or stupid for not adopting it. American industries—our farming system, especially—have peculiar wants which cannot be supplied from foreign sources.

We must look out for this undefined form of "foreign intervention" in connection with mohair. Let us cultivate a little clannishness on our part, to protect us against the clannishness of our neighbors. The almost sacred tradition of "skilled foreign labor," and the bugbear of the cheapness of foreign labor, will have to be encountered at every turn. French and English monopolists have done much to retain the manufacture of mohair, and to retard the production and manufacture in this country, by favoring the impression that the processes of manufacture were extremely difficult, and the machinery enormously expensive. Both of these fallacies were practically disproved at the Paris Exposition; where it was demonstrated that the process was not difficult nor the machinery expensive. The cost of spinning machines ranges from $100 to $200, according to the number of spindles; and the double Jacquard loom, the best loom known, manufactured by Willibard Schraue, of Vienna, costs only $200. We should consider that, in the progress of mohair manufacturing in this country, the machinery required would undoubtedly become cheapened and improved by American mechanism.

In the present crude, undefined state of this business, it would not be at all surprising if the quality of the product should deteriorate; and the reputation of California mohair suffer accordingly; but this difficulty can soon be surmounted by a more careful system of breeding the animal and by the judicious assortment of the fleece. An established demand for the raw material is now the great desideratum.



THE CALIFORNIA DEER.

About Deer.

The game laws now permit the killing of deer—if you and your rifle-balls can find them. A member of our editorial corps recently took advantage of a brief vacation to go off on a war of extermination against the deer of California. But the only trophy brought by him on his return to his anxious co-laborers, was a branch of the wild nutmeg tree; bearing among its luxuriant, dark-green foliage, clusters of full grown nuts. This branch of wild nutmegs hanging in the sanctum is supposed to have added spiciness to our paper.

We give on this page a very correct drawing of the California deer—by many called the elk. We are at a loss to conceive how this beautiful animal should be confounded with the clumsy, ill-shaped elk. It differs from the elk in a great many respects, especially in its most striking features. The elk, besides the great hump on the neck, has a much longer head and ears, and heavier horns. The nostrils of the elk also resemble those of the horse; while those of the deer, as will be observed, bear no resemblance to the horse. A most striking peculiarity of the California bucks, and one which has doubtless been observed by hunters, is their savage disposition after being wounded. After being pursued for hours, and arrested at length by a bullet, they turn suddenly upon their pursuers, and make desperate battle. This movement on their part, as may be imagined, generally creates considerable excitement; still, as it is never resorted to until a leaden messenger has been felt, the gallant bearing of the animal is of but short duration. The venison of California is pronounced the finest in the world.

American Material for English Ale.—We learn that a Stockton house has sold a quantity of Chevalier barley at higher figures than wheat brings. The order comes from a brewer in England, with the remark that he has found out how to use our barley; and it is superior to the English Chevalier variety, which has so high a reputation.

A trade in dried potatoes has lately been developed among some Rochester (N.Y.) shippers, about which but little is known. Potatoes are sliced and dried in much the same manner as dried apples. One firm in Rochester has an order for 50,000 lbs. of dried potatoes, as well as for 1,500 bushels of onions dried in much the same manner. They are intended for the navy. A bushel of potatoes dries away to about 10 lbs., and a bushel of onions to about 6 lbs. When ready, they are put into large tin cans holding about 40 lbs., and sealed up the same as oysters.

Raising cork trees seems to be an approaching industry in California. They are said to grow very rapidly among the foothills. At Auburn there are a number of trees three or four years old that have bark thick enough for an ordinary cork.

Prospect for California Tobacco.

The misfortunes of our neighbors in the tobacco crop of the present season are likely to work to our special benefit. Even before the opening of the season active influences were in operation beneficial to our interests. For the last two years production has been discouraged, somewhat, by published statements of the accumulation of tobacco on the hands of holders. The proportion of inferior grades was supposed to be especially large; this phase of the market being particularly effective in bringing down prices.

This was known at the opening of the present season, and somewhat discouraged planting; but it was not supposed that the falling off was so great as it is now ascertained to be. By the agricultural report for July, made up from statistics from all the States, we learn that less than half the usual acreage was set last spring. In Kentucky only about 20 per cent. of the usual acreage was planted. The tobacco acreage of Connecticut is estimated at about 50 per cent. of that last year. It is said that the crops on even this limited acreage do not look favorable.

It is also ascertained that the stock of old tobacco on hand is not as large as was supposed. These facts having been made known, the prices of tobacco are tending upward; and that portion of eastern and southern tobacco growers who have been holding on to their stock, awaiting an advance in price, will probably do well. This favorable change in the tobacco market happens extremely opportunely for California; this season's tobacco acreage being larger than usual. The inherent merits of our tobacco, and the advantages of our curing process, will stand a better chance of being recognized than in ordinary seasons; and we hope to see as great a gain in reputation as in immediate pecuniary profit. Look out for inflation in next year's tobacco acreage.

Sorghum.

According to recent reports of the Agricultural department, the amount of sorghum growing in the several States at the present time, compared with former years, is as follows:

Alabama has increased her acreage 11 per cent.; Minnesota, 9 per cent.; Texas, 6 per cent.; Mississippi and Arkansas, 5 per cent.; Kansas, 1 per cent.; Delaware reports the same acreage as last year. In other States there is a decline, the minimum, 77 per cent., being in Maryland. New England, New York, New Jersey, Pennsylvania, South Carolina, Florida, Louisiana, California and Oregon make no returns of the crop. The condition is one per cent. above average in Texas; full average in Delaware, Michigan and Wisconsin; in the other States it is deficient, Kentucky showing the greatest decline, 43 per cent. below average. Several counties in different parts of the country report a declining interest in sorghum culture. It will be seen that California is among the States that make no returns.

There can be little inducement for introducing the crop here. It cannot compete with our beet crop for sugar making. In those portions of the country where beets cannot be grown to advantage for sugar making, and especially where means are not available for making sugar on a large and expensive scale, sorghum may be grown and converted into syrup, thus forming a cheap substitute for sugar; but the results from its growth in America during the long period of its experimental growth, does not warrant the belief that it will ever become a staple product in any part of the country; least of all in California. We believe, however, that sorghum could be grown to advantage by the farmers here as summer fodder. The mid-summer season in California corresponds with the winter season in the Eastern states, in the difficulty of carrying cattle through in good condition. Sorghum would answer admirably for this purpose.

Cherokee Co., Kansas, has turned out to be a successful cotton field. The present season's growth is estimated at 300 bales.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

HORTICULTURE.

Large Cans for Fruit.

EDITORS PRESS:—Correspondents from different counties complain of the smallness of fruit compared with other years. It may be so in some cold sections, but my experience is quite different. The lower portions of Tuolumne county have an abundance of fruit, of large growth and of superior flavor. In my own small garden the peaches are much larger and finer every way than ever before; the trees breaking down, in some cases, while the fruit is only half grown. Apples are very abundant, and considered larger than usual. In this section of the county fruit is considered far above an average. James Goodwin, of Mountain Pass, informed me that he has orders from some of the principal houses in Stockton for peaches, at five cents, while fruit from the plains can scarcely be given away.

The curled leaf is scarcely known here. Splitting the bark has been practised for many years, and is of advantage in giving strength to the body of the tree, whether the disease is apparent or not. We are now in the midst of putting up fruits in

Kerosene Cans,

Consisting of peaches, pears, plums, etc. Hotels and steamboats would find great advantage in having fruit put up in that way. Five gallons are almost as easy to put up as one, after the can is prepared. Solder is better adapted to rough handling than the common method of waxing; and it is quite convenient to repack for shipping in the old boxes, at a nominal expense. To cleanse the cans free from the taint of the oil seems to be the greatest objection. We have never had any trouble in freeing the cans from every offensive taste, after rinsing well. One pint of vinegar heated in can on top of the stove is sufficient to cleanse every crevice, and render the can as pure and clean as though no oil offensive to taste and smell had ever touched it. We generally put up from 20 to 30 cans; sufficient for one year. Whole pears are put up by cutting a hole sufficient to take in the largest pear, and closing up all holes in the can's end, cutting out a piece of tin somewhat larger than the hole. When full, solder the seams as in smaller holes. When properly canned, the fruit comes out just as fresh and sweet as when put up, though kept for years. Small families can recan and keep recanning. When large cans are opened, one dozen small cans will serve for a number of years. Hotels will use the large cans without that trouble, and as kerosene cans cost so little after being emptied, a great saving may be made in this way, as well as in labor in handling so many small cans to obtain the quantity. A very little practice, and any person of common ingenuity will soon learn to use the soldering iron, and be his or her own tinsmith. I again mention this, as it is now the time for saving fruit for winter use, and as a matter of economy. The comparatively poor are always with us. The plethoric rich require not economical advice. Fruits and flowers grow in the rich man's path throughout the year. Whatever tends to the happiness of many is fulfilling a duty we owe God and our neighbor. Fresh fruit the year round is one of the means of preserving health, which is happiness of itself. This country is doubly blessed in its variety and quality of fruit; and if there were nothing else but fruits, flowers, wheat and mountain water, with California's glorious scenery we should be satisfied to spend our days in the midst of such blessings.

JOHN TAYLOR.

Mount Pleasant, Aug. 23d, 1874.

P. S.—I cannot think that the flower sent you belongs to the hollyhock family, as it has a bulbous root, while the other grows from the seed. I enclose a leaf, as I forgot to do so when I sent the flower. I have drunk "wild coffee," and it appears to be *coffee*. J. T.

Another Daniel Drew.

EDITORS PRESS:—In reading "Daniel Drew" this morning it reminds me that I bought a small farm four years ago, and when I was in the field plowing, a friend called to see me and our talk ran on fruit trees. I said that I was going to set out a large orchard of fall and winter trees. He said "You had better put the money to interest." I said no, I like to see them grow under my care. And now I have as fine a lot of young trees as you can find anywhere. I have 700 apple trees, plums, peaches, currants, blackberries and gooseberries. I sent to Ohio for chestnuts, and they are growing finely. They have as pretty leaves as any I ever saw. So all this is the work of four years; and this fall I shall have a great many apples from my young trees.

SUBSCRIBER.

Alta, Aug. 24th, 1874.

Parasite in Alfalfa.

EDITORS PRESS:—In your issue of last week, a correspondent asks about a plant which has made its appearance in his field of alfalfa. From the description given it is evidently similar to a weed which is known in England as "Dodder;" and, if not the same, yet is, I think, undoubtedly of that family.

The botanical name is *Cuscuta*, natural order *Cuscutaceæ*, of which about 50 species are known, mostly found in the warmer temperate climates. One or two species only are found in England; but they are a great pest in fields of clover, spreading over patches of 30 or 40 feet square, entirely destroying other vegetation. In Germany flax, and in Southern France leguminous plants suffer much from it, which is corroborative of the opinion held by English farmers that they are mostly subject to it when they sow imported clover seed, instead of home-grown. The seed germinates, but the plant soon attaches itself, by small rootlets, to its neighbors; and, the original root dying, becomes parasitical.

Previous to the communication referred to, I was not aware of its existence in California, and am inclined to believe that it has been imported in Chili seed.

In England, where the system of rotary crops prevails, the evil of course only exists for one season; but if—as I presume is the custom here—alfalfa is sown with the idea of its being permanent for some years, the fact of this parasite being allowed to fully mature may be productive of material loss.

Probably there may be some practical English agriculturist in the State who is acquainted with the plant, and with the best method for its eradication. A. T. ELLIOTT.

San Francisco, Aug. 25, 1874.

The Withered Branches.

Referring to the singular blight which has been discovered upon some kinds of fruit trees since the great storm of about six weeks ago, Mr. Shull, of Ilion, writes to the Utica *Herald* as follows:

I send you by this mail branches of the apple and pear tree, withered and dead as you find them, taken from the trees in the village of Mohawk. All through the village the singular phenomenon is presented. The apple and pear trees have isolated branches, varying, say, from three inches to three feet in length, scattered all through many of the trees, some trees containing but a few and others hundreds of those branches. The parts of the trees not affected appear perfectly thrifty—the fruit full size for the time in the season. This state of things was noticeable immediately after the great storm of the 7th of June. I attribute it to the effects of the electricity. The whole locality must have been highly charged to have been so uniformly affected. It is not the effect of a bolt or chain, or the whole of the trees would have been killed. In one case, a small pear tree, standing sheltered by two large cherry trees, at least one-third of all the branches were killed — branches containing small pears, as seen by the sample sent you. The cherry trees were not affected, as I could find. Many of those branches have the appearance of being exposed to a fire. While the whole tree was exposed, certain portions only were injured and killed.

There is much wonderment and speculation as to the cause of the dead branches so suddenly, so mysteriously, and so extensively appearing in the apple and pear trees. I have thought it a proper subject of inquiry, as to the cause, and of its prevalence, and of its local character. It certainly is not caused by insects — it must be atmospheric, according to my belief. A year or two ago, branches of apple trees similarly affected were exhibited at a meeting of the Central New York Farmers' Club, but in that case, I think, no definite conclusion as to the cause was arrived at.

HABITS OF THE CURCULIO.—Prof. Riley, of St. Louis, informs us that the curculio, as a beetle, winters above ground, and seeks shelter under the bark of trees, brush or any other rubbish. The female lives sometimes a year. Its operations upon fruit are mostly performed at night and during the absence of the sun in cloudy days. Hence the most successful jarring is early in the morning and in the evening. The insect always becomes a pupa under ground, and the grub frequently remains in fruit that falls, which should be removed and destroyed. During its beetle-life both sexes feed as long as the weather admits of activity, and they attack pip fruit when stone fruit is not to be had. Jarring should, therefore, be repeated every morning and evening from the time the fruit is the size of a pea till it is ripe. No doubt this is correct in every particular. *Jarring* the trees seems to be the most certain mode of getting rid of this most destructive insect, and the best way to do this, in order that the tree shall not be injured, is by removing a low bough of the tree within an inch or two of the trunk and striking it with a mallet. A friend in Montgomery county, who has adopted the jarring system, informs us that he will have this season a "cartload" of perfect plums. He caught in a sheet at the first jarring fully one hundred and fifty insects, and at the second about fifty. But he did not continue it so frequently as Prof. Riley suggests. It is best to begin operations early and to continue them as long as any of the "little Turks" remain.—*Germantown Telegraph.*

SHORTEN IN.—In nearly every yard and orchard about here may be seen trees breaking down under their weight of fruit. Different varieties require different treatment and one remedy is always sure—picking off by hand so that only what the tree can readily bear up under remains—but this is a tedious job and is seldom attended to. Propping up will sometimes save the tree, but not always, and then the fruit is small and mean when so much fruit is allowed to mature. The best way, to our mind, to treat such trees as show an inclination to shoot out long branches, is, to shorten in every year, and keep new limbs for bearing growing out near the body or stronger branches. The peach and some varieties of the apple, particularly, require severe shortening in every year.—*Foothill Tidings.*

THE lady-bug is one of the husbandman's friends. If Mr. Riley, State Entomologist of Missouri, would be kind enough to inform us how to breed lady-bugs we would soon get rid of the Colorado potato bug, as it is the only insect that we know that feeds on the eggs of this pest. One lady-bug will suck out several hatches of Colorado potato bug eggs in one day. If we had plenty of lady-bugs, they would soon destroy all the embryo Colorado bugs.—*Ex.*

ROSE SLUGS.—These insects are often very troublesome, defeating our efforts to grow fine roses. Powdered sulphur, says a writer in *The Gardener's Monthly*, dusted on the plants when wet, is certain destruction to this pest. Paris green, diluted with thirty times its bulk of flour, is a sure remedy, but prevents the flowers from being ever used for bouquets.

STOCK BREEDERS.

The Short-Horn Controversy.

A sharp controversy is now going on in the English agricultural papers about the respective merits of the Booth and Bates families of Short-horns. Relative thereto, a correspondent of the London *Field* says:

If Short-horn breeding is not to sink into an association of half a score or so of millionaires buying in one another's cattle at fabulous prices to set folks talking, it will be necessary for breeders to look at the pursuit from a wider point of view than that now taken up by purists, and landed by the press. If all that is to be aimed at is obsequiously to copy the herd of some dead breeder who earned a reputation, it would seem more rational to adopt the dead man's method rather than to scramble for what are left of his tools in the condition that he left them. To have a right to public sympathy, it would be necessary to show some benefit accruing to the public from the pursuit. To judge by some recent observations it would seem as if some leading breeders thought the object of breeding was to confine an admirable breed of an animal in as few hands as possible.

Both the two national benefactors—the late Messrs. Bates and Booth—tried with such powers as they had (and these were large) to establish a distinct type of Short-horn. Both succeeded, and the molds they left behind are deservedly much prized. But it should be the object of the admirers of each to reproduce the forms of the animals which won distinction for their original breeder, and not to reproduce pedigrees on paper, varying as little as possible from those which their forerunner left.

It is quite well know that the animals which most resemble the original Duchesses have been found in tribes crossed with Duchess blood, but not of Duchess descent, and that cows reproducing the model of Bracelet and the Blossoms, or the four sister Queens, have occurred at intervals in very obscure families which have had the advantage of crosses of Killerby or Warlaby blood. Such reappearances are more to the credit of the owner than animals which, having a pedigree almost a facsimile of original Bates or Booth pedigrees, are yet weedy or unsightly. Yet the tendency of the recent sales is to encourage young beginners to neglect the former, and to half ruin one another in a frantic effort to restrict the number of the possessors of the latter. It is a matter of common talk that at some not far distant auction the best butchers' beasts have scarcely made butchers' price.

No doubt, for special purposes, "pure" animals have a special value. But it must not be forgotten that the result of "pure" breeding has been that some most valuable families are fewer in numbers now than they were ten years ago. Is this a recommendation to land occupiers to set up for keeping "pure" herds? The object of the land is to feed the people; and the really good stock are they which year by year contribute the largest portion of the best food for English families.

There is a tendency in much that is said and written about Short-horns to obscure the fact that no breed when really in a natural condition, will milk longer, feed quicker, or give more salable carcasses than good Short-horns. The Irish and Scotch farmers (both of whom of late years have bred with greater diligence than their English brethren) have never joined in the hunt after this "pure" will-o'-the-wisp, as we must needs regard it. The English press must encourage the English farmer not to join in flattering the owners of "pure" animals—in the esoteric sense of the word—which produce a good many more paragraphs than beefsteaks.

"Pure" cattle are all very well for the few who can afford to run the long-continued risks which pure breeding involves; and for the fewer still who know how to turn to best account such cattle when they have got them.

SMALL HOGS.—Some sensible feeder of swine writes: "There is not one single advantage to be claimed in large hogs. There never was a monster hog which did not make the man who raised him pay for every pound he weighed. They don't furnish an ounce of meat gratis, but charge full price for every atom of their carcass. When slaughtered, it takes a long time to get one cool to the marrow bone, and when the hams are put in salt it is troublesome to finish them to the center. 400 pounds live weight is as large as hogs should be, in order to make good bacon. Beyond this size there is a loss somewhere—either the feeder, the butcher or consumer is beaten, and as a general thing, every one who has anything to do with the big hog will find, if he observes closely, that they are not so profitable as the smooth, little hog of only 350 pounds weight. Small head, with little, upright ears, and legs and feet delicate to perfection, are marks which indicate the greatest amount of flesh for any given amount of food consumed, and more rapidly draw the attention of the butcher."

CURE FOR THE CATTLE PLAGUE.—The *Mark Lane Express* says that at the time of the cattle plague, a farmer was seized with the strange idea that he was suffering from it. No doctor could persuade him to the contrary. At last one medical man gave him a prescription to take to a chemist. The chemist soon understood the nature of the case, and read aloud the note: "This man has the cattle plague; take him into your back garden and shoot him, in accordance with the act of parliament." The farmer vanished, quite cured.

THE SWINE YARD.

Pig Feeding and Pens.

The superintendent of the Experimental Farm at Madras, in India, gives in his report his plan of caring for his pigs, which has all the advantage of economy, and seems to be best adapted to the nature of the hog. He says:

On the opening of the Model Farm, I erected a number of pig styes in which to feed porkers for sale, and, being anxious to keep down the cost of the buildings as much as possible, did not use asphalte for floors, determining first to test whether the arrangements carried out in the loose box system (which had with cattle produced such good results) would be successful when applied to pigs. The results were so satisfactory that I altogether abandoned the intention of putting down asphalte floors, and have since put all the pigs into loose boxes with ordinary earthen floors. The boxes vary in area from two to four hundred square feet; the former is the size allowed for a litter of young, and the latter for five or six half grown sows or hogs. The roof of the shed is supported on brick and chunam pillars about six feet in hight.

A rail fence about four feet high surrounds the whole building, and the divisions or boxes are formed by partition railings. The floors are sunk one and one-half feet below the level of the surrounding ground. Precautions are taken to prevent the surface water from flowing in, and the eaves of the roof project about two feet so that the roof water falls clear, and does not get into the bedding. At starting, a layer of ashes is spread over the floor of the box, and afterward bedding to the depth of five or six inches. The pigs are then allowed to enter the pens. In the course of a few days the bedding is trodden down to half its former hight, and becomes more or less solid, as the pigs are large or small. It is then only necessary to add a slight surface dressing of bedding when needed.

In this way both the liquid and solid manure is all retained in the straw, and the understratum made into an excellent manure, the surface being as clean looking as could be desired, while there is an entire absence of all smell. I have now for some time watched the habits of the pigs under the old and under the new systems, and most unhesitatingly give the preference to the latter, as under it the pigs are far healthier and much more cleanly, and they are decidedly placed in more favorable circumstances to cultivate cleanly habits than are nine-tenths of the pigs that furnish the prime Irish bacon, so highly esteemed in our home market.

HOW TO ESTIMATE THE WEIGHT OF LIVE HOGS.—The following rule for estimating the weight of live hogs we find in the *National Live Stock Journal*: "From the first 100 pounds deduct 25 pounds from gross; from the second 100 pounds deduct 12½ pounds; from the third 100 pounds deduct 6¼. All over the third 100 is net. Thus, a hog of 300 pounds, live weight, will give 256¼ net weight; and, as a rule, 43¾ pounds should be allowed for shrinkage on every hog of 300 pounds or over. A hog of 100 pounds will net 75 pounds; one of 150 pounds, 118¾; one of 200 pounds 162½; one of 250 pounds 209⅜." This, of course, is only as close an approximation as can be given for the general average of hogs as brought to market. If they are thin there is no more shrinkage; if large and well fatted, and especially if pure bred, they will often shrink even less. We have known instances where the shrinkage amounted to only one-sixteenth of the live weight.

The Horse.

Arab Horse Maxims.

Whoso raiseth and traineth a horse for the Lord is counted in the nnmber of those who give alms day and night, in private as well as in pnblic. He will find his reward. All his sins will be forgiven him, and never will any fear come over him and dishonor his heart.

Let your colt be domesticated and live with you from his tenderest age, and when a horse he will be simple, docile, faithful and inured to hardship and fatigne.

If you wonld have your horse to serve you on the day of trial, if you desire him then to be a horse of truth, make him sober, accustomed to hard work, and inaccessible to fear.

Do not beat your horses, nor speak to them in a loud tone of voice; do not be angry with them, but kindly reprove their faults; they will do better thereafter, for they understand the language of man and its meaning.

If you have a long day's journey before you, spare you horse at the start; let him frequently walk, to recover his wind. Continue this until he has sweated and dried three times, and you may ask of him whatever you please, he will not leave you in difficulty.

Use your horse as you do your leathern bottle; if you open it gently and gradually, you easily control the water within, but if you open it suddenly, the water escapes at once, and nothing remains to qnench your thirst.

Never let your horse run up or down hill, if yon can avoid it. On the contrary slacken your pace. Which do your prefer, was asked of a horse, the ascent or descent? A curse be on their point of meeting! was the answer.

Make your horse work and work again. Inaction and fat are the great peril of a horse, and the main cause of all his vices and diseases.

Observe your horse when he is drinking at a brook. If, in bringing down his head he remain sqnare, without bending his limbs, he possesses sterling qualities 'and all parts of his body are built symmetrically.

Four things he must have broad — front chest, loins and limbs; four things long—neck, breast, fore-arm and croup; and four things short—pasterns, back, ears and tail.

Feed for Work Horses.

Mature timothy and oats are the usual feed for working horses, and they do well upon it. Many substitute meal for oats, in which corn is a large ingredient. There is also a tendency toward using less hay and more strengthening food, as it is held that this gives more life and vigor to the horse. It also seems to wear out the animal the sooner, especially if worked according to his strength. Those who feed hay harvested when well out of blossom, with one feed a day of early-cut clover, or clover and timothy (the proportion of the hay somewhat lessened from the old system of feeding hay plentifully), and sufficient concentrated food, say oats and corn, the oats predominating, seem to prove the best. There will be the necessary strength and activity, with better health and more service. The natural order will not be so far departed from; the tender hay, of which one feed is given, is but in effect a continuance of grass or pastnre to some extent; it has a good inflnence upon the bowels and the general health, which is of such importance that it cannot be ignored without disadvantage. There is also relief from the oppressed condition which the feeding largely of dry, ripe hay induces, and the fat, slnggish habit produced by the large use of corn meal, which, as a summer feed, is also too heating. Oats contribnte to mettle and endurance, yet not in excess. All the desirable points are furnished in this diet, without any bad ones supervening. The matnred hay holds to check the tendency to free bowels, which the cured grass or young clover and the meal are apt to induce. In a word, this diet produces a balance and harmony, the result of which is health, strength and activity. The horses are safe with such a regimen, which includes medicine and food, and is simple withal. It is less expensive, particularly the tender young hay, the properties of which are more available than other dried food. The proportion of this may be increased where the horse is worked less, and thus still further increase the comparative cheapness. Where much work is required, more concentrated food must be given; in such case also less green hay in proportion.

Green hay may be used instead of bran mashes or physic, or turning to grass. It has the effect of keeping the system in a sufficiently free or relaxed condition, promotive of health and strength at the same time; and as I have said, it is cheaper, contains about double the quantity of available nutrition which is found in old or ripe hay, such as is commonly used. The practice of feeding green (early cut) hay to milch cows, sheep and growing stock, is progressing; it is more difficult to do it with horses, especially hard-working horses, as the prejudice is deep and strong. But when it is once fonnd generally that early cut and well cured hay, including clover, has an increase of available nutriment, thus lessening the expense of keeping, less grain and less hay being required, and the health and strength of the animal improved, and when farther, the hay cutter and the wetting of the feed may be mostly or entirely dispensed with—when all this presents itself undeniably, the reform will be effected.—*Country Gentleman.*

Important Veterinary Operation. — Mr. Robert Wood, Lowell, Mass., assisted by Drs. Stickney, Very & Thayer, of Boston, performed a snrgical operation on a colt eight months old—that of removing a fifth leg. The extra leg was firmly attached to the metacarpal bone of the natural leg just below the knee, on the inside, and was perfect in structure, having a perfectly formed metacarpal bone, sesamoids, a perfect fetlock joint, long and short pasterns, coronet, and a well-shaped foot. Also the two sets of tendons, the flexors and extensors, suspensory ligament, blood vessels and nerves, all covered by skin and hair, all of which was successfully removed by the above named gentlemen. The colt is at present doing well, and with every prospect of the leg resuming its normal size and shape. Such a malformation and surgical operation is without a parallel in this country.

Bees.

A Bee Parasite.

I hasten to send you a little insect, apparently a red spider, which I took off one of my black queen bees this afternoon. She had been dethroned to make room for a Ligurian, just sent me, and was released in a queenless hive into which I had introduced her on Saturday last. I opened the hive to-day to find out whether she was alive and well, and found her with this little creature on her back. For a long time I was nnable to remove him, as he was quite indifferent to the pokes I administered with a little piece of grass, and hid himself under her wings; so I was ohliged at last to capture her majesty, and in the safe retreat of my study remove this too faithful attendant with a pair of tweezers. I found only two grubs in the royal cells. Probably the presence of the spider and the cold weather had interfered with breeding.—*Bligh.*

[The insect was sent to an eminent authority connected with the British Museum, who writes: The insect sent is known as the bee-louse of Europe, and in some parts of the Continent is not uncommon; in fact, it is a nuisance, as many as fifty to one hundred being sometimes found on a single bee in Italy, etc. It is a wingless dipteron, allied to the forest-fly, "Hippobosca;" it is named *Braula cœca;* the young are said to be produced in the pupa state; it lives by sucking the bees. No doubt more are to be found in the hive whence the specimen sent was obtained; if so, a specimen or two would be acceptahle for the Museum collection. It is not frequently found in England, except in imported swarms of the Italian bee. —*British Bee Journal.*]

Profit of Seventeen Swarms.—J. P. Moore, Binghampton, N. Y., says: I commenced the season of 1873 with seventeen stocks of bees, having lost four in the spring and sold one. Ten were in fair condition by May 20th; the other seven were much rednced, but, by taking brood from strong ones, I was able to build up five of the weak ones by the time honey commenced to yield. The other two I run for increase and surplus queens, and was able by feeding and using my four hives of empty comh to increase the two to eight full stocks and five half stocks or nuclei. Two of the nuclei died in the winter, and the other three are very weak (I prefer full stocks for winter), and raised ten surplus queens. The fifteen that the boxes were pnt on, were run entirely for box honey, without increase, as we have things so arranged now that when we get a hive filled with brood, in time to put on boxes, we can have them put all their surplns in boxes, if the queen is prolific, without attempting to swarm, and without the trouble of handling the brood. The product of the fifteen stands thus: By returns from honey shipped, 1,864 pounds, at an average of about 27¾ cts., $498.32; honey sold at home, 120 pounds at 17 cts., $19.20; honey reserved for home use, 50 pounds, $8.00; total, $525.25.—*Buffalo Live Stock Journal.*

Eggs of the Bee-Moth.—The eggs of the hee-moth are entirely round and very small, being only abont the eighth of a line in diameter. In the oviducts they are ranged together somewhat in the form of a rosary. They are not developed successively like those of the queen bee, but are found fully formed in the ducts, a few days after the moth emerges from her cocoon. The female deposits them in small parcels or clusters on the combs. If any one wishes to witness the discharge of eggs, he need only seize by the head a female two or three days old, holding it between the finger and thumb. She will instantly protrude her ovipositor, and the eggs may be seen passing along the semi-transparent duct. That the moth does not deposit her eggs in the pollen of flowers, as some imagine, but on the combs in the hive, is very certain. I have repeatedly found little clusters of eggs on combs which I removed out of hives.—*Dr. Donhoff.*

In the province of Silesia 260,000 colonies of bees are kept, representing a capital of more than one million of dollars. These, even in the most unfavorable years, yield a profit of ten per cent.; and in propitions seasons, such as the year 1846 was, the yield was fully 100 per cent., or more than $1,000,000. It is weli ascertained that the whortleberry and buckwheat blossoms are much richer in saccharine juices on the poor soil of Silesia than in more fertile districts.

The Dairy.

Fatten the Old Cows.

These suggestions are made hy the New York *Herald:*

"The best time to begin to fatten old animals is in the latter part of spring or during the former part of summer. At that season of the year, everything is springing into new life. The nutritious grass, the warm and pleasant weather, the cheerful sunshine and the cooling shade, all lend their influence, in one harmonious combination, to revivify and promote the growth, not only of young and healthy animals, but those that have endured the pelting storms and pinching cold of many winters. At that season of the year they begin to improve in flesh, even if their allowance of food is not so abundant as it ought to be. The tender and nutritious grass imparts health and vigor to the animal system, and they commence secreting fat and flesh for future use.

"At such a time, farmers should be active in aiding the work of building up the animal system, which has commenced with renewed energy, by keeping such animals improving in flesh every day until they are ready for the shambles. If they be allowed to stop improving, the proprietor must sustain a loss to a greater or less extent. In case an animal does not receive a full allowance of grass, it should he fed a few pounds of meal or oil-cake daily. A few pounds of meal fed at such a time will increase the amount of fat and flesh far beyond our highest expectations. Old cows should be dried off at once, as they will not fatten much while giving milk. Then, while the warm weather continues, a cow or a bullock should be fed twice a day with meal, in addition to grass and good hay.

"Sheep should receive no less than one pound each daily of Indian corn and oats and barley. If ground into meal, it will be much better than to feed it whole."

Garget in Milch Cows.

The *Country Gentleman* collates the following prescriptions that have been recommended for garget in milch cows. We should advise either 1, 3 or 4 internally, in connection with either 5 or 7 externally:

1. Cut up finely the roots of scoke, *Phytolacca decandra*, or pigeon berry, and give two tablespoonfuls in bran or meal twice a day; then omit the root for the same length of time. Repeat until cured.

2. Give one ounce pulverized saltpeter in a bran mash once a day for two or three days. Repeat as in No. 1.

3. Give seven drops of tincture of aconite, dropped on a piece of bread and fed in a bran mash for two or three days, once each day. Repeat as in No. 1.

4. Give in the same manner as in No. 3, one-half teaspoonful of tincture of aconite root. (This is not the same as the tincture aconite in No. 3.)

5. Linseed oil, one ounce; kerosene, one ounce; tincture of aconite, 25 drops. Rub the bag well with this mixture two or three times a day. Feed roots or bran mashes freely.

6. Muriate of ammonia, three-fourths of an ounce; water, one quart. Wash the bag daily with this, rubbing thoroughly.

7. Sweet oil, two ounces; alcohol, four ounces; aqua ammonia, four ounces; tincture of opium, two ounces. Rub in thoroughly two, three or four times daily.

Butter Inspection.—The New York *Tribune* says: It is proposed to establish a system of butter inspection, npon the same principle that regulates the inspection of flour. It is difficult to see why this should not be carried into operation. At present much poor butter is sold in the market at more than its intrinsic worth because of its name, and much excellent butter is sacrificed for want of a name. This is precisely "what's in a name." But when butter, whether it he "Orange County," or Western," shall be graded No. 1 or No. 2, as the case may be, and is sold upon its actual merits, there will be some encouragement for the dairyman to practice the best methods and turn out the best quality, because he will find that it pays. Just now "reputation is oft got without merit and lost without deserving," in the butter market, as elsewhere.

The cheese-makers of New York State propose to organize themselves into a mutual protection society. The basis is that no cheese shall be sold at less than 12½ cents per pound, and if a member must sell when the market is lower, then either the society or any member will huy it to hold until it will bring that price.

In breeding swine the following principles should be observed: Every individual has its excellences and defects; near relations are likely to have the same excellences and the same defects. By coupling such relations, both excellences and defects are exaggerated and intensified, and the defects may be so intensified as to destroy the utility of the prodnce. Breed together animals of like character. The produce will be like the parents; they will he even and sure. For this reason, keep within the breed.

Roasting Coffee.—A new invention has for its object an improved mode of roasting coffee, and consists of means for roasting coffee by reflection of heat.

The Centennial Buildings.

The following facts concerning the forthcoming Centennial Exhibition are of special interest to those visiting our own Industrial Exhibition.

The estimates vary from $2,871,500 for the temporary indnstrial palace alone, built entirely of combustible materials, and without any permanent memorial hall, np to $10,050,000, which includes a permanent memorial hall, built of iron and brick, with heating apparatus, organ, etc., complete. The Building Committee is of the opinion that it is best to have separate buildings for the Exhibition, and recommends the erection of the following structures: The Art Gallery, covering one and a half acres; the Grand Pavilion or main hall, covering thirty-six acres; the machinery hall, covering ten acres; the agricultural hall, covering five acres; the conservatory and, from time to time, smaller buildings as they are needed. The committee reports that the Grand Pavilion, which is a temporary construction, must cover a minimum of thirty acres of ground, and be capable of extension, if required, as the work progresses. That it must be rectangular in plan and without curved corridors, and that no galleries must be constructed for exhibition purposes proper; but small balconies may be judiciously introduced for observation. That the interior arrangement should allow vistas and attractive promenades, and afford opportunities for the convenient assembling of a large number of people, as at Sydenham Palace, and in the most successful English exhibition buildings. That in the construction the reduplication of parts should be an essential feature; that iron and brick should be the principal parts of the structure, in order to afford a reasonable protection against fire.

The plan of the mammoth building is rectangular, being 2,040 feet long by 680 feet wide, with greater width at the center and ends up to 952 feet. The governing dimension on the plan is a square or pavilion measuring 136 feet on each side. The main parallelogram forming the building is therefore fifteen of these pavilions long, and five pavilions wide, an area equal to 31.84 acres.

These particulars will give a faint idea of the vastness of the magnficent structures. The Mechanics' Pavilion here, in San Francisco, covers but four and a half acres, and yet we look upon it as something colossal. It would barely stop a hole in the big Centennial shanty.

Colorado Coal.

In a recent issue of the Colorado Springs *Gazette*, we find some interesting details of an exploring expedition recently made by the *Gazette* editor, in company with Prof. Hayden, into the coal beds near Colorado Springs. The *Gazette* says:

It is manifest that the supply may be reckoned by the millions of tons, the croppings having been traced for upwards of three miles, and drifts and tunnels having been run in upon the lowest and principal vein fully that distance apart. Three veins have been discovered. The first is comparatively unimportant. The second averages abont six feet in thickness; on this a tunnel has been run in for over three hnndred feet, and a shaft has also been sunk to it. The third vein is from eight to nine feet thick; a shaft has also been sunk to this vein, and, as the quality of the coal in it is superior to that in the other veins, and it is altogether free free from "dead matter," it is pr posed to work the third vein during the coming winter.

After a careful examination of the ground, and the whole of the openings which have been made, Prof. Hayden said there could be no doubt that the coal corresponded with the Marshall coal in the North, and the Cañon City coal in the South, and he thought it not improbable that, as it was developed, it would equal in quality the latter. He had no idea that such an extensive coal-field existed in this part of Colorado, and thonght its discovery was of the greatest importance. The quality of the coal, he said, is fully equal to that of the Evanston coal, which supplies the Union Pacific railway and the whole of the Pacific slope; and he was of the opinion that its existence, in the position which it occnpies, must certainly, ere long, bring to Colorado Springs an Eastern railway connection, for the K. P. must, without doubt, go somewhere for coal.

Non-Poisonous Fly Paper.—Put one ponnd quassia wood in five pounds water, and let it stand over night in a warm place. The decoction is then hoiled down to ahout two pounds. The wood is afterward put in two pounds fresh water, and hoiled down to one pound. The two decoctions are mixed, one-half to three-fourths pound of sugar added, and paper passed through it, drained and hnng on lines to dry. Ordinary unsized blotting paper is usually employed, and may have something printed npon it before saturation with the quassia solution.—*Jour. of Chem.*

Liquid India Ink.—When India ink is kept in a liquid state it soon hccomes worthless, from the fact that the gelatin which it contains decomposes. A little glycerine added acts as a preservative, and causes the ink to flow well. Too much glycerine will prevent the ink from drying, and in this case it is, of course, easily blotched or smeared.

Patrons of Husbandry.

Patrons who are subscribers to the RURAL PRESS should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

EDITORS RURAL PRESS:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. HAMILTON.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well as Treasurer's reports.

J. M. HAMILTON.

State Grange Agency.

Patrons will please take notice that Bro. I. G. Gardner, State Grange Agent, the Farmers' Mutual Fire Insurance Company and the State Grange Secretary, Bro. W. H. Baxter, have removed to No. 6 Leidesdorff street, south side California street, next to Merchants' Exchange - rear of Grangers' Bank of California (415 California street). sep5-tf

List of Organizing Deputies.

COUNTY	DEPUTY.	POST OFFICE.
Alameda.	A. T. Dewey.	Oakland or San F'co.
Butte.	Wm. M. Thorp.	Chico.
Butte.	G. W. Colby.	Nord.
Colusa.	J. J. Hicok.	Grand Island.
Contra Costa.	R. G. Dean.	Antioch.
Inyo.	T. J. Farbee.	Bishop's Creek, Inyo.
Lake.	J. M. Hamilton.	Guenoc.
Los Angeles.	Thos. A. Garey.	Los Angeles.
Merced.	H. B. Jolley.	Merced City.
Mono.	T. J. Farbee.	Bishop's Creek, Inyo.
Monterey.	J. D. Fowler.	Hollister.
Napa.	W. H. Baxter, (Gen'l Dep.)	San Francisco
Placer.	A. D. Neher.	Roseville.
Sacramento.	W. S. Manlove.	Sacramento.
San Francisco.	I. G. Gardner.	
San Francisco.	John Riegler.	General Deputy.
San Joaquin.	E. B. Stiles.	Ellis.
San Luis Obispo.	A. J. Mothersead.	Moro.
San Mateo.	B. V. Weeks.	Pescadero.
Santa Clara.	W. G. Henning.	San Jose.
Solano.	R. C. Haile.	Suisun.
Solano.	J. C. Merryfield.	Dixon.
Sonoma.	Geo. W. Davis.	Santa Rosa.
Sonoma.	A. B. Nally.	Windsor.
Stanislaus.	J. D. Spencer.	Modesto.
Tulare.	M. S. Babcock.	Kingston, Fresno Co.
Yolo.	Wm. M. Jackson.	Woodland.
Los Angeles.	Thos. A. Garey.	Los Angeles.
Santa Barbara.	O. L. Abbott.	Santa Barbara.
Ventura.	Milton Wasson.	San Buenaventura.

Farmers desiring to organize Granges, can apply to J. M. Hamilton, (W. Master), Guenoc, Lake Co.; W. H. Baxter, (W. Sec'y), 320 California St., S. F.; J. W. A. Wright, (W. Lecturer), Borden, Fresno Co.; or to the nearest Deputy to their locality. Thos. H. Merry, (W. Ex-Lecturer) of Healdsburg, is also deputized to organize Granges.

California District and County Councils.

ALAMEDA COUNTY—JOEL RUSSELL, Haywood, M.; T. HELLAR, S.
LOS ANGELES AND SAN BERNARDINO DISTRICT—T. A. GAREY, Los Angeles, M.; J. F. MARQUIS, Anaheim, S.
MONTEREY AND SANTA CRUZ DISTRICT—J. R. HEBBRON, M.; A. F. RICHARDSON, S.
NAPA DISTRICT—J. D. BLANCHAR, M.; H. W. HASKELL, S.
SACRAMENTO, EL DORADO AND PLACER DISTRICT—Officers not reported.
SAN LUIS OBISPO COUNTY—A. J. MOTHERSHEAD, M.; J. M MANNON, S.
SANTA CLARA COUNTY—H. M. LEONARD, M.; I. A. WILCOX S. Regular meetings every three months, alternately at Santa Clara and San Jose.
SANTA BARBARA AND SAN LUIS OBISPO DISTRICT—Officers not reported.
SOLANO COUNTY-J. B. CARRINGTON, M.; J. M. JONES, S.
SONOMA COUNTY— MCPHERSON, M.; J. A. O'BRIEN, S.
STANISLAUS COUNTY—R. R. WARDER, M.; VITAL E. BANGS, S.
TULARE COUNTY—J. M. Graves, M.; F. L. JEFFERDS, S.
VENTURA COUNTY COUNCIL.—MILTON WASON, M.; L. B. HIGGINS, Saticoy, sec'y.
WEST SAN JOAQUIN DISTRICT, (Merced, San Joaquin and Stanislaus counties).—W. J. MILLER Oristimba, M.; THOMAS A. CHAPMAN, Oristimba, S.

California State Grange.

OFFICERS:

Master—J. M. HAMILTON, Guenoc, Lake Co.
Overseer—O. L. ABBOTT, Santa Barbara.
Lecturer—J. W. A. WRIGHT, Borden, Fresno Co.
Steward—N. L. ALLEN, Salinas, Montsrey Co.
Assistant Steward—WM. M. JACKSON, Woodland, Yolo Co.
Chaplain—I. G. GARDNER, Grayson.
Treasurer—W. A. FISHER, Napa City, Napa Co.
Secretary—W. H. BAXTER, 320 California street, S. F.
Gate Keeper—R. R. WARDER, Watsford, Stanislaus Co.
Ceres—MRS. G. W. DAVIS, Saota Rosa, Sonoma Co.
Pomona—MRS. S. C. BAXTER, Napa City, Napa Co.
Flora—MRS. R. S. HEGELER, Bodsga, Sonoma Co
Lady Assistant Steward—Mrs. S. M. GARDNER, Grayson, Stanislaus Co.

Executive Committee:

J. M. HAMILTON, W. M., Chairman, of Guenoc, Lake Co
I. G. GARDNER, Grayson, Stanislaus Co
J. C. MERRYFIELD, Dixon, Solano Co.
H. B. JOLLY, Merced, Merced Co.
THOS. A. GAREY, Los Angeles, Los Angeles Co.
G. W. COLBY, Nord, Butte Co.
A. B. NALLY, Windsor, Sonoma Co.

California Subordinate Granges.

[This list contains the names of Masters and Secretaries so far as reported to us, elected to serve during the year 1874. Secretaries and others will greatly oblige us by making needful corrections.]

ALAMEDA COUNTY.
CENTERVILLE, Cent.: JAS. SINN, M.; J. L. BEARD, S.
EDEN, Hayward's: THOS. HELLAR, M.; WM PEARCE, S.
LIVERMORE, Liv. Valley: D. INMAN-F. R. FABSETT.
SUNOL, Snool Stat'n: E. M. CARR, M.; S. W. MILLARD, S.
TEMESCAL, Oakland: E. S. CARR, M.; JOHN COLLINS, S.
BUTTE COUNTY.
CHICO, Chico: E. HALLETT, M.; H. W. BARNES, S.
EVENING STAR, Bigg's Station: E. W. S WOODS, M.; C. F. SUTLEN, S.
NORD, P. O. Nord: G. W. COLBY, M.; PETER KERN, S.
CALAVERAS COUNTY.
CALAVERAS, Jenny Lind: M. F. GREGORY-A. MILES.
COLUSA COUNTY.
ANTELOPE VALLEY: H. A. LOGAN-A. T. WELTON.
CENTER, Colusa: J. P. KIMBRELL-W. G. SAUNDERS.
COLUSA, Colusa: W. K. ESTELL, M.; R. JONES, S.
FRESHWATER, Colusa: P. S. PERDUE-R. A. WILSEY.
FUNK SLOUGH, Colusa: E. C. HUNTER-J. G. WOLFE.
GRAND ISLAND: WM. OGDEN, M.; H. DUFFILLD, S.
NEWVILLE: B. N. SCRIBNER, M.; S. OSBORNE, S.
PLAZA, Jacinto: F. C. GRAVES, M.; M. KENDRICK, S.
PRINCETON, Princeton: A. D. LOGAN, M.; R. R. RUSH, S.
SPRING VALLEY: D. H. ARNOLD, M.; L. T. HAYMAN, S.
UNION, Princeton: J. F. GARR, M.; W. W. DOLLINGS, S.
WILLOWS, Princeton: J. W. ZUMWALT-G. T. HICKLIN.
CONTRA COSTA COUNTY.
ANTIOCH, Antioch: M. A. WALTON, M.; J. D. DARBY, S.
DANVILLE, Danville: G. WOOD, M.; JOHN B. SYDNOR, S.
POINT OF TIMBER: R. G. DEAN, M.; J. E. W. CAREY, S.
WALNUT CREEK, Walnut Creek: NATHANIEL JONES, M.; WM. K. DALY, S.
EL DORADO COUNTY.
CLARKSVILLE, Clarksville: K. T. MILLS-I. MALTBY.
EL DORADO, El Dorado: C. G. CARPENTER, M.; J. M B. WEATHERWAX, S.
PILOT HILL, Pilot Hill: P. D BROWN-A. J. BAYLEY.
SUTTER MILL, Coloma: A. J. CHRISTIE-HENRY MAHLER.
FRESNO COUNTY.
ADAMS, Big Dry Creek: T. P. NELSON, M.; T. WYATT, S.
BORDEN, Borden: J. W. A. WRIGHT, M.; J. FONTAINE, S.
FRESNO, Fresno City: D. C. LIBBY, M.; F. DUSY, S.
GARRETSON, King's River: W. J. HUTCHINSON, M.; W. W. PHILLIPS, S.
SYCAMORE: A. C. BRADFORD, M.; J. A. ALLEN, S.
HUMBOLDT COUNTY.
ELK RIVER, Eureka: THEODORE MEYER, M.; D. A. DE-MERRITT, S.
FERNDALE, Ferndale: F. Z. BOYNTON-J. A. DAVENPORT.
KIWELAITAH, Arcata: H. W. ARBOGAST, M.; C. DANIELS, S.
MATTOLE, Petrolia: S. GOFF, M.; D. J. JOHNSON, S.
ROHNERVILLE, Rohnerville: H. S CASE-S. STRONG.
TABLE BLUFF: J. SAWYER, M.; B. H. C. POLLARD, S.
INYO COUNTY.
BISHOP'S CREEK: T. J. FURBEE, M.; W. T. WISWALL, S.
INDEPENDENCE: JOSIAH EARL, M.; J. B. WHITE, S.
LONE PINE: C. L. JACKSON, M.; R. A. LOOMIS, S.
KERN COUNTY.
BAKERSFIELD: S JEWETT, M.; JEROME TROY, S.
CUMMINGS' VALLEY, Tehaichipa: GEO. W. THOMPSON, M.; T. M. YATES, S.
LINN'S VALLEY, Glenville: A. B. DU BRUTZ, M.; S. E. REED, S.
NEW RIVER, Bakersfield: J. G. DAWES, M.; J. DIXON, S.
PANAMA, Bakersfield: H. D. ROBB, M.; J. F. GORDON, S.
RISING STAR, Panoche: C. VALPEY-J. W. CRAYCROFT.
TEHAICHIPA, Tehaichipa: J. NORBOE, M.; J. PREWETT, S.
WELDON, Weldon: R. T. MELVIN, M.; J. T. H. GRAY, S.
LAKE COUNTY.
GUENOC, Guenoc: H. A. OLIVER, M.; A. A. RITCHIE, S.
KELSEYVILLE: D. P. SHATTUCK, M.; T. ORMISTON, S.
LAKEPORT, Lakeport: C. CUTLER, M.; N. PHELAN, S.
LOWER LAKE, Lower Lake: A. E. NOEL-G. H. SNOW.
UPPER LAKE: D. V. THOMPSON, M.; D. Q. MCCARTY, S.
LOS ANGELES COUNTY.
ALLIANCE, El Monte: S. S. REEVES-J. W. MARSHALL.
AZUSA, El Monte: W. W. MAXEY, M.; J. C. PRESTON, S.
COMPTON, Compton: C. W. COTTREN, M.; A. F. COTTREN, S.
EL MONTE, Los Angeles: G. C. GIBBS-J. H. GRAY.
ENTERPRISE, Los Angeles: A. M. SOUTHWORTH, M.; W. T. HENDERSON, S.
EUREKA, Spadra: C. BURDICK, M.; P. C. TONNER, S.
FAIRVIEW, Anaheim: E. EVEY, M.; J. M. GUINN, S.
FLORENCE, Los Angeles: J. RUSSELL, M.; W. PORTER, S.
FRUITLAND, Santa Ana: N. O STAFFORD-G. L. RUSSELL.
LOS ANGELES: T. A. GAREY, M.; T. D. HANCOCK, S.
LOS NIETOS: J. F. MARQUIS, M.; W. S. REAVIS, S.
NEW RIVER, Los Nietos: W. NEWTON, M.; S. G. BAKER, S.
ORANGE, Orange: J. BEACH, M.; J W. ANDERSON, S.
RINCON: F. M. SLAUGHTER-JOHN TAYLOR.
SILVER, Los Nietos: H. L. MONTGOMERY, M.; W. P. MCDONALD, S.
SPADRA, Spadra: A. T. CURRIER, M.; JOS. WRIGHT, S.
VINELAND, Tustin City: DR. A. B. HAYWOOD, M.; R. L. FREEMAN, S.
WESTMINISTER, Anah'm: M. B. CRAIG-W. F. POOR.
MARIN COUNTY.
NICASIO, Nicasio: H. F. TAFT, M.; J. W. NOBLE, S.
POINT REYES: N. H. STINSON, M.; A. H. STINSON, S.
TOMALES: WM VANDERBILT, M.; R. H. PRINCE, S.
MENDOCINO COUNTY.
CAHTO, Cahto: R. M. WILSON, M.; J. P. SIMPSON, S.
LITTLE LAKE: B. G. MAST, M.; W. A. WRIGHT, S.
MANCHESTER: JOSEPH WOODEN, M.; B. F. MCCLURE, S.
POMO, Pomo: J. MEWHINNEY, M.; GEO. B. NICHOLS, S.
POTTER VALLEY: L. A. PRESTON, M.; MRS. A. H. SLINGERLAND, S.
ROUND VALLEY, Covelo: P. HANDY-J. A. CRAWFORD.
SANEL, Sagel: ALEX. MARSHALL, M.; JOS. A. KNOX, S.
UKIAH: W. D. WHITE, M.; A. O. CARPENTER, S.
MERCED COUNTY.
BADGER FLAT, Kreyenhagen's: A. P. MERRITT, M.; A. F. FOWLER, S.
COTTONWOOD: J. L. CRITTENDEN, M.; J. M. DALEY, S.
HOPETON, Hopeton: JOHN RUDDLE, M.; T. EAGLESON, S.
LOS BANOS, Kreyenhagen's: WM. M. VINEY, M.; A. MCGLASHAN, S.
MERCED: W. E. ELLIOT, M.; F. E. TADLOCK, JR., S.
PLANSBURG: P. Y. WELCH, M.; T. J. E. WILCOX, S.
SNELLING, Snelling: D. YEISER M.; W. L. HAMLIN, S
MONTEREY COUNTY.
HOLLISTER: M. POMEROY, M.; WM. H. OLIVER, S.
MORNING STAR, Castroville: C. E. WILLIAMS, M.; F. BLAKIE, S.
PAJARO, P. O. Watsonville, Santa Cruz Co.: D. M. CLOUGH, M.; G. W. ROADHOUSE, S.
SALINAS: C. S. ABBOTT, M; CLARA WESTLAKE, S.
NAPA COUNTY.
BERRYESSA, Mooticello: J. W. SMITTLE-O. SCHETTER.
CALISTOGA, Calistoga: J. N. BENNETT-L. H. HOPKINS.
NAPA, Napa City: J. M. THOMPSON, M.; MANUEL EYRE, S.
POPE VALLEY: J. A. VAN ARSDALE, M.; C. A. BOOTH, S.
RUTHERFORD, Yountville: G. S. BURREGE-H. W. CRABB.
ST. HELENA: J. LLEWELLYN, M.; J. L. EDWARDS, S.
YOUNTVILLE: J. M. MAYFIELD, M.; FRANK GRIFFIN, S.
PLACER COUNTY.
LINCOLN: M. WALDRON, M.; J. S. MARRINER, S.
ROSEVILLE, Roseville: A. D. NEHR, M.; I. N. NEHR, S.
SHERIDAN, Sheridan: D. H. LONG, M.; S. J. LEWIS, S.
SACRAMENTO COUNTY.
AMERICAN RIVER, Patterson: E. G. MORTON, SR., M.; CYRUS WILSON, S.
COSUMNES, Sheldon: J. A. ELDER, M.; J. H. ATKINS, S.
ELK GROVE: OBADIAH S. FREEMAN, M.; DELOS GAGE, S.
ENTERPRISE, Brighton: J. M. BELL, M.; M. TOOMEY, S.
FLORIN: CALEB ARNOLD, M.; WM SCHOLEFIELD, S.
FRANKLIN: AMOS ADAMS, M.; P. R. BECKLEY, S.
GALT, Galt: J. C. SAWYER, M.; J. L. FIFIELD, S.
GEORGIANA, Rio Vista: F. M. KITTUELL-G. A. KNOTT.
SACRAMENTO: W. S. MANLOVE, M.; A. S. GREENLAW, S.
SHERMAN ISLAND, Emmaton: J. M. UPHAM, M.; W. M. ROBBINS, S.
WALNUT GROVE: SOLOMON RUNYON-J. V. PRATHER.
SAN BENITO COUNTY.
MOUNTAIN, San Benito: S. KENNEDY-J. W. MATHEWS
SAN BERNARDINO COUNTY.
RIVERSIDE, Riverside: E. G. BROWN-G. W. GARCELON.
SAN BERNARDINO, San Bernardino: R. SHELTON, M.; J. BRODHURST, S.
SAN JOAQUIN COUNTY.
ATLANTA, Morano: W. J. CAMPBELL-MRS. J. W. MOORE.
CASTORIA, Lathrop: H. W. COWELL, M.; J. STRAHAN, S.
COLLEGEVILLE, Colville: A. MAYBERRY-J. C. MCINTOSH.
ELL OF, Elliot: HENRY H. WEST, M.; N. S. MISINER, S.
FARMINGTON, Farmington: J. M. GROVES-E. O. LONG.
LIBERTY, Acampo: JUSTUS SCHOMP, M.; J. J. EMSLIE, S.
LINDEN, Linden: JOHN WASLEY, M.; JAMES WASLEY, S.
LOCKEFORD, Lockford: G. C. HOLMAN-S. S. STEWART.
LODI, Lodi: J. W. KEADNY, M.; MRS. N. CROUCH, S.
RUSTIC, Lathrop: J A. SHEPHERD, M.; H. MOORE, S.
STOCKTON, Stockton: W. L. OVERHISER-W. G. PHELPS
WEST SAN JOAQUIN, Ellis: M. LAMMERS-G. E. MCSTAY.
WILDWOOD, Wildwood School House: JOS. LEIGHTON, M.; A. B. MUNSON, S.
WOODBRIDGE, Woodbridge: J. L. HUTSON-A. S. THOMAS.
SAN LUIS OBISPO COUNTY.
ARROYO GRANDE, Arroyo Grande: W. H. NELSON, M.; D. F. NEWSOM, S.
CAMBRIA, Cambria: C. H. IVINS, M.; H. OLMSTEAD, S.
MORO CITY, Moro: A. J. MOTHERSHEAD-H. Y. STANLEY.
OLD CREEK, Old Creek: ISAAC FLOOD-R. M. PRESTON.
PASO ROBLES, Paso Robles: H. W. RHYNE-J. P. MOODY.
SAN LUIS OBISPO, San Luis Obispo: WM. JACKSON, M.; E. L. REED, S.
SUMMIT, San Marcos: J. V. N. YOUNG-A. T. FOSTER.
SAN MATEO COUNTY.
LA HONDA, La Honda: M. WOODRAMS, M.; W. A. SAUNDERS, S.
OCEAN VIEW, Ocean View: I. G. KNOWLES-E. ROBSON.
PESCADERO, Pescadero: B. V. WEEKS-H. B. SPRAGUE.
SAN MATEO: A. F. GREEN, M.; W. H. LAWRENCE, S.
SANTA BARBARA COUNTY.
CARPENTERIA, Carpenteria: O. N. CADWELL, M.; G. E. THURMAND, S.
CONFIDENCE, Guadaloupe, A. COPELAND-J. T. AUSTIN.
SANTA BARBARA, Santa Barb'a: O.L. ABBOTT, M.; VIRGINIA F. RUSSELL, S.
SANTA MARIA, Suey Station: J. MILLER-M. D. MILLER.
SANTA CLARA COUNTY.
GILROY, Gilroy: W. Z. ANGENEY, M.; H. COFFIN, S.
MAYFIELD, Mayfield: F. W. WEISHAAR-J. W. PITMAN.
SAN JOSE, San Jose: WM. ERKSON, M.; MISS JETTORA WATKINS, S.
SANTA CLARA: H. M LEONARD, M.; I. A. WILCOX, S.
SARATOGA: F. DRESSER, M.; MISS JENNIE FARWELL, S.
SANTA CRUZ COUNTY.
BEN LOMOND, Santa Cruz: H. H. BUCKLES-C. CRAORILL.
SANTA CRUZ: G. C. WARDWELL, M.; J. W. MORGAN, S.
WATSONVILLE: J. MCCOLLIN-A. F. RICHARDSON.
SHASTA COUNTY
COTTONWOOD: G. G. KIMBALL, M.; JOHN BADRY, S
MILLVILLE, Millville: E. WAGONER-G. W. WELCH.
READING: J. F. DINSMORE, M.; S. J. R. GILBERT, S.
SISKIYOU COUNTY.
ÆTNA: JOHN MCBRIDE-J. MCCONAUGHTY.
FORT JONES, Fort Jones: J. S. MATTHEWS-J. W. TUTTLE.
MOUNT BOLIVAR, Callahan's Ranch: R. M HAYDEN-J. A. COLE.
SOLANO COUNTY.
BINGHAMPTON: A. BENNETT, M.; E. A. BEARDSLEY, S.
DENVERTON: J. B. CARRINGTON M.; G. C. ARNOLD, S.
DIXON: J. C. MERRYFIELD, M.; B. F. KELLY, S.
ELMIRA: J. A. CLARK, M.; M. D. COOPER, S.
MONTEZUMA, Collinsville: T. HOOPER, M.; C. K. MARSHALL, S.
RIO VISTA: A. B. ALSIP, M.; J. H. GARDNER, S.
ROCKVILLE, Cordelia: W. A. LATTIN-J. R. MORRIS.
SUISUN VALLEY: J. M. LEMMON, M.; A. T. HATCH, S.
VACAVILLE: E. R. THUEBUR, M.; OSCAR DOBBINS, S.
VALLEJO: G. C. PEARSON, M.; CHAS. B. DEMINO, S.
SONOMA COUNTY.
BENNETT VALLEY, S'ta Rosa: I. DE TURK-J. H. PLANK.
BLOOMFIELD: WM. H. WHITE, M.; A. B. GLOVER, S.
BODEGA Bodega: E. S. PIUNE, M.; J. WILKINSON, S.
CLOVERDALE: CHAS. H. COOLEY, M.; J. B. COOLEY, S.
GEYSERVILLE: C. M. BOSWORTH, M.; R. R. LEIGH, S.
HEALDSBURG: C. ALEXANDER, M.; W. N. GLADDEN, S.
PETALUMA: L. W. WALKER, M.; D. G. HEALD, S.
SANTA ROSA: GEO. W. DAVIS, M.; J. A. OBREEN, S.
SEBASTOPOL: M. C. HICKS, M.; W. J HUNT, S.
SONOMA: WM. MCP HILL, M.; W. A. BERRY, S.
TWO ROCK: S. Q. BARLOW, M.; HOWARD ANDREWS, S.
WINDSOR: A. B. NALTEY, M.; J. H. MCCLELLAND, S.
STANISLAUS COUNTY.
BONITA, Crow's L'd'g.: J W. TREADWELL-A. B. CROOK.
CERES: W. B. HARP, M.; C. N. WHITMORE, S.
GRAYSON, Grayson: T C. BROWN, M.; A. C. LANDER, S.
OAK DALE: A. S. EMERY, M.; C. B. INGALLS, S.
ORISTIMBA, Hill's Ferry: W. J. MILLER-E. H. ROBISON.
SALIDA, Modesto: B. F. PARKES, M.; A. H. ELMORE, S.
STANISLAUS, Modesto: J. D. SPENCER-V. E. BANGS, S.
TURLOCK: A. S. FULKERTH, M.; W. S. ROBINSON, S.
WATERFORD: R. R. WARDER, M.; W. C. COLLINS, S.
SUTTER COUNTY.
SOUTH SUTTER, Pleasant Grove: THOS. BOYD, M.; ALEX. DONALDSON, S.
SUTTER, Meridian: W. C. SMITH, M.; J M. GLADDEN, S.
YUBA CITY: GEO. OHLEYER M.; S. R. CHANDLER, S.
TEHAMA COUNTY
FARMINGTON: ADDISON J. LOOMIS, M.; S. H. LOOMIS, S.
NEW SALEM, Paskento: O. HARRIS-J. R. WHITLOCK,
RED BLUFF: R. H. BLOSSOM, M.; C. E. FONDA, S.
TULARE COUNTY.
CHRISTMAS, Visalia: A. B. COREY, M.; W. H. STUART, S.
DEEP CREEK, Farmersville: W. G. PENNEBAKER, M.; F. G. JEFFERDS.
FRANKLIN, Kingston: F. WYRUCK-P. A. KANAWYER.
LAKE, Kingston: M. S. BABCOCK, M.; J. S. ROBINSON, S.
TULARE: D. E. WILSON, M.; VICTORIA WRIGHT, S.
TULE RIVER, Porterville: G. A. WILLIAMSON, M.; N. T. BLAIR, S.
VISALIA, Visalia: T. FOWLER, M.; J O. BLAKELEY, S.
WOODVILLE: J. A. SLOVER, M.; J. STEWART, S.
TUOLUMNE COUNTY.
SONORA, Sonora: S. S. TURNER, M.; R. F. WILLIAMS, S.
VENTURA COUNTY.
OJAI, San Buenaventura: C. E. SOULE, M.; J. HOBART, S.
PLEASANT VALLEY: D. RONDEBUSH-P. BROWNING.
SAN PEDRO, San Buenaventura: J. Y. SAVIERS, M.; D. D DENURE, S.
SATICOY: MILTON WASON, M.; E. A. DUVAL, S.
SESPE, San Buenaventura: S. A GUIBERSON, M.; THOS. MARPLE, S.
VENTURA, San Buenaventura: J. WILLETT, M.; CHAS. PREBBLE, S.
YOLO COUNTY.
ANTELOPE: W. J. CLARK, M.; C. L. N. VAUGHN, S.
BUCKEYE, Buckeye: WM. SIMS, M.; L. MOODY, S.
CACHE CREEK: D. B. HURLBURT, M.; L. D. STEPHENS, S.
CAPAY VALLEY: R. R. DARBY, M.; P. M. SAVAGE, S.
DAVISVILLE: CHAS. E. GREEN, M.; JOHN KRIMMER, S.
HUNGRY HOLLOW, Yolo: G. L. PARKER-O. PERKINS.
WEST GRAFTON, Yolo: A. W. MORRIS-G. W. PARES.
YOLO, Woodland: J. A. Hutton, M.; D. SCHINDLER, S.
YUBA COUNTY.
MARYSVILLE: C. G. BOCKIUS, M.; JAS. M. CUTTS, S.

Nevada Subordinate Granges.

RENO, Reno, Nev.: A. J. HATCH, M.; R. H. KINNEY, S.
EAGLE VALLEY: G. W. CHEDIG-O. A. F. GILBERT, S
CARSON VALLEY, Genoa: R. J. LIVINGSTON-J. S. CHILD.
WASHOE VALLEY, Franktown: ELIAS OWENS, M.; G. D. WINTERS, S.

☞ Deputies who organize new Granges are requested to send the list of officers, and the names of all charter members, with other facts of interest, for free publication in the RURAL PRESS, as early as possible.

The Grangers and the Railroads.

The following from the Aurora *Herald* says it all in a few words: There seems to be an opinion prevalent that the Grangers are opposed to railroads. There could nothing be further from the truth. Farmers are in favor of railroads, but would use them for the same purpose that they use wagon roads, namely—to transport their produce and themselves—not to make their laws, bribe their Legislatures, nor to disobey laws when made, nor to combine to resist the authority of the people, nor to control their courts. Neither do they want them to double or triple the number of the shares of stock, and demand ten per cent. on the whole amount, to be paid from the pockets of the farmers who raise the grain and stock which are transported over the road. It is because the railroads have been guilty of all these things that the farmers have inaugurated a rebellion, and propose to bring railroads back to their original purposes — to transport produce to market and return merchandise cheaper than this work can be done by horses—as much cheaper as steam power is cheaper than horse power. The farmers have always welcomed the railroads; they have given up their farms to permit railroads to be built through the most valuable portion of them; they have paid taxes on bonds voted to aid in their construction; and now that the roads have fallen into the hands of foreign capitalists, they ask that their rights be considered. Having made these sacrifices to secure the roads, they ask that the roads shall be used for their benefit, by transporting freight at reasonable rates, taking all these things into consideration. They are willing that, after paying running expenses, there should be profits enough to pay a fair interest on the amount it would actually cost to build the road now; but they are not willing that roads should pay ten per cent. on three or four times their actual value, by charging enormous tariffs on their grain, stock and lumber.

RAILROAD VS. GRANGE.—It is a trite saying that when rogues fall out honest men get their dues. Suit has been brought in the 15th District Court to recover seven and a half millions of dollars from parties connected with the California Pacific railroad. Whatever may be the issue of this suit, it seems incontrovertible that a vast sum of money has disappeared somehow, and the credit of the State, and even of all American securities will be clouded by it. The great cry of the railroad companies has been that the Grange movement has lessened our foreign credit. No more of this. It is the jobbing, thieving and swindling of the railroad companies themselves that have impaired our credit, and crippled our railroad enterprises.

Napa Grange Feast.

About ten o'clock I stuck a quill in my vest pocket, and through the kindness of a Granger friend, who invited me to ride with him, started for Napa city, the scene of the Granger's harvest feast.

As we neared the city, the air, which was cool and comfortable when we left home, began to feel warm and continued to grow warmer till we reached our journey's end. Driving through Main street every nook and corner seemed to be filled with vehicles, and one could scarcely get to the door of a livery stable.

Appearances indicated the presence of Grangers, and the next thing was to find their headquarters. I started immediately in search, and on turning a corner, heard voices above fairly making the air ring with their merry peals of laughter. Upon entering the hall my first move was to look about and see if any Vacaville friends were present, but my eye had not wandered far in search, ere it discovered what was more desirable than even friends just then.

For a time my thoughts were diverted from friends, and called to assist in supplying an urgent demand for nonrishment; and my eye, in its search, failed to reach beyond the long, well-filled table. As I ate, I thought,

> Who wouldn't be a Granger,
> And with the Grangers stand;
> A roasted pig before him,
> A chicken in each hand?

Diuner over, I sharpened my quill, and procured a seat in the corner to take a few items from the speeches that were expected to follow; when to my surprise and much to my disappointment, the command "All not Grangers, please retire," rung in my ears; my heretofore faithful quill dropped from my hand, my paper sought a hiding-place in the left corner of my pocket, and I got out of there much disgusted with the closing ceremonies of a harvest feast. Thus was your correspondent sadly disappointed; and, after having ridden all the way to Napa to hear a "big Granger" orate, was forced to return without having my curiosity satisfied.—*Cor. Vallejo Chronicle, Aug.* 22.

The Grangers.

The following article from the *Morning Call* is worth a careful reading:

Co-operation in any and every department of industry is found to possess advantages. In no branch can we discover where it has been more useful than to the farmers. They are a class of our population, who, from the necessities of the case, are scattered over the whole country, and on that account have heretofore found it difficult to interchange views on subjects vital to their welfare. The establishment of the Order of the Patrons of Husbandry, with its Granges in almost every county and populous neighborhood, has afforded them opportunities to come together and devise measures for their mutual benefit. Within a year they have accomplished a great deal. Besides holding power to be exercised in a general supervision over taxation, they have been enabled to concentrate their capital to purchase sacks at reduced rates, to employ ships for transporting grain, for the erection of warehouses in which to store it, and for a dozen other purposes scarcely less important to their interests. It is within their power to create a public opinion to keep down the rates of transportation, or failing in that, to build short lines of railroads and put steamers on the navigable streams, to accommodate their carrying trade. By their united efforts they can construct canals and irrigating ditches, reclaim marsh and tide lands by the erection of levees, and finally induce the large landholders to divide their immense tracts for the occupation of industrious settlers. In fact, there is no point from which the harmonious labors of the Grangers can be viewed, that does not seem full of promise to the great interests of the country. What has already been accomplished, and it is much, will appear to be trifling as compared with what may yet be done. The principle upon which the Order is founded is one that commends itself for its non-liability to be abused or be converted into a means of oppression. If we understand it aright from the expositions of its founders and supporters, the Order aims, not to build up, but to destroy monopolies, and to so ramify its benefits that they shall search into all departments of trade. Certainly it has so far strictly conformed to this object, and so long as it continues to practice upon it in good faith, there can be no reason why the farmers should not sustain it, as the very best, and perhaps the only medium of securing that attention and promoting that prosperity so desirable to their vocation.

NEW GRANGE.—On Thursday last, 27th ult., Andrew Wolf, the Worthy Deputy for San Joaquin county, assisted by William G. Phelps, Worthy Secretary of Stockton Grange, organized a Grange of the Patrons of Husbandry at the Washington schoolhouse, Elliott township, with 24 charter members. The following named persons are the officers of the new Grange: W. B. Stamper, Master; S. W. Sollars, Overseer; D. R. McIntire, Secretary; S. O. Sollars, Steward; A. A. Vanstandt, Assistant Stewart; Ozias Leter, Chaplain; C. H. Little, Gate Keeper, Mrs. A. E. Blyther, Ceres; Miss E. L. Harris, Pomona; Miss R. Sollars, Flora; Mrs. E. Leeman, Lady Assistant Steward.

The Regents vs. the Grangers.

The following resolntions were passed by Santa Barbara Grange, and copies have been sent to all the Granges in the State. As it is impracticable for us to publish resolutions from all Granges, we shall hereafter simply enumerate such as take similar action in this matter.

Resolutions.

WHEREAS, Congress granted to the State of California 150,000 acres of land, which the Regents have so managed as to sell, or contracted to sell, for $750,000, to maintain an Agricultural and Mechanical College, on certain conditions, which were accepted by the State, and never complied with; and,

WHEREAS, Twelve years have elapsed since the grant, and six years since the organization of the University, and the only substantial step taken in compliance with the spirit of the grant has been the appointment of a solitary Professor of Agriculture; and,

WHEREAS, President Gilman, Gov. Booth and other members of the Board of Regents attempted to abolish the Chair of Agriculture, and compel the resignation of the present able and faithful incnmbent; and,

WHEREAS, Dr. Carr has finally been discharged by the said Board of Regents in consequence of his having joined the Order of agriculturists known as Patrons of Husbandry, and having addressed the members thereof in their meetings without permit, and against the will of the said Gilman, Booth & Co.; and,

WHEREAS, The said Board of Regents are attempting falsely to represent the University as an Agricultural and Mechanical College, by employing a number of itinerant lecturers, for the purpose of enabling them fraudulently to draw the additional annual endowment of $30,000, from the General Government, and wrongfully apply the same to the support of the College of Letters; and,

WHEREAS, The said Board of Regents are paying nine per cent. interest on $50,000, secured by mortgage on the Brayton property (see statement of the Regents of the University of California to the joint committee of the Legislature, page 34, March 3d, 1874) and have at the same time $79,709.96 deposited at six per cent. per annum in the Bank of California (see same report, page 33 and 34), contrary to the 4th section of the Act of Congress, dated July 2d, 1862, which says that the fund arising from the disposal of said property "shall be invested in stocks of the United States or of the State or some other safe stocks," when it can be safely invested in county, city or schoolhouse bonds, drawing at least 10 per cent. interest; and,

WHEREAS, $94,573 are admitted to be on deposit in bank to the credit of said Board of Regents (see same report, page 35) and no interest has been accounted for on the same, whereby the income from said grant is $9,457 less per annum than it should be; and,

WHEREAS, Eighty per cent. credit was given on 94,572 acres of land sold at $5 per acre (see same report, page 36), amounting to $378,293, which was to draw interest at the rate of 10 per cent. per annum (see same report, page 29) no account of which has been given in said Report, whereby it appears that the income from said grant is $37,829 less per annum than it should be with prudent and proper management; and,

WHEREAS, No appropriate reply by the Board of Regents has yet been made in answer to the inquiries of the Congressional Committee appointed to investigate the condition of the Agricultural and Mechanic Arts College, and the manner in which the funds arising from the Congressional endowment have been used; therefore,

Resolved, By the Santa Barbara Grange, No. 50, P. of H., 1st, that we condemn the course pursued by the Board of Regents in dismissing Dr. Carr from the University, and demand that he be re-instated as Professor of Agriculture; and if this demand is not complied with, we will take an appeal and await the result.

2. That Dr. Carr and every other agriculturist has a right to join the Patrons of Husbandry or any other secret agricultural association and lecture to the farmers as often as he chooses without asking the consent of politicians or capitalists.

3. That we will stand by Dr. Carr in this matter through thick and thin and see that Gilman, Booth & Co. are not allowed to divert the Agricultural College endowment permanently from the purposes for which it was originally intended.

4. That we sincerely thank Worthy Master J. M. Hamilton, of the State Grange P. of H., for the noble and manly stand taken in the Board of Regents of the State University, at a recent meeting, in resisting their attempts to abolish the chair of Agriculture, and to compel the resignation of the present able and faithful professor.

5. That we accept the invitation of the mechanics and will gladly co-operate with them in resisting the attempt of Gilman, Booth & Co. to subvert the fund for Agricultural and Mechanic Arts Colleges, to other than the specific purposes indicated in the Congressional Act of endowment.

6. That we censure the Board of Regents for the manner in which they have managed the funds which have arisen from the disposal of the said grant.

7. That we request all papers which sympathize with the agriculturists and mechanics of this State, in their efforts to rescue their cherished institution from the grasp of the politicians and capitalists, to publish these resolutions.

J. C. HAMER,
W. N ROBERTS,
T. H. B. ROSENBERG,
Committee on Resolutions.

In Memoriam.

The following memorial resolutions were received some time since, but had been mislaid. Resolutions of Antelope Grange on the death of Sister Cornelia Garrett:

WHEREAS, By a sudden stroke of Divine wisdom, our worthy and much esteemed Sister, Cornelia Garrett, a member of Antelope Grange, No. 98, P. of H., has been removed from our midst by death, being in the meridian of life and usefulness, and her husband has been deprived of a kind companion, her children of a kind mother, her parents of a loving daughter, and her friends and relatives of a congenial companion. And while we bow in submission to the Hand that has stricken us, we still cherish a faith that our loss is her infinite gain; and though we feel deeply to mourn her loss, we nevertheless feel to bow obedient to Him who doeth all things well.

Resolved, That we tender our heartfelt sympathy to Bro. Garrett, to his family and friends, for their great loss. That while her seat is left vacant in our Grange and in the family circle, we believe she has been called to higher scenes of usefulness in a brighter world above, where death has no more pangs, and where she will shine brighter and brighter to the perfect day.

Resolved, That the preamble and these resolutions be spread upon the minutes of our Grange. That a copy be sent to her husband, one to her father and mother, and one to the RURAL PRESS for publication, and that the Secretary be requested to carry out these resolutions. Signed,

Z. J. BROWN,
T. F. HUGHES,
Committee.

C. L. N. VAUGHAN, Sec'y.
Antelope Grange, No. 98, P. of H.

Mrs. Mary Mohr, wife of Mr. John Mohr, died at their residence neer Moore's Landing, on the 23d day of June, 1874, leaving a husband and two small children to mourn their loss.

To the memory of Sister Mary Mohr, the following lines are affectionately dedicated by West San Joaquin Grange, of which the deceased was a member.

GEO. E. MCSTAY, R.S.

Ellis, July 11th, 1874.

Let us in reverence join,
Aud pay this tribute to a sister loved
But lost.
We may soon follow her.
May we, like her, as fearless hear
The call of that grim messenger.

Loved sister, rest
Among the mounds where others blest
Repose.
May'st thou find joy,
In heaven and peace and bliss,
That floweth there without alloy.

Thy childreu two
Shall long and call for thee, alas! and weep
In vain.
Come back in spirit, mother,
And guide theu safely through this world,
To join thee, joyous in that other.

That widowed heart,
Now reut with anguish sore, look up
And trust!
There is a future blest,
Where she who loved, now beckons thee
To join and love her in that rest.

Almighty God, to thee
We yield our claim; teach us to say
Thy will be done.
May we enjoy thy love,
Aud find with all our dear ones here;
An entrance to that home above.

CA L GLENGYLE.

Grange Headquarters During State Fair.

EDITORS PRESS:—Last Saturday the Grange committee on reception passed the following resolution:

Resolved—That all Grangers visiting the State Fair are cordially invited to make the hall of Sacramento range, No. 12, their headquarters.

I hope all Grangers will make a note of this, which of course includes you, Mr. Editor, to mingle with the rest, that we may get a glance at your phiz; become acquainted and have a friendly chit chat. It is the intention for all to daily assemble and engage in social reunion, that we may learn from one another the success and failures of different enterprises and how to overcome them in future—of course the matrons are entitled to the floor and will be heard at all times.

These who wish to engage room, should write to the secretary, A. S. Greenlaw, Sacramento, who will make arrangements as they wish. The hall will be open every day—and evening if necessary—during the fair, and the secretary or his assistant will be in attendance to receive callers and introduce strangers. Other members of the Grange will be there at all hours and make it pleasant and sociable; all will find it a quiet retreat during the bustle and noise that usually attend such gatherings.

With the many attractions that will be seen at the park and pavilion, a view of the State house and park and the general gathering from all parts of the State will well pay for spending the time once a year at least, in general recreation, to brighten up the hidden thoughts, and catch some new ideas that may present themselves. Yours fraternally,

GEO. RICH.

Sacramento county, Aug. 27, 1874.

COUNCIL MEETING.—EDITORS PRESS:—Santa Clara County Council will hold its next regular meeting at San José, on Monday, September 14th, at 10 A. M.

I. A. WILCOX, Sec'y.

Wheat Interests in Kern County.

The Grangers and the Monopolists.

The activity shown by the Grangers in handling and managing their own wheat throughout the State speaks well for the future of the organization. Several vessels are being loaded with grain that has escaped the control of the money of the monopolists. The Grangers' Bank, lately established in San Francisco, is likely to prove powerful enough to render the producer independent of Friedlander and the Bank of California, which has furnished him the means to command the price of grain from one end of the State to the other.

The Grangers of Kern Island have had no occasion to consider the new facilities for moving wheat, not yet having been able to supply the local demand; but the coming season will tax them to provide an outlet which shall leave the full value of the product with the new farmers who are settling among us.

The wheat crop of our river lands has been made heretofore with very little care, and under the most unfavorable circumstauces. No one has sought to know how much could be raised to the acre. The best lands have been devoted to alfalfa and feed grains; the demand being out of all proportion to the supply, and only exceptionally dry and alkali ground given to wheat. The result has been, that to furnish flour for our rapidly increasing population, the local mill has been compelled to obtain wheat from Merced, 200 miles north of us. It is a common and natural belief that so small a portion of the great valley is so well adapted to the raising of alfalfa as that portion watered by Kern River, and the greater part of the northern portion can only be made productive of small grain by planting in the Fall; that we should exclude wheat from our products, and confine ourselves to raising stock, the more profitable branch of farming. But, though we are specially favored in that respect, we cannot afford to entirely surrender so important an interest. The valley of Kern river must supply all its home wants, and not subject us to the necessity of going elsewhere for our bread. Besides, the mountain settlements to the east and south of us offer a large market for flour, for which, if not supplied from this place, they must pay a freight of from twelve to twenty dollars per ton.

It has been demonstrated that the wheat raised on these lands is specially profitable to the miller, the hull being extremely light and the grain hard and dry. So far as ascertained, the yield is from 20 to 40 bushels per acre, according to the condition of the soil and the care given to the crop.

Most of the present farmers, if not all, are associated with the Grangers on the island. They have a great work in hand. The spread of the Gospel among the heathen is hardly more needed than organized distribution of plans for securing the greatest and most profitable variety of products of which our soil is eminently capable. They should command the mill and the transportation, so far as organized strength and systematic combination can do it. In some parts of the valley, although the Grangers have erected warehouses for storing grain, we find some of the prominent members putting their wheat into the hands of the agents of Friedlander because of the insecurity of imperfect organizations.

It should be a warning to all interested, that nothing but the best business management of such affairs will be tolerated by those who, from the greatest use of capital or more diligent effort for success, have produced a large and valuable crop. No successful man will subject his business or his means to the direction of indifferent business men. Nothing will so paralyze the Grange organizations, as loose and careless conduct of the details of the disposition of the product intrusted to them, and in no way can they compete with those who have so long held the farmer in hand from the time of sowing the grain to the filling of the sacks, but by the selection from among them of men who not only are capable, but are fully impressed with the importance of close and prudent care and sale of the product, and prompt and certain returns with the smallest margin of expense.

It is the boast of those who now monopolize the traffic, that a re-action will soon destroy the present organization, because of the ignorance of the majority of the farmers of the rules, regulations and necessities of commerce, which have become a science too profound for ordinary comprehension. They claim that their warehouses are full while those of the Grangers are empty, because of the unwillingness of the better class of farmers, though members of the Granges, to confide their year's product to miscellaneous persons who have no experience beyond the duties of the farm. The work of the Grange would seem to include the education of its members in the commercial requirements pertaining to the results of the labor expended on the farm. No good can be accomplished by attaining to political ascendency to the neglect of the original objects of the association. Such ascendancy would be but temporary. It would only become permanent when based upon the success and prosperity of each separate society through patient attention to the details we have hinted at, and which, more than all things else, is to make the Grangers a power in the land.

The Granges established here have made no public report of their work. Continued silence will not promote their strength. We hope to be able to publish such of their proceedings as will show an active and energetic movement in harmony with the struggle being made in all parts of the Union. —*Southern Californian.*

A Grange Store at Nicasio.

State Deputy Hegler visited Nicasio last Saturday; with a view to establish an agency there for the sale of butter, under the auspices of Nicasio Grange. The proposition was received with favor by all the Grangers and citizens who could be consulted, and we think it is certain to develop into a most excellent institution for the producers there. The dairymen of Nicasio nearly all drive to Petaluma with their butter, where they exchange it for other commodities, and Sonoma county gets all the advantage of the trade. Talking about an agency to buy the butter led a step farther, to the inquiry, Why not buy the goods right here that we go to Petaluma for? It was found that Mr. Miller's stock on hand could be bought for a very low figure, and the whole matter was canvassed, and left over for one week, when Mr. Hegler will go over again. It is probable that a co-operative store will be formed, and a quick freight wagon put on to take the produce to San Quentin for shipment, and bring back merchandise for the store. As good as Petaluma prices will be guaranteed and a saving of the time and travel effected. Dairymen can load their butter into the agency wagon at their own door, receive the cash, or order goods from the store, to be delivered, and have no trouble whatever about a market. Here we have the theory and practice of the Grange movement in a nutshell. The farmers and dairymen become their own middlemen, and reap the full benefit of their marketable produce. The money heretofore expended in an adjoining county will be kept at home if the above arrangement carries.—*Marin County Journal, Aug.* 20.

Oregon Items.

THE Olympia *Transcript* says the farmers in Thurston county are busy harvesting and haying. Most of them are about done haying, although a few who cut large quantities have not finished. One farmer on Black river had 150 tons cut on Thursday, when the heavy rain fell. On Boisefort, Lewis county, only a few farmers have begun cutting, although others were ready and would have begun but for the rain on Tuesday. They fear that the rain will knock down the grain and damage it. On the Chehalis, at Black river and below, the haying is over, and most of the farmers are cutting their wheat and oats. The crops of all kinds throughout the country were never better, and it is to be hoped they can all be harvested without injury.

THE *Sentinel* says: It is known that last year many horses died in this valley of what was called "Black Distemper." This year a distemper of a somewhat different character is prevalent among full grown horses and down to sucking colts. The animal discharges copiously from the nose, and the throat swells. In some instances a swelling appears in other parts of the body and becomes a running sore. A great many colts and horses have died from this disease. The "Black Distemper" of last year was confined to the southwest portion of the valley, while this year it is common to all sections.

THE rabbits are playing the deuce with the farmers' grain on the south side of Boise river. W. L. Thurman has lost 60 acres of grain by these pests, and all the fields have suffered, and in some instances they are taking vegetables. The boys and men are shooting hundreds every day, but don't seem to thin them out in the least. The sage brush adjoining the farms is a good hiding place, and as one travels along and scares them up he can see a hundred running at a time; and this is the case for miles up and down the river.

A GENTLEMAN from North Yamhill states that grain is yielding far better than any estimate had ever reached before the harvest began. Mr. Benjamin Stuart had a 10-acre field which harvested 490 bushels. This field had been estimated to yield 40 bushels to the acre, whereas it went nine better, and this is about the proportion that all grain is overreaching estimates in that section of country.

THE Olympia *Courier*, of last Friday, says: Rain has fallen copiously during several days past. It will do a great amount of damage in the river bottom regions should it continue much longer, as harvesting has only just commenced in places mentioned. As it is, the labor of harvesting has been materially increased by breaking down of grain.

HENRY P. ANKENY, the largest cheese maker in Marion county, and Oregon, is now milking 135 cows and making 200 pounds of cheese daily.

HARVESTING is about over in Wasco county, The crops are not quite as good as last year's, yet they are a fair average.

MR. A. L. STINSON informs the *Record* that a good deal of wheat is coming into Jefferson for shipment.

A GREAT deal of wheat is being placed in the warehouses since the rains stopped the harvesting business.

SEVENTY cents a bushel is the price for wheat at Salem, and 65 cents in the towns above.

THE vegetable garden at the Penitentiary near Salem is said to be the best in the State.



The End.

BY JACOB PRICE.

Past twelve o'clock? Oh, no barkeep,
Can't be that I've lain here asleep
On this settee, since noon to-day.
Don't! I'll get up. Drunk, did you say?
'Tis not the first time. I say, Joe,
Give me a drop before I go.

Let's see my coin? O Joe, just think
What I have given you for drink—
Wealth—strength—children—wife,
All—all that man holds dear in life;
And must I beg of you in vain
One drop to ease my throbbing brain?

Don't push me that way; don't now, Joe,
Hands off I say! Before I go
I must have rum. For God's sake, man,
Spare me this torture if you can;
This horrible thirst, this raging hell
Within, that rum alone can quell.

There, see, I've fallen! (oh so low)
You didn't strike me, did you, Joe?
You did! well then you were in fun,
Leave, or I'll get another one?
Another blow? Joe, Joe! beware—
What—what—is that—just over there!

Great God Almighty! Let me go!
Help, keep him off! O save me, Joe!
Oh, spare—he's gone—why, Joe, I swear
'Tis you! there's snakes coiled in your hair,
And in your bosom there is one,
They're in mine too! Great God! I'm gone!
* * * * * * *

Dead on the sidewalk! Lo, the end
Of him who was a genial friend,
A husband fond; a father kind,
A man of culture, learned, refined;
A gentleman—true-hearted, brave.
Alas! alas! a drunkard's grave.

How Wild Horses Fight the Panther.—The puma of South America, known in different latitudes as the congar, panther, catamount, often attacks horses as well as smaller game. A traveler relates an instance of an attack of this kind, and of the remarkable plan and prudence of wild horses in self-defense: A few years ago a party of travelers were exploring Paraguay, where the plains abound in horses and the forests in pumas and other wild animals. They saw a mare with a pair of twin colts, and stealing near them were a pair of pumas, while at a little distance were a herd of horses who saw the pumas and were preparing for battle. The stallions came to the front, and the mares went to the rear and went to feeding, as if for a ruse. Soon a shrill neigh came from the stallion-general, and in a moment the whole troop charged down on the pumas, surrounded them, but left a little space, out of which the mare and her colts slipped away and reached the other mares. The pumas then attacked the horses, but they turned heels and struck them right and left, keeping up a circular movement, dealing heavy blows in turn, and finally laying the pumas dead.—*Our Dumb Animals.*

A Sour Temper.—Theodore Parker most justly reprimands those sour, cross-grained people who afflict some households: "A single person of sour, sullen temper—what a dreadful thing it is to have such a one in a house! There are not myrrh and aloes and chloride of lime enough in the world to disinfect a single home of such a nuisance as that; no riches, no elegance of mein, no beauty of face, can ever screen such persons from utter vulgarity. There is one thing which rising persons hate the reputation of more than all others, and that is vulgarity; but, trust me, ill-temper is the vulgarest thing that the lowest born and illest-bred can ever bring to his home. It is one of the worst forms of impiety. Peevishness in a home is not only sin against the Holy Ghost, but sin against the Holy Ghost, in the very temple of love."

Self-Exaltation.—There is no surer soul-death, no more inevitable paralyzing of worth and force than self-exaltation and self-praise. The shadow of self blights growth, maims power, cripples influence. There are men in some aspects almost great, in others pitifully small, because they will not stand out of their shadow. There are men who have the ability and the will to perform the most valiant service for one and another great cause, who are wise, brilliant, eloquent; who yet have been of little or no worth to their fellow beings, simply because they are willing to do nothing without securing full credit for it, to raise no column of the temple of regenerated humanity, unless they can inscribe their names on its capital. —*A. P. Peabody.*

A Wife's Happiness.—No married woman can be happy if her husband does not appear to regard and honor her as well as actually to do so. The order of flirts have a certain article of faith which comforts them mightily—namely, that a man's wife is always the least interesting woman in the room to him. If he does not know this, she does; and some act of graceful courtesy, some little word or motion—nothing in itself, perhaps, but indicative of the tenderness he feels for her—gives the good wife a moment of triumph so innocent and sweet that no one should begrudge it to her.

A Beautiful Chromo.

Mrs. Snooks Washing the Children.

If the religious press gets ahead of the El Paso *Journal* we give it fair warning that it must get up on its spine. We have stood the "Sleeping Cherubs," by the *Christian Union*, we have gazed on the pictures of wall-eyed virtue with which brother Talmage ropes in subscribers from the rural districts unmoved, but when the *Christian at Work* sends us a picture of two sore-eyed dogs watching three merino lambs, and wants us to pay them $20 for it, then, indeed, the free spirit of an American citizen is aroused.

We want it distinctly understood that we are in the chromo business ourselves.

Hereafter, every subscriber that takes the El Paso *Journal* will receive a beautiful chromo entitled "Mrs. Snooks Washing the Children." It is one of these beautiful home pictures that at once appeal to the fondest and holiest affections of the heart. Every man who sees it will at once "Would he were a boy again," when being washed and getting soap in his eyes was one of the regular Sunday afflictions next to the catechism.

In the foreground is Mrs Snooks. Before her is a tub, and one of the orphans is struggling in the water. The artist has seized upon the moment when the infant has just opened his mouth for a prolonged solo, but is dexterously checked by his mother's swabbing his voice with a sponge. The manner in which a stream of soapy water is represented running down into the urchin's right eye is very finely done. In the other eye is thrown all the added emotion of pent-up grief and sorrow that "knows no tongue." We defy any man to see this picture without being stirred to his inmost depths. Mrs. Snooks' face is a study. It is such an expression of motherly love, housewifely zeal, and beautiful devotion to duty that can be likened to nothing except that seen upon the face of our mothers on wash-days and at house-cleaning times.

Three of the children have already been washed. Their rosy countenances, bright with exuberent health, have been further heightened by the art of the limner, who has depicted them suffering with colds as one result of their baths. At the same time, their complexion forms an agreeable contrast to the three behind the tub who have not yet bathed. This is finely done, and cost a world of labor.

The whole forms an agreeable contrast to the naked cherubs sent out by the religious press. It is a domestic scene, full of holy joy, and tranquilized by a sweet and dream-like peace.

In order to convey the idea that even in so perfect a home as this, sorrow must enter, one of the children is suffering with the measles. The way in which the measles blotches are struggling with the dirt on his nose, having captured the last-named organ, is one of the sweetest things in the chromo line that has ever been presented.

We are now prepared to furnish these chromos to every subscriber of the El Paso *Journal*. We append a few certificates from prominent individuals:

"True to life. The very atmosphere smells of soap."—*Henry Ward Beecher.*

"I assure you, on my honor, that the chromo is so natural that one of my children actually caught the measles from looking at it."—*Ben Butler.*

"Reminds me of the time when they used to wash me, now many, many years ago.—*Susan B Anthony.*

"Send me 15,000 dozen of your chromos, 'Washing the Children.' We want to offer them as premiums."—*Christian at Work.*

"It shows domestic misery in the highest degree. No woman ought to be allowed to have seven children."—*Victoria Woodhull.*

We trust these testimonials are sufficient. We could append many thousands; but we forbear. Now let the honest masses show their appreciation of art by coming up and taking the—*El Paso Journal.*

A New Re-veal-ing.—A little girl had seen her brother playing with his burning glass, and heard him talk about the "focus." Not knowing what the word focus meant, she consulted the dictionary and found that the focus was "the place where the rays meet." At dinner, when the family were assembled, she announced as grand as could be that she knew the meaning of one hard word. Her father asked her what it was. She said it was the word "focus." "Well, Mary," said he, "what does that mean?" "Why," she replied, "it means a place where they raise calves." This, of course, raised a great laugh. But she stuck to her point, and produced her dictionary to prove that she was right. "There," said she, triumphantly. "Focus"—a place where the rays meet, and if they raise meat they raise calves. And so I am right, ain't I, father?"

"If you think," said a high school boy to his mother when she asked him to go out and get the kerosene can filled,, "if you think they haven't crammed enough Science of Government into me to teach me that this is a land where the free American heart cannot tolerate despotism in any form, why you're laboring under a baleful error. That's the kind of hair pin I am."

Now Horace Greeley is charged with plagiarism in his memorable advice, "Go West." It is pointed out that the original of the remark was when Ruth said (many years B. C.), "Where thou go (w)est I will go."

How Sea Lions Enjoy Life.

Charles Nordhoff, in the April number of *Harpers'*, has this interesting account of the habits of sea lions:

It is an extraordinary, interesting sight to see the marine monsters, many of them bigger than an ox, at play in the surf, and to watch the superb skill with which they know how to control their own motions when a huge wave seizes them and seems likely to dash them in pieces against the rocks. They love to lie in the sun upon the bare and warm rocks; and here they sleep, crowded together, and lying upon each other in inextricable confusion. The bigger the animal, the greater his ambition appears to be to climb to the highest summit; and when a huge, slimy beast has, with infinite squirming, attained a solitary peak, he does not tire of raising his sharp-pointed, maggot-like head, and complacently looking about him. They are a rough set of brutes—rank bullies, I should say; for I have watched them repeatedly, as a big fellow shouldered his way among his fellows, reared his huge front to intimidate some lesser seal which had secured a favorite spot, and, first with howls, and if these did not suffice, with teeth and main force, expelled the weaker from his lodgment. The smaller sea lions, at least those which have left their mothers, appear to have no rights which any one is bound to respect. They get out of the way with an abject promptness which proves that they live in terror of the stronger members of the community; but they do not give up their places without harsh complaints and piteous groans.

Plastered against the rocks, and with their lithe and apparently boneless shapes conformed to the rude and sharp angles, they are a wonderful, but not a graceful or pleasing sight. At a little distance they look like huge maggots, and their slow, ungainly motions upon land do not lessen this resemblance. Swimming in the ocean, at a distance from the land, they are inconspicuous objects, as nothing but the head shows above water, and that only at intervals. But when the vast surf, which breaks in mountain waves against the westher side of the Farallones, with a force which would in single sweep dash to pieces the biggest Indisman—when such a surf, vehemently and with apparently irresistible might, lifts its tall white head, and with a deadly roar lashes the rocks half-way to their summit—then it is a magnificent sight to see a dozen or half a hundred great sea lions at play in the very midst and fiercest part of the boiling surge, so completely masters of the situation that they allow themselves to be carried within a foot or two of the rocks, and, at the last and imminent moment, with an adroit twist of their bodies, avoid the shock, and, diving, re-appear beyond the breaker.

Natural Selection.—Darwin thus accounts for the proboscis of the bee. Special organs, such as the bills of birds, the long legs of water fowls, wings, the long, rough tongue of birds that hunt worms in rotton wood—all these things were gradually acquired by the constant exertions of the animal to supply its wants. "Thus," he says, "a proboscis of admirable structure has been acquired by the bee, the moth and the humming-bird, for the purpose of plundering the nectaries of flowers." Will he tell us how the bee got along while the proboscis was being acquired "gradually?"

A Boston artist, who excels as an animal painter, saw as he was passing through one of the rural towns of Massachusetts a very animated looking bull. Thinking he would like to take him on canvas he got permission of the owner, an honest old farmer, and in due time produced an excellent likeness of the bull, which he sold for $200. On seeing the farmer soon after he told him he had sold the picture of his bull for $200. "Good gracious!" said the old man; "why I would have sold the bull for less than that!"

The evidence of a witness in a life insurance case involved in the blowing up of a steamboat on the Ohio, is droll, just because it is characteristic. The witness knew the missing man, and saw him on the deck of the steamboat before the explosion. When asked by the lawyer, "When was the last time you saw him?" he answered, "The very last time I set eyes on him was when the biler bust, and I was going up. I met him and the smoke-pipe coming down."

The Shah of Persia once ordered his vizier to make out a list of all the fools in his dominion. He did so, and put his Majesty's name at the head of them. The Shah asked him why, to which he immediately answered, "Because you entrusted a lac of rupees to men you don't know to buy horses for you a thousand miles off, and who'll never come back." "Ay, but suppose they do come back?" "Then I shall erase your name and insert theirs."

A West Indian, who had a remarkably red nose, having fallen asleep in his chair, a negro boy, who was in waiting, observed a mosquito hovering around his face. Quashy eyed it very attentively. At last it lit upon his master's nose, and instantly flew off again. "Yah, yah," he exclaimed with great glee; "me berry glad to see you burn your fut!"

"You ought to acquire the faculty of being at home in the best society," said a fashionable aunt to an honest nephew. "I manage that easily enough," responded the nephew, "by staying at home with my wife and children."

Pitman's Chickens.

We had a good deal of trouble last summer with Pitman's chickens. As fast as we would plant anything in our little garden those chickens of Pitman's would creep under the fence, scratch out the seeds, fill up and go home. When the radish bed had been ravished in this manner for the fifth time, we complained to Pitman. He was not disposed to interfere. "Adeler," he said, "I tell you it does 'em good, and it does them beds good to be raked over by chickens. If I have radishes, give me chickens to scratch around 'em and eat up the worms. Radishes that haven't been scratched ain't worth a cent." Then we climbed over the fence, with a determination to take the law into our own hands. We procured half a peck of corn and two dozen diminutive fish-hooks. Fastening each hook into a grain of corn, we tied thin wire to each hook. Then we scattered the whole of the corn on the radish-bed, and fixed the ends of the wires to the biggest sky-rocket we could get. The rooket stood in a frame about ten yards away from the hooks. That very morning Pitman's chickens came over and instantly began to devour the corn. We were ready, and as soon as it was evident that the hooks were all swallowed we applied a match to that rocket. It is regarded as probable that no barnyard fowls that have lived since the days of old Noah ever proceeded toward the azure vault of heaven with such rapidity as those did. A fizz, a few ejaculatory cackles, a puff of smoke, and Pitman's roosters and pullets were swishing around among the celestial constellations without their feathers, and in some doubt respecting the stability of earthly beings. Pitman never knew what became of his fowls; but when we read in the paper next day that twenty-four underdone chickens, with fish-hooks in their craws, had been rained down by a hurricane in New Jersey, we felt certain that that sky-rocket had done its duty. —*Max Adeler.*

Probabilities.—"Old Prob." is not to be held responsible for the following society probablities:

When you see a man going home at two o'clock in the morning and know his wife is waiting for him, it is likely to be stormy.

When a man receives a bill of goods his wife has bought unknown to him, lookout for thunder and lightning.

When a man goes home and finds no supper ready, the fire out and his wife visiting, it is likely to be cloudy.

When a man promises to take his wife to a party, and changes his mind after she is dressed, you may expect a shower.

When a man saves his cigar money to buy his wife a new bonnet and the children new shoes, it indicates a spell of sunshine.

When a man dies and leaves a nice young widow, with plenty of money, and you see her walking out with the executor on Sunday afternoon, a change is imminent.

A clergyman informed his people at the close of a sermon that he intended in a few days to go on a mission to the heathen. After the congregation was dismissed, a number of the members waited for their pastor, and, crowding around him, expressed their astonishment at the new turn in his affairs, asking him where he was going, and how long they would be deprived of his ministrations. He said to them, "My good friends, don't be alarmed, I'm not going out of town."

An Odd Taste.—"And have you had no other sons?" asked a curious lady of a bronzed old sea-captain. "Oh, yes, madam. I had one that lived in the South Sea Islands for nearly a dozen years." "Really! Was he bred there, and what was his taste—the sea or the land?" "No, madam, he wasn't bread, he was meat—leastways the natives ate him; and as for his taste—the chief said he tasted of terbacker."

An old bachelor, thinking over the subject of marriage, and particularly the expense of maintaining a family, set the table in his lonely abode with plates for himself and an imaginary wife and five children. He then sat down to dine, and as often as he helped himself to food he put the same quantity on each of the other plates, and surveyed the prospect, at the same time computing the cost. He is still a bachelor.

There was a certain "Daft Will Speir," who was a privileged haunter of Eglington Castle and grounds He was discovered by the Earl one day taking a near cut, and crossing a fence in the demense. The Earl called out, "Come back, sir; that's not the road." "Do you ken," said Will, "whaur I'm gaun?" "No," replied his lordship. "Weel, hoo the deil do ye ken whether this be the road or no?"

A Sunday-school teacher was giving a lesson on Ruth. She wanted to bring out the kindness of Boaz in commanding the reapers to drop large handfuls of wheat. "Now, children," she said, "Boaz did another nice thing for Ruth; can you tell me what it was?" "Married her!" said one of the boys.

A Louisville gentleman who had his nose bitten off in a row wrapped it up in a paper, and sent it home to his family. The rest of his body he threw away, there being but little left. —*Boston Post.*

Book-keeping may be taught in a single lesson of three words: Never lend them.

The Amazon.

A voyage on the Amazon, writes an American traveler, is excessively monotonous. A vast volume of smooth, yellow water, floating trees and grass, low, linear-shaped islets, a dark, even forest, the shore of a bonndless sea of verdure, and a cloudless sky, with occasional flocks of screaming parrots—these are the general features. No busy towns are seen along the banks; only here and there a palm hut or Indian village, half buried in the wilderness. No mountains break the horizon—only half a dozen table-topped hills—and while many bluffs of red and yellow-trap are visible, they are exceptional, the usual border being low alluvial deposits, magnificently wooded, but half the year covered with water. The real grandeur, however, of a great river like this is derived from reflecting upon its prospective commercial importance and immense drainage.

A lover of nature, moreover, can never get tired of gazing at the picturesque grouping and variety of trees, with their mantles of creeping plants; the wild, unconquered race of vegetable giants; the reckless energy of vegetation compared with which the dense canopy of green supported by crowded columns, branchless for fifty or eighty feet; the broad-leaved bananas and gigantic grasses; and, above all, the hundreds of species of palms, each vieing with the other in beauty and grace.

It is told of a man poorly dressed that he went to a church seeking an opportunity to worship. The usher did not notice him, but seated several well-dressed persons who presented themselves, when finally the man addressed the usher, saying: "Can you tell me whose church this is?" "Yes, this is Christ's church." "Is he in?" was the next question, after which a seat was not so hard to find.

The characteristic of the umbrella is its power of changing shapes. You can have a bran new silk with an ivory or rosewood handle at any public gathering; within three hours it will turn itself into a light blue or a faded brown cotton somewhat less in size than a circus tent, with a handle like a telegraph pole, and five fractional ribs.

Let the foundation of thy affection be virtue, then make the building as rich and glorious as thou canst; if the foundation be beauty or wealth, and the building virtue, the foundation is too weak for the building, and it will fall; happy is he, the palace of whose affection is founded upon virtue, walled with riches, glazed with beauty, and sealed with honor.—*Quarles.*

It was awfully annoying to have some other fellow's clothes left in your room by the washerwoman. Saturday we put on another fellow's shirt, but couldn't wear it. Although it was ruffled around the bottom, the sleeves were too short to button cuffs on, and there was no place for a collar.—*Milwaukee Sentinel.*

Great may he be who can command
And rule with just and tender sway;
Yet is diviner wisdom taught
Better by him who can obey.

Blessed are those who die for God,
And earn the martyr's crown of light;
Yet he who lives for God may be
A greater conqueror in his sight.
Adelaide Proctor.

"I believe my fate will be that of Abel," said a wife to her husband one day. "Why so?" inquired the husband. "Because Abel was killed by a club, and your club will kill me if you continne to go to it every night."

An old lady from the country with six unmarried daughters, went into Augusta, Ga., the other day, hunting for the Patrons of Husbandry. She meant business.

A life of active exertion, of well regulated energy, an humble mind, and a heart of faith and love, will convert the mountain of misery into a peaceful valley.

I am a man of peace; God knows I love peace, but I hope I may never be such a coward as to mistake oppression for peace.—*Kossuth.*

A Danbury man has brought out a new vermifuge with the significant name of "The Early Bird."

Josh Billings says "Success don't konsist in never making blunders, but in never making the same one the second time."

The worm of conscienoe is the companion of the owl; the light is shunned by evil spirits only.—*Schiller.*

In Siboria, whispers can be heard half a mile. When a fellow goes sparking he carries a slate and writes down what he intends to say.

Placards on the St. Louis street cars declare that "This car can't wait for ladies to kiss good-bye."

The firm foot is that which finds firm footing; the weak falters, though it be standing on a rock.

Why were the soothsayers of old called augurs? Because they were such horrible bores.

New mown hay and pneumonia are in season at the rural resorts of Massachusetts.

A single burst of mirth is worth a whole season full of cries with melancholy.—*Bruyere.*

Young Folks' Column.

"What is it All When All is Done?"

"The sun goes up and the sun goes down,
And a thousand years are the same as one;
The leaves grow green, and the leaves grow brown,
And what is it all when all is done?"

Aye, what is it all, if this life he all,
But a draught to its dregs of a cup of gall,
A hitter round of the rayless years,
A saddening dole of wormwood tears,
A sorrowful plaint of the spirit's thrall,
The grave, the shroud, the funeral pall—
This is its sum; if this life he all.

But it is not all; beyond this shore,
A sun goes up to go down no more;
The leaves that grow green are green for aye,
And the flowers that bloom know not decay;
A thousand years are, indeed, as one,
But of hitterness then the soul hath none;
And this is all when all is done.

A Curious Pair of Jaws.

Don't you think it must be a curious pair of jaws that can bite off a chunk of cold iron as easily as you bite a stick of candy?

You can hardly believe it? Wait till I tell you.

One of the most interesting places I ever visited was a room filled with these monsters with the sharp steel jaws, called nail machines. In the first place, the noise made by several of these machines in one room is something absolutely fearful. I wanted to stuff my ears with cotton; but I thought that would not be very civil to my guide, and after a little I got used to it, and soon found myself so much interested that I really forgot the noise. Some machines nip off the tacks so fast that a stream of finished tacks runs down a tin tube into a reservoir—thousands in a minute. Listen to the ticking of the clock and reflect that every time it ticks at least twenty tacks are snapped off.

But I must tell you how they do it. First the iron bar, as it comes from the iron works, is put between immense rollers, which flatten it out as nicely as the cook can roll out pie-crust with a rolling pin. The bar of iron is thus made into a sheet, just thick enough for the nails they want to make. It goes next to the slitting machine, which makes no more fuss about slitting it into the proper widths for nails than your scissors make about cutting paper. It is cut a little longer than the nail is to be, because the heads are to be made.

When the strips of iron are all ready, a man takes one, and slips the end into the steel jaws I told you of. These jaws are worked by steam power, and instantly they bite off a nail while a furious little hammer springs out suddenly, and with one blow on the end of the bit of iron flattens it, and thus makes a head. If you want to know what a blow that must be, take a piece of iron and try to pound a head on it yourself.

The instant the head is made, the jaws open and the nail drops out finished. Of course it is done much quicker than I have been telling you; for a machine can make brads (which I needn't tell the boys are small nails without heads) at the rate of three thousand a minnte. It is said that "figures won't lie," and I hope they won't, but I must admit it is hard to believe that story.

After the tacks come out of the machine, they are "blued," as it is called. It is done by heating them in an oven or on an iron plate. Then they go in the packing room, where one girl can weigh and put into papers two thousand papers of tacks in a day. That's another tough story, but my guide assured me it was true.

How many kinds of nails oan you name? You will probably be surprised to hear that two hundred kinds of nails are made in one factory, beginning with spikes which weigh nearly half a pound each, and ending with the tiniest kind of tacks, not a quarter of an inch long.

Men didn't always have machines to make nails for them, and of course they had to make them by hand. That was no such easy matter, and in fact, they couldn't make them of cold iron, but had to heat every one. In some parts of England they are very slow to get machinery, and the ignorant people, thinking their trade is to be spoiled, will break up and destroy any machinery that is brought there. So they work at nail making as their grandfathers did. Every man has a little forge—such as you have seen in a blacksmith's shop if you live in a village—and a small anvil. Every child is put to work to make nails at eight or nine years of age, because they earn so little that every one of a family must help earn his bread. Of course these children have no time to learn to read, and many grown men and women can neither read nor write. This is the way they make the nails: They buy iron rods just the right size for the nails they make—for one family always makes the same size of nail. They take one of these rods, heat it red-hot at the forge, lay it on the anvil, and cut off the length of a nail; then, laying away the rest of the rod, they take the piece they have cut off, pound it out to a point at one end, and pound on a head at the other. A very slow operation, you see, when you think of how the machines snap them off cold. A whole family scarcely ever earns more than five dollars a week at the work, and part of that has to go for the coal it uses.

One of the nail factories in our country that I have read about uses one hundred and fifty tons of iron in a week, all of which is bitten up into nails.—*Harper's Bazar,*

Good Health.

Delicate Operations.

Dr. Prœgler, of Addison, Illinois, (*Chicago Med. Examiner,*) has transferred the blood of lambs into the human subject in two cases. The first was a young man who had been consumptive two and a half years. A healthy lamb was obtained, and secured on a board. Its carotid artery was laid bare, and surrounded by two loose ligatures, while one of the patients veins was prepared in a similar manner. Connection was made by canulæ and rubber hose.

Compression of hose and artery, before employed to prevent loss of blood, was discontinued, and for ninety seconds a stream of vital fluid was allowed to flow into the patient's system, the quantity being estimated by the subsequently ascertained rapidity of the current, at about eight ounces.

Immediately a sense of warmth spread from the incision over the patient's entire surface; the face became flushed; the pulse slackened but full and firm, a slight *fullness* in the head increased to exoessive vertigo; ringing in the ears was heard; vision became indistinct; *snowflakes* seemed to appear before the eyes, while a constantly increasing dyspnœa indicated a discontinuance of the transfusion. All symptoms disappeared in a few minutes, and nothing was observed until, after about two hours, rigors set in, giving away after fifteen minutes to a rather high fever, the temperature rising to 104°, the pulse to 115 beats, leaving the patient toward the middle of the night in a sound sleep. On the next evening the fever was repeated, but only in moderate intensity.

Very little change appears to have followed in the patient's condition. Hasse, of Nordhausen, Germany, claims to have cured several cases of advanced phthisis by this method, which he put in practice in forty persons. In the present case the account goes on to state, that an uticaria which Hasse had met with, appeared after eight days, covering most of the surface, and subsiding in three days; "its subsidence being accompanied with the vanishing of a strong *odor of lamb*, which had haunted the patient till now."

The second case was that of a man far advanced in phthisis. Ten or twelve ounces of blood was transfused in the same way. The effects were similar. Chilliness commenced immediately and the extremities turned blue, while the temperature rose to 104°. Reaction followed, but the result was not known at the time of making the report.

Bloodless Surgery.—A description of the Esmarch process for performing surgical operations without provoking the usual hæmorrhage, recently appeared in *Les Mondes.* The devices used in connection therewith by inventor are thus described: These consist of an elastic bandage, measuring 26 feet in length by 18 inches in breadth, and a tube or cone of strong vulcanized rubber, having a hook at one end and a chain and bar at the other. The application of the apparatus is very simple. Supposing that an arm is to be amputated, the band is tightly wound around the member from the extremities of the fingers up to a little above the point at which the division is to be made. By this uniform compression the blood is forced back and out of the vessels. At the upper limit of the bandage the rubber end is passed three or four times around the arm, as closely as possible, and fastened in place by the hook and chain, thus preventing the return of the circulation to the member after the bandage is unwound. The latter on being removed, leaves the arm white and free from blood, and hence ready for the operation, which is accomplished with a very trivial effusion.

The Right Sort.—There is a class of cosmetics we can safely recommend, and guarantee that they will produce not only a clear complexion, but improve the general health. Our cosmetics are plain, wholesome, nutritious food, not vitiated with soda or spice, or lard, abundance of fruit (dried apples nicely cooked will answer), frequent ablutions of the entire body, accompanied with plentiful use of fine soap on the face as well as other portions of the surface, ample exercise in the open air, and early and long sleep. Three months' use of these cosmetics will improve the most hopeless complexion, and leave only the happiest after effects.—*New York Tribune.*

Hospital Hygiene.—Dr. Alphonse Guerin, an eminent Surgen of the Hotel Dieu, in Paris, has recently presently to the French Academy of Sciences a remarkable memoir on the influence of atmospheric germs on surgical maladies, in which he strongly advocates tow dressings for wounds. He states that, when this material is packed upon the injured part, the pus is completely preserved from putrid fermentation. He uses the tow in brief as a filter for the air, which circulates freely through it, and in fact produces an arrangement highly analogous to the cotton wool respirator mentioned by Professor Tyndall in his paper on haze and dust.

An English chemist, officially employed to detect adulterations, has reported 40 faulty samples out of 170. Arrowroot was mixed with starch, coffee with chiccory, milk with water, mustard with flour and turmeric, vinegar with sulphuric acid, etc.

New Remedy for Dysentery.

In a recent issue of the *Archives de Medicine Navale* is published an official note, addressed by Dr. Robert, who is the medical chief of the naval division of China and Japan, to the Inspector General of the Health Service in the French navy, calling attention to a drug used by Chinese physicians in the treatment of dysentery. It consists of the root bark of the *ailanthus*, very common in China, also cultivated in France and in this country.

The bark of the root is the only part employed. An infusion of the bark, however, exhales a slighly nauseous odor, and possesses an excessive bitterness, resembing that of sulphate of quinia. The Chinese physicians employ the root in the fresh state only; but Dr. Robert, having been compelled to use some that had become dry, found no sensible difference in its action in the two states.

For administration, one and a half ounces weight of the root is cut into very small pieces and triturated with two ounces of hot water for a few minutes, in a mortar, in order to soften the bark, and then strained. A teaspoonful of this strong infusion is administered as a dose, morning and evening, alone or in a cup of tea. Taken in this form, it provokes vomiting. The medicine is administered in this manner during three days, the patient being kept upon full diet. After that time the *ailanthus* is omitted, and the diet is altered to broths until health is restored. If after eight days' treatment the patient is not cured, the Chinese physicians recommence the use of the *ailanthus;* but Dr. Robert states that he has not met with a single case in which this resumption has been necessary, although he had under his notice some where the disease had lasted several months, as well as others of more recent origin.

The principal symptoms which follow the administration of the *ailanthus* are said to be nausea, and sometimes vomiting, followed by a temporary lowering of the pulse. The disappearance of blood from the evacuations commences on the first day, and is completed on the second; the colic ceases a little later. The effect of the drug upon the color of the evacuation is variable. Dr. Robert sums up by expressing his opinion that the administration of the *ailanthus* gave superior results to those of ipecacuanha, astringents, alone or combined with opiates, or calomel.

The Germ Theory of Disease.—That hay fever, a disease quite prevalent during the present month, is traceable to vegetable organisms, is a curious discovery, tending toward the confirmation of the theory that disease is originated and propagated by independent organio germs, recently made by Professor Binz, of Bonn. The investigator has been himself subject to the malady, and has pursued his researches over a number of years. On examing the nasal secretions with a powerful immersion lens, he found the organisms to be absent, except when the disease attacked him during spring. Then the parasitical bodies were chiefly seen in motion, vibrating on the slide and increasing in size after several days. By using a neutral solution of sulphate of quine, applied by the nasal douche, Professor Binz found that the animalculæ were completely destroyed, and that subsequent examination failed to show their existence in the secretions.

Ether for Tape Worms.—When the anæsthetic power of ether was first discovered, it was only proposed to use it on human beings to render surgical operations painless. Von Heydon, the merciful man who would not inflict pain on any living creature, employed it as long ago as 1830 for killing insects for his collection. Even worms are rendered dormant and helpless by its use. Prof. August Vegel now announces a new application of this anæsthetic for worms—its application to tape worms. The ether is enclosed in a gelatin oapsule and swallowed. The ether is vaporized in the stomach and the worm stupified, it being then easily removed by any of the usual remedies, against which, when awake, the worm offers a strong resistance.

Sausages Colored by Aniline.—Aniline red is used to impart to sausages a fresh and healthy appearance. It can easily be detected by the use of alcohol or ether, either of which substances dissolves aniline, but not blood. This use of aniline red is severely reprehensible, not only from the fact that it is known to have caused the illness of entire families who have eaten meat colored with it, but also because, from its mode of preparation, it frequently contains arsenic, and must, therefore, act as a poison.

Antidote.—A post-office agent, traveling in Texas, tells of a successful use of the gall of a rattlesnake as an antidote for the bite of that reptile. In the case spoken of, rolief was almost instantaneous to the patient, who was writhing in paroxysms of great pain, and rapidly swelling and becoming purple. We obtain the information from a local exchange. Sounds a little too much like "the hair of the dog, etc." What a simple remedy! and so extremely handy.

Water Contaminated by Copper Tubes.—Copper tubes, like those of lead, are objectionable for conducting water for drinking purposes. Experiment teaches that in a short time 1,000,000 parts of water contained 7·2 parts of copper. In another case the same quantity of water contained .8 part of copper.

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SAN FRANCISCO:

Saturday, September 5, 1874.

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Grasshoppers to be Utilized.

The biter is to be bitten, the grasshopper ie to have a tooth for a tooth. Emperor Napoleon III. succeeded in a meaeure in educating the French people np to the habit of eating horse-flesh; the *American Naturalist* has embarked in the undertaking to induce the Yankee nation to place the graasbopper on its bill of fare. The authority mentioned above wishes to institnte experiments ae to the best styles of preparing the grasehopper for human food. The editor suggests, among other modes, that it may be a good way to fry them in butter—first killing them with boiling water—and declares hie belief tbat they wonld thns become as palatable a dish as many that are now eaten.

This effort to make other people eat horse-flesh and grasshoppers will hardly be appreciated. Why don't these philanthropists take hold and show ns how it ie done? Let some advocate for grasshopper diet practice what he preaches for a eeason; then exhibit himself through the country as an example of what this food does for a man. We eincerely hope that tbe editor of the *American Naturalist* will succeed in making tbis a standard dish, because we shall expect to see this insect taken from us about as soon as its poseession becomes desirable. We do not, however, hope to see the day when there will be any provision made in our game laws for the preservation of the grasshopper.

ON FILE.—"Before People," by E. E. A.; "How to Get Rid of the Pods," G. W. S. C.; "When the Man is Satisfied," J. W. T.; "Buckthoru vs. Wild Coffee," W. P. G.

MUSICAL REVIEW.—Tbe Augnst number of this musicsl monthly has made its appearance, containiug its usnal amount of interesting art matter.

A HERD of 1,000 horses, from California, are coming across northwestern Colorado.—*Col. Stock Journal.*

Fruit Drying.

In our issue of August 8th, we described a machino for drying fruit which it was claimed had beeu "thrown open to the public" over twenty years ago. We do not nnderstand, from the article, which was clipped from the *Horticulturist* and which we republished in the PRESS, that tbe machine wae ever patented; but on the otber hand we should judge that tbe writer meant that the invention was "thrown open to the pnblic" by the fact of its being described and illustrated in a pnblic journal. Since writing our previous article we have taken some pains to inquire into the merits of the various fruit-drying machinee now offered to the publio, and to learn the difference in treatment and tbe quality of the final product of the different machinoe.

The process of placing the fruit in a closed cbamber like a etove oven, and then heating the air in the chamber until the fruit ie dry, is not a desaicating process, practically epeaking, but rather a bakingof the fruit. A emall quantity of the moisture in tbe fruit is taken up hy the air in the oven, but as tbe air hae no escape it soon becomee charged witb water and a steam ie generated in the oven, which partially cooks the fruit.

When the fruit ie dried in kilns, which are distinguished from the oven procese by the fact that the air has free access and exit to tbe fruit dnring the drying process, the fruit ie liable to become burned or scorcbed by the heat before it is properly dried, as the organic moisture in the fruit is soon carried away by the heated air, especially if the temperature is not high enougb to seal the ontside of tbe fruit, so ae to prevent the eecape of the moisture; and the coneequeuce ie that if the fruit is not scorcbed it ie ehrivelled and dried so completely tbat it is tasteless and incapable of being restored to its original flavor.

The secret of drying fruit, so ae to leave it in a tboroughly preserved condition, without detracting from its original quality, the inventor of the Alden process, which is now being introduced quite exteneively upon this coast, claims to have discovered. Mr. Aldeu claims that, to proporly preserve fruit and vegetables by drying, only a small portion of its moisture must be removed. The fixed moisture which is not removed but remains in the fruit, he asserts, can be so chemically combined with the constituent elements of the fruit and vegetables that its presence, instead of being an objectiou, is absolutely necesaary to prevent the succulent properties from being destroyed. This combination is effected by exposing the fruit or vegetables to a gradually decreasing temperature and increasing moisture. For this diacovery Alden secured his patent, and although he uses an upright furnace with a chain carrier similar to the one described as having been thrown open to the public over 20 years ago, his process could be carried out in almost any style of furnace. In the old process it is evident that the fruit was carried from top to bottom of the stack or chamber. It is also evident that the heated air was admitted at the lower end of tbe chamber, and passed out at tbe upper end. The fruit was therefore exposed in its passage down the etack to increasing heat, drynese and decreasing moisture, just the opposite of the process employed by Alden. The 20-year-old process is therefore qnite a different thing from Alden's. The apparatus, however, being old, can be used by all who deaire to use it without infringing, as long as no patented improvement is added to it, and as long aa the old process is followed out.

The rationsle of the Aldeu procese is that when tbe frnit is snbjected to the high degree of heat at the lower part of the chamber or stack, the heated air comuences to eliminate the moisture, and ie converted into steam. This eteam, rising upward in the stack, envelops the fruit above eo as to keep the poros of tbe fruit open, and thus permit tbe free water to escape, while the remsinder forme a component part of the fruit. Thus we eee the difference between the Alden process and other processes which were previouely in use. And if anything is needed to show us tbe superiority of the procees, it is the excellence of the dried fruit prodnced by it.

Another fruit drier which is offered to the public, and which dcserves especial mention on account of ite cheapness and great efficiency, is the American Fruit Drier, patented Nov. 12th, 1872. Mr. Ryder, the inventor of tnis machine, agrees with Alden, tbat the fruit should be subjected to the greatest heat at first, so as to seal its exterior, and he gradually moved towards a lower temperature; but, instead of keeping the frnit surrounded by the steam of the newly introduced fruit, or other moisture, he carriee tbe steam off as soon as it leaves the fruit; thns moving the fruit towards both a decreasing moisture and a decreasing temperature. Tbe operation is carried on in an inclined chamber, through tbe middle of wbich the fruit ia conducted on traye. Tbe heat is admitted to the under side of tbe frnit line from the furnace, and rises through the fruit to the space above it, where the current of hot air carries the moisture off through the upper end of the chambor, without allowing it to strike the fruit above tho point whore tbe steam is generated. The goods produced by this drier are thoroughly dessicated, and, instead of being damp and clammy, like the Alden goods, are dry and firm. Either of these prooeeses nnqnestionably preservee the fruit, and at the eame time retaine moet of the properties of freeh fruits and vegetables in a condition ready to be developed agsin by returning their quantum of water. Fruit-drying machinee aro destined to become as necessary, in a commercisl point of view, as the flour mill, sugar refinery, or other well established manufacturing apparatus. Every farmer who bas a snrplus of fruit or vegetables above wbat is neceesary for home nee, will require some arrangement for preserving them, and thns render tbem available during the montbe when fresh fruit and vegetables cannot he obtained. California, with her superabundance of frnits of all kinds, will appreciate the great value of these machinee, and will use tbem for the purpose of enabling her to send theee otherwise perishable producte to all portions of the world where a demaud exists. Tbe frnit-drying industry is now in its infancy. A few years hence, we believe, will ehow a different etate of things. Large drying establisbments will he in full operation. Lsrge farmers will have their own driers, and the dried products will be found on every table. Time alone will tell whicb of the machinee offered to the public is the best.

The Alfalfa Parasite.

Henry Stewart, Eeq., editor *American Agriculturist*, writee ue as follows on the subject of the alfalfa parasite, which was noticed in a recent issue of the RURAL:

The parasite upon alfalfa, which is described in the RURAL PRESS of Angust 15th, ie without doubt the "dodder," a epecies of *cuscuta* whicb preye exteneively npon this plant and clover in Europe. It has probably been introduced into California witb the eced of alfalfa. I should be greatly obliged if your correspondent, who sent you the specimen, wonld send me one; or, if yon wonld procure one for me, tbat I may verify my suepicion, and identify the species. It is a very destructive pest, and is very difficult to get rid of. Probably the best plan ie not to cut any infested crope for seed, and mow it before the "dodder" seeds are ripe.

It will be seen that the opinion of Mr. Stewart and that of Mr. Elliott, as expressed in the correspondeuce department of our preeent number, exactly coincide. These gentlemen are both reliable authorities on this snbject Will our Colfax correspondent, who sent us the sample of the parasite that has heen tbe means of drawing ont tbese opinions, confer a still further favor by sending us another epecimen? If he will do so we will see that tbe requeet of Mr. Stewart ia complied with.

MORE FAIR TICKETS RECEIVED.—The Secretary of the San Joaqnin Valley Agricultnral Society sent to the editor of the RURAL PRESS a complimentary ticket to the fair of tbe society, which is to be held at Stockton, September 29th, 30th, and October 1st and 2d. The compliment is appreciated, and thanks returned. We bave also received a complimentary season ticket to the Third Annual Exhibition of the Napa and Solano District Agricultnral and Mechanical Arts Society, which commences on September 8th, and continues four days. The officers will please accept our thanke for the same, with our best wishes for the success of their worthy enterprise. Since noting the above we have received from George Buck, Esq., Secretary of the Stanislaus County Agricultural Society, a complimentary ticket to the Tenth Annual Fair of that society, which is to be held at Modesto on September 15th, 16th, 17th and 18th. Would circumstances permit, we should bo pleased indeed to visit our Stanislaus county friends, and thank them in person for tbe ticket sent us.

OUR PAPER THIA WEEK. — We offer to the readere of the RURAL PRESS thie week an amount of useful and entertaining matter which will compare favorably with any paper iu the country. If our friends will call the attention of such of their neighbors as are not eubscribers to the contents of the PRESS, and send them a copy occasionally, it will be to the satisfaction and benefit of all partiea. And when you meet with some of the many complimentary notices of our paper which tbo press of this and other States contain. just meution the matter to your friends, in order to give them a proper estimato of tho standing of the RURAL PRESS.

THEY are preparing over at Catalina Island for lamb sbearing. The sheep interests of this island and Clemente are of considerable magnitude. On the former there are four hands aggregating about 10,000 head. On the latter there are nearly 40,000. Last year 160 bales o wool were shipped from Clemente.

LESLIE COMBS, Jr., youngest son of Gen. Combs, of Kentucky, is off for Europe, to look at the Short-horns of England and learn the system of breeding and feeding. Young Combs, although only 22 years of age, ie already known to the public as a Short-horn breeder.

ABOUT 12,000 bushels of flax seed were loaned out to farmers by the Des Moines, Iowa, oil mill last spring. and it is estimated that the return will be 36,000 bushels.

GRASSHOPPERS are making sad havoc with the hay harvest in Montana. It is estimated that ranches yielding 100 tons last year will not yield 10 tons this year.

Grapes Without Irrigation.

One of the most successful grape-growers of Los Angelee called at our editorial rooms recently, with whom we bad a very pleasant chat abont matters pertaining to grapee. This gentleman claims to he tho first grape-grower to adopt the non-irrigation system. Yankee enterpriee—impelled eomewhat hy neceseity—induced bim to broak through some of the established rules of grape culture.

His place being up in tho foothills, where surface water wae not available, and where it could not be reached by digging 125 feet, there was a "poor show" for his grape vines obtaining the moisture which was supposed to be indispensable to their growth. Some parties encouraged him with the suggestion that the vines might possibly thrive if they could be pretty thoronghly irrigated np to the first of July; while others went so far as to hope tbat watering up to the first of June wonld do. But our friend could not depend on water after the first of May; still he planted a few vinee, depending on the limited amount of water which be could snpply from buckets. It is generally conceded that the vines do best on the somewhat dry foothills, when they are once established there, but it ie generally believed that they require a liberal snpply of water for one aeason, at least. But the gentleman alluded to proved that the vine, even in ite first eeason'e growth, needs but little water. It manifeste at once an affinity for its natnral home, the hill eide.

It has heen proven that the vine can thrive without irrigation; and tbat the fruit is better witbont it. Tbe grape-root naturally strikes deep, very deep; and it is probably from ite lower deptbe that it obtaine tbe richuees and fine flavor that the fruit possesses. Althongh the roots of the vine naturally strike deep, they will be attracted to the eurface if tbe viues are irrigated. As a conequence of tbe roots imbibing this artificial moisture, the juice of the grape becomea too watery; and the fruit, obtaining sustenance from the surface soil, does not possess richness or flavor, wbose reservoirs are located deeper dowu in the earth. The wine from grapee grown nnder irrigation does not possees the character or keeping qualitiea of that produced under more natural circumstances; and but little of even natural moisture is deeirable.

We have tasted of eeveral varieties of the wine, and also of the brandy, produced by the gentleman alluded to above, and find them of a superior quality. The quality of tbe unpressed grapes grown on the red hills of Nevada connty—the soil and situation being decidedly similar to those where the fruit nnder consideration was grown—was known to us; and we were not enrprised to find the wine of our Los Angeles friend of a corresponding richness and flavor. It has long been tbe opinion of many that euch localitiea, offering but little encouragement for growing grain and some other crops, are destined to be the favored spots for grape culture.

Since the peculiar grape-producing merits of certain localities have been demonstrated by the experience of Californians, our people are not so incredulous about the marked variation said to exist in the quality of wines produced in localities separated merely by a range of hille or a river.

The difficulty of realizing how places in such close proximity could produce tbe same article, under the same treatment, yet differing in so marked a degree in strengtb and flavor, arose principally from the point of obeervation, the difference in the products being supposed to depend mainly on the climate. But soil, we apprehend, gives character to the grape; and anyone who bas worked the soil is aware of the great difference which a trifling separation will sometimes produce.

WHEAT YIELD —We received information of the results of the harvest in this vicinity, which are very encouraging, and show thst the average yield is little, if any behind that of last year. The largest yield we hear of is on the Ike Durbin place, where thirteen acres of fall wheat threshed ont 675 bushels, or 52 bnshels per acre. When any one can boat that we hope they will let us know. Dan Durbin may also claim the palm for the greatest yield for the largest field of wheat, as he had 120 acres in one field in summer fallow and took from it an average of 45 bushels to the acre. Both of these cases show what good cultivation will do, and probably both pieces of land bave been in cultivation for twenty years. So the proof goes that Oregon lands do not easily wear out. —*Williamette Farmer.*

THERE is great consternation among the planters in the southern and southwestern portion of Marshall Co., Miss., on account of the ravages of the charbon. It is gradually extending all over the country, and is carrying havoc to horses and cattle all along its path. A large number of valuable horses have been killed.

AT Gold Run, on the Central Pacific Railway, some fifteen or twenty families bave been using wild coffee (so called) as a substitute for tho imported article, and announce tbat it tastes like Costa Rica coffee.

THE farmere in the vicinity of Castroville are hauling their straw together and saving it for winter nse. Senaible idea.

Something New on Flour Making.

Mr. Bentz, of Maryland, publishes for the information of millers, that his experiments in California wheat have resulted in a discovery of great importance to our State. He takes off the very thin silicions coat of the berry, as is customary before milling. By present methods, bran, shorts and middlings are separated by the bolting cloth. Only wheat passes through the meshes, as flour. The rest is cattle feed.

By the Bentz process what now is refuse, is all converted inexpensively into flour. The whole berry becomes extra family and extra shipping flour, there being no trace nor color of bran. He desires to bring a mill to San Francisco, and to assist in inaugurating a new and profitable system of utilizing our wheat crop. He proposes that we cease to ship grain; and, instead, ship flour.

He finds that our California flour, so white and so fair to the eye, is, of all flonr, the most constipating. He says this evil is remedied by his system. All the gluten goes into the flour and makes it wholesome, without affecting its appearance.

He has examined the new flour barrels, now being made in Minnesota, of wheat straw; and he pronounces them superior to wood in every particnlar. He proposes that we, of California, who are short of suitable wood, shall at once set about arranging to make onr own barrels, for which our straw is superior. The straw is cut up and pulped, and thus it is easily formed into barrels, after the way of *papier mache*. Iron hoops are used. These barrels are lighter and stronger. They are water-proof and damp-proof. They preserve the flour without a shade of deterioration. They can be re-nsed, good as new.

Mr. Bentz predicts that California flour, thus made, will command the markets of the world. He speaks of Japan, of China, of India and the islands of the Pacific, as promising a greatly increased consumption, founded upon the superior quality of the new flonr, and of its new packages. He prays that he may be able to remove hither, and to reap a share of the rich reward.

It should be nnderstood that Bentz's flour claims to be made essentially different from ordinary brands.

We say to the inventor, send a few barrels of your flour, that we may judge of its pretensions. If it be all he represents, it is the best news we have heard for the farmers of California.

Important to Inventors.

The following letter, which was recently received from an old client of Dewey & Co., now residing in one of the Easterul States, speaks for itself, and will do more, perhaps, to convince inventors of our capacity for business than any number of local compliments. We extract as follows:

GENTLEMEN: It was through your house that I secured my first patent, and although I have since done bnsiness here in the Atlantic States with the ablest patent solicitors—gentlemen who have done me justice—yet I have often regretted that you were too far off to advise with me in my cases. It has taken a longer time with every patent I have taken out since I left California and came East, than in the cases yon prepared for me in San Francisco, which is certainly very creditable to you.

By the way, one of my patents has passed the ordeal which is the essential test of a patent's value. I mean that of a trial in the courts, and it stood the battling of one of the best lawyers in the country. The specifications and claims were completely made out and there was a perfect comprehension of its principle dnring the trial. Since giving it this test we thought that we would make it even stronger, if possible, and submitted it to one of the best patent solicitors for advice. After a careful examination of the case he advised us to let it alone as it stood, saying that whoever made up those papers nnderstood tbeir business. I then informed him that they were drawn up by Dewey & Co., of San Francisco, and he replied that he knew you well by repntation. * * * * * Very truly yours,

L. L. SAWYER.

Meriden, Conn., May 16, 1874.

SANTA CLARA HOPS.—Among the productions of California, now on exhibition at the Mechanics' Fair, none excite more attention than a sample of hops from the yard of Mr. Isaac Bird & Son, of this county. The sample, which is but an average of the whole yard, has been made the subject of flattering comments by the press of the city. In addition to journalistic comments, Messrs. Bird have received many letters from prominent persons interested in the agricultural development of the State, congratulating them on their success in that direction. In this connection we will announce that hop picking will commence in this county the latter part of this week, and all children who want employment for a few weeks at remunerative wages can be accommodated by applying either to Messrs. Bird or to the manager of the Coe ranch.—*San Jose Mercury, August 30th.*

THE Stanislaus County Fair will be held at Modesto, commencing September 15th, and ending on the 18th.

Horticultural Exhibition—Third Week.

During Monday and Tuesday the old plants were removed from the tables and replaced by the choicest collections of this year's show. The increased attention of visitors in this department is plainly visible.

The first table—nearest the front of the Pavilion—contains the following collections—these are plants of late introduction: Marantas, variegated leaf. begonias and caladinms, from the nursery of Miller & Sievers.

The second table represents decorative plants: Caladiums, marantas and flowering begonias and greenhouse climbers from the Woodward's Gardens.

The third table is filled with a choice collection of variegated leaf begonias.

The fourth table presents a gay and charming appearance of cnt flowers, consisting of gladiolas, dahlias, roses and other choice flowers, exhibited by Miller & Sievers; a fine collection of pinks, by Mr. Murphy, and a choice assortment of dahlias, by Mr. Malmgren. The display of cut flowers is attracting nniversal attention, and their quality is nnsurpassed.

The fifth table contains a general collection of rare greenhouse and conservatory plants.

The sixth table is still decorated with rustic work, baskets, stands, fern cases, aquariums, parlor fountains and specimen plants from the nurseries of Miller & Sievers.

The seventh table is rearranged by the same firm with a fine collection of exotic ferns.

The eighth table is occupied by Mr. Groves, gardener to Mr. Thompson, of Oakland, with a most excellent collection of variegated leaf begonias and flowering begonias of unusual brilliancy.

The ninth table presents a most varied appearance of pansies, verbenas, palargoniums, glosinias, and flowering begonias, by Miller & Sievers.

The tenth table is occupied by a group of pineapples in fruit, a novel and interesting feature.

The most interesting collection of all is undoubtedly the new and rare plants of recent introduction. The new heliotrope, the Star, is a remarkable beauty, and should be seen by everybody; the tricolor fern, various new varieties of echeverias and aloes, the variegated leaf fuchsia, and many brilliant colored plants, are well calculated to excite the curiosity of visitors. The enterprise of introducing such plants deserves much praise.

FRUIT MOVEMENTS AT SACRAMENTO.—Anything relating to the disposal of our surplus fruit will be of interest to our readers. We accordingly give from the note of a correspondent an extract showing what one establishment at Sacramento, the firm of A. H. Cummings & Co., are doing in this line. Our correspondent writes as follows under date of August 27th: "Arriving at Sacramento, I made a visit to the fruit and produce establishment of A. H. Cummings & Co. They have been doing business for the past five years, and, judging from appearances, "they have goue in to win." Their store is 80x100 feet, two stories; their largest warehouse is 40x160 feet, which at this season of the year is crammed from top to bottom. Of pears are seen 20 varieties: the Bartlett, Doyenne, Seckel, Buerre Diel, Flemish Beauty, etc., some of them weighing from 1 lb. to 1 lb. 8 ozs.; plums in variety; peaches, six kinds, some from 9 in. to 12 in. circumference; grapes, Tokay, Muscat, Black Malvoisie (Mal-vo'-za) and Rose de Peru, etc., which, with the quince, apple, nectarine, etc., make the best fruit show your correspondent has yet witnessed. They ship from 135 to 200 tons of frnit eastward weekly — to Nevada, Utah, Colorado, Wyoming, Nebraska and to the States still further eastward. Excellent facilities of transport and careful packing result in the fruit being put down at its destination in excellent condition."

WHO SENT IT?—A package of wild coffee has been received at this office, post marked Capella. We have been looking for an explanatory note, but have thus far failed to get it. As a sample of this product the contents of this package compare favorably with those heretofore received.

Progress of Life.

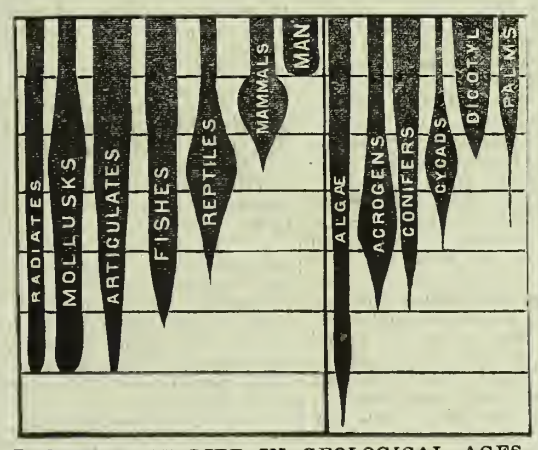
In our issue of August 22d we gave an illnstration showing the bnilding np of the earth's crust, and the various periods into which it has been subdivided by scientists. To-day we illustrate the progress of life, as developed by an examination and study of the fossils contained in the various deposits and geological subdivisions of so much as is known of the earth's crust.

Referring to our illustration, it will be observed that the diagram is separated into two general divisions, the one for animals, the other for plants. It is again divided into seven snbdivisions, corresponding to the geological "periods" already alluded to. Commencing with the lower or Azoic period, we find the first appearance of life was vegetable—the *Algæ* (sea-weeds), a flowerless order of plants, propagated by spores instead of seeds, and vegetating in low, swampy places, or such as are entirely covered by water. This is the lowest form of life, and just what we might expect to find at the very beginning thereof.

As soon as we leave the Azoic period we come into the lowest order of animal life, which consists of Radiates, Mollusks and Articulates (crustaceans and worms). Each of these have continned in slightly varying quantities through all geological periods to the present time. The width of the shadings represents their increase or decrease through the several periods.

Fishes next commenced their existence, and have slowly increased in numbers np to the present time.

Next follow Reptiles, and after them Mammals, with very important variations in quantities until we reach the age of man, the last and crowning act of creation.



PROGRESS OF LIFE IN GEOLOGICAL AGES.

In Regard to Plants.

As we have already said, we first find the *Algæ* or sea-weeds—flowerless plants; next come the Acrogens, a second class of flowerless plants, embracing the coal-plants, the wonderful abundance of which, during the carboniferous age, is strikingly manifest from our diagram. The Conifers also began to appear about this time, and, as will be seen, have steadily increased to the present time. In subsequent succession came the *Cycads*, the *Dicotyls*, and lastly the palms—the most magnificent of vegetable creations.

The remains of all these animals and vegetable creations are fonnd as fossils, and always in the order of superposition as here given. This diagram presents a most interesting and instructive study.

SAN JOSE FARMERS' CLUB.—The club met pursuant to adjournment, and was called to order by President Casey. The club proceeded to the election of officers with the following result: For President, Col. Younger; Secretary, A. C. Erkson; Treasurer, Jesse Hobson. Mr. Hobson reported that a number of the books in the library had been returned to the donors as per agreement at the time of donation, so that there will be no available funds from this source. It was ordered that the officers elect proceed to settle the affairs of the club, levy assessments and pay indebtedness. A vote of thanks was tendered to President Casey for the faithful performance of his duties as President, also to the *Mercury* for its faithful reports of the proceedings of the club. On motion it was ordered that the club adjourn to meet at the call of the President elect.—*Mercury, Aug. 30th.*

MINNESOTA WHEAT.—Mr. Dalrymple, the greatest wheat-grower in Minnesota, probably in the world, states that the quality of his this year's wheat surpasses that of any harvest in which he has ever been engaged, the berry being plump, well filled, and every way superb. There is not a sprouted or damp kernel to be encountered, and the yield is considerably better than was expected np to as late a day as the commencement of harvest. He had then calculated upon fourteen bushels per acre, but discovered by actual and the best of tests made at the threshing machines, that the yield will reach eighteen bnshels per acre, so far as his fields are concerned. He thought the State, generally, would make as good a showing. —*Western Rural.*

Agricultural Implements at the Great Industrial Exposition.

It is not necessary that people should be acquainted with farming in order to be informed as to the great improvement made of late in agricnltural implements. If they read their papers, even as mnch as they read their bibles, they will learn that in nothing upon which mechanical labor has been employed has greater progress been made than in this department. Nor does it require a continued familiarity with agriculture during the last fifteen years to realize the improvements made in implements within this period. It may be questioned whether the realization is not stronger, even in the minds of those who have no practical acquaintance with the farming implements of the present day, and only think of them in contrast with the tools of the period when they left the farm, perhaps a quarter of a century ago, than in those of the farmers who have been adopting these improvements as they have made their appearance in the field. The visitor to the Mechanics' Institute Fair who has been out of practice in farm life for a term of years—and there are many such among the crowds that frequent the Pavilion—will be astonished at the progress made in this department of mechanism.

The attendance of agriculturists proper bas been quite large, even up to the present time; and will undoubtedly be still larger; but the visitors to this department of the exhibition bave by no means been confined to this class. There is apparently as much interest manifested here by the residents of cities as by farmers themselves. A goodly proportion of the visitors to the agricultural implement department are ladies, who display a high degree of interest in the articles. The new style demagogues who are exerting themselves so strenuously to set class against class, may possibly succeed in measure in creating in the minds of the farmers a feeling of distrust and disrespect toward city people and their callings; for it is for this purpose that demagogneism is now doing its best; but they can never destroy in the minds of the professional, mercantile and laboring classes of the cities a longing for the charms of country life, and respect for those who follow it. But while they respect the farmer who guides the plow, they are disposed to give due credit to the mechanic who invented and made the implement.

A large space on the west side of the first floor of the Pavilion is appropriated to the exhibition of agricultural implements. As the visitor approaches this department from the front he first meets with the Stockton gang plow, H. C. Shaw, inventor and manufacturer. Only the smaller sizes of this plow are on exhibition. They are fine specimens of an implement that has been well tested. The same exhibitor has the Royce Economical Reaper and the Chisel Cultivator; both of which are well and favorably known.

The Kimball Manufacturing Company exhibit the M. L. Gorham Feeder and Cultivator combined; the California harrow—an adjustable and convenient implement—and the model of a scraper, which is said to be of great efficiency in road-making, grading railroads, etc.

Treadwell & Co. have a goodly array of agricultural implements here; among which are a corn sheller; the improved Hooker drill; the Wolverine cultivator; gang plows; Clark's patent double shake fan mill; the Whitewater wagon; the Swift mill; the Junior Excelsior cider press; lawn mowers; Huchinson's family cider press, etc.

Marcus Hawley & Co. have on exhibition the Illinois harvester; the Buckeye mower and reaper; the Deere gang plow; the National hay cutter; the Chicago wagon; the John Deere cultivator and single plow, the Buckeye cider mill, etc.

Walter A. Wood exhibits harvesting machines. J. D. Arthur & Son exhibit the Jackson Michigan wagon.

Baker & Hamilton have a large and meritorious exhibit; comprising the Sweepstake plow; the Excelsior lawn mower; the Buffalo Pitts thresher and separator; the Hickory Valley feed cutter; a corn and wheat mill of five-horse power; Rose's vineyard plow; the Price hay press, and many other articles not strictly agricultural.

Among the implements mentioned above are many that deserve special mention. In fact, there is scarcely one of them that is not worthy the space here given to the whole list. Still we have not been able to mention all the agricultural implements on exhibition, even in this condensed form. We will continue the list in a future number of our paper.

MESSRS. Thompson & Barnhart, living near the mouth of Birch creek, have recently completed a sale of 3,900 pounds of wool delivered at Umatilla Landing, for 24 cents per pound. Their sheep did not yield this year as much as last by at least one-third—a result which they think attributable to the unusually cold and severe weather of last winter.

ARTICLES of incorporation have been filed in the Secretary of State's office for the "Alden Fruit Preserving Co. of Salem." A. A. McCully, O. Dickenson, D. McCully, P. S. Knight and O. J. Carr, incorporators. Capital stock, $6,000.

Miscellaneous.

Kimball Manufacturing Company.

The problem of the success of the Ninth Industrial Exhibition of the Mechanics' Institute has been already solved. Notwithstanding the discouraging circumstances under which it opened, it is demonstrated even at this early day, to be most decidedly a success. The pavilion is all its projecters could desire—large, well lighted, and may be well ventilated—it is very worthy of the noble purpose for which it has been erected. The classification and display of wares is as a whole excellent, and in some few cases of a very superior order. Among these we take pleasure in mentioning W. G. Badger, dealer in pianos and organs; the California Mannfactnring Company; Jacob Strahle & Company, billiard table manufacturers; and, conspicuous in advance of all others, stands the Kimball Manufaoturing Company, corner of Fourth and Bryant streets. This enterprising and prosperous firm is represented in four different departments, in any of which they stand the peers of the foremost. It is a genuine pleasure to inspect and admire their magnificent display of carriages and buggies, and one that visitors indulge in day after day, with unabated interest. To say that they are excellent does not express the idea—they are simply perfect, each of its kind. It is a pleasnre to know that we have in San Francisco a firm that has the business tact, energy and perfect taste to furnish our citizens just such carriages as the most elegant and cultivated of our people could desire. No less excellent and beautiful than their carriage department stands the furniture manufactured for the Palace Hotel. Not for the exhibition, but actually a part of an order per contract, to furnish that mammoth hotel, that is destined to be the ornament and the pride of the State. These articles, to be appreciated, must be seen. Made from wood exclusively of the Pacific coast and the islands, in styles new and in perfect taste, they attract as they deserve, the unqualified admiration of all. Passing from the gallery to the main hall of the pavilion, we find the Kimball Manufacturing Company still in the front.

Among the very many new and improved agricultural implements on exhibition, the California harrow attracts the attention of all that are interested in agricultural matters. This harrow is something entirely new; and is so simple, so free from all of the objections to old style harrows, that its universal nse is only a question of time. It runs npon three wheels that are attached to the central section, upon which is placed an easy seat. Three levers are within reach of the driver, by means of which he can raise any one, or all, of the three sections at a time in passing obstructions.

By means of these levers the harrow may be raised from the ground while passing from field to field or along the highway, thus converting the old time, cumbersome and awkward harrow into a comfortable conveyance. By the use of a lever the depth of the work may be graduated, harrowing deep or shallow, as may be desired. It is difficult to give a description of this implement, that will convey a correct idea of its most perfect adaptability to the work for which it is intended. It is constructed of wood and tubular iron, making it a strong, light and beautiful harrow, that will n t be affected by exposure to the weather. In connection with the California harrow we desire to call attention to the California scraper, mannfactured by the same company.

This scraper fills a long needed want of the farmer, the road-maker and the grader. It runs upon two wheels, between which is an oblong platform, upon which stands the driver, and, by a simple change of position, loads or nnloads the scraper at will and with perfect ease. All of the severe labor in connection with the common scraper is obviated, and work that heretofore could only be done by strong, able men, with this implement can be performed by any one that can drive the team. It will prove invaluable as a leveler of uneven farming land, as the load can be dumped in one place or spread evenly over the ground; a consideration of great importance to those whose land needs irrigation.

No one that has visited the pavilion has failed to join the admiring crowd usually found around the beautiful and gorgeous palace street car; which, for beauty, style and finish, will bear the closest scrutiny.

This energetic company have done themselves, as well as the city and State, honor by the very liberal effort to make the Mechanics' Fair a success, and will nndoubtedly receive, as the legitimate result of their liberality, a very material increase to their already very extensive business.

A Power Supplying Company.—The Rochester (N. Y.) Hydraulic Co. carries on no manufacture, but rents its buildings to various manufacturers, supplying the power to them from the water flowing in the river beside the shops. A short time ago the rock was cut so as to make a deep well, and two of the largest water wheels, yielding over 1,000 horse power, were placed therein. It is the intention of the owners to add another wheel, which will swell the power attained to over 1,500 horse power. —*Commercial Bulletin.*

New Method of Making Mortar.

So very marked is the mortar used in modern buildings as poor, compared with that long ago nsed, that various attempts have been made to ascertain the "secret," if secret it was, of the composition of the old builders in mortar-making. One "secret" which the old builders possessed, we may quietly here impart to those of the present day, that is, that to make good mortar, good lime and plenty of it must be nsed; the old bnilders did not nse a composition nearly all sand, and that sand not fit often to be used, and then call it mortar, as do the builders of the day oftentimes. When we examine almost any piece of modern work, we find that the mortar hardens very slowly, and even when hardened as much as it will harden, it crnmbles away, loses cohesiveness, so much so that in many cases it is qnite an easy matter to detach the stones or bricks from one another, and from the mortar. The very opposite characteristics are fonnd in ancient work, and on examination it has been seen that the mortar has in great part been converted into silicates, entering into close union with the particles of quartz. It is to these silicates that mortar owes its firmness, and it is to the slowness with which silicates form in modern mortar, and small proportion of these present in it, that this owes its poverty. A method of setting free the silicions earth, and promoting the rapid formation of silicates, has been discovered by a Professor Artus, and which yields a mortar resembling in its characteristics those of the ancient kinds. The great recommendation the process possesses, is its simplicity. Lime is in the first instance well slacked, and mixed carefully with finely sifted sand; to the mass is added a qnantity of unslacked lime to the extent of one-fourth of the sand in the first instance mixed with the slacked lime; mix the whole thoroughly, the mass heats and the mortar may be at ouce used. When the mortar is not wanted for immediate use, the first process only is carried out, namely mixing the sand with the fine slacked lime; when wanted for use the unslacked lime has to be added. A very strong mortar is said to be the result.—*Builder.*

Skeletonizing Leaves.—There are several ways of doing this. That by maceration is long, tedious and disagreeable, and quite out of date. The following are the methods now in use: Lay the green leaves and seed vessels on small sheets of tin, and cover lightly with thin lace or muslin, place in a vessel of cold water. put over the fire and boil slowly for several hours. Uncover one by one, wash out the cellular tissue with a camel's hair brush, then bleach, wire and mount in the nsual way. Or put into a basin equal qnantities of soft soap and rain water, put in the leaves and let it stand on the stove till the mixtnre boils. Remove the leaves to a pan of clear, soft water, wash them quickly and carefully from the soap, float out on a piece of glass, and remove the tissue with a brush, rinse in clear water. Or take three ounces of carbonate of soda, one and a half of quicklime previously slaked, and one quart of water. Boil 10 minutes and draw off the clear solution. Retnrn this to the fire, wash the leaves, and boil briskly one hour or till the tissure is easily removed. To bleach the leaves, mix a drachm of chlorate of lime with a pint of water and a little acetic acid or strong vinegar. Steep the leaves in this about 10 minutes, simmer, rinse well and place in books to press. Or procure Labarragne's solution of chloride of soda, and nse a teacupful to a quart of water. Pnt the leaves in, and in two or three days they will be perfectly white. —*N. Y. Tribune.*

Cheap Ice Houses.—At a meeting of the Elmira Farmers' Club, some time since, W. A. Armstrong said that a cheap ice house could be made out of a simple, well-roofed enclosure, without hollow walls or pits, or other costly apparatus. He leaves six inches of space next the sides all aronnd, into which he rams clean sawdust closely, and covers the ice when packed with a foot of the dnst. The ice is cut into large blocks and made to fit at the joints as closely as convenient, but where edges are jagged he fills in with pounded ice or sawdust—the latter being the cheapest. Drainage is important, but if the house stands on porous soil, or is so elevated that the water will run off readily, it answers every purpose. He had kept ice several years in such a building, nine feet square and the same in hight, the sides being only of inch boards. When the ice is taken out, be careful to keep all cavities covered with sawdust or it will waste away rapidly. In answer to a question as to the cost of a house 14 feet square, he said that $50 would pay for it and the sawdust; and bnilt of cheap lumber it might cost only $25. In packing, spent tan or cut straw would answer nearly as well as sawdust.

Wire Fence.—The grassy angles between the walks in the dooryard can be kept free from intrusive footsteps by a low fence of telegraph wire painted green. Cut the wire in lengths of six or seven feet, and put each end in the ground, forming a semicircle. Midway between the two extremities of the first semicircle place one end of another length, and continue this simple fence as far as necessity requires. It should be about two feet and a half high.

Arago says that "he who, outside of the range of pure mathematics, utters the word *impossible*, is wanting in prudence."

Making Matches.

For those who care to experiment in making home-made matches, the following hints from the *Scientific American* may prove serviceable: The preparation is different according as they are chemical or lucifer matches. For chemical matches, put 40 grains of phosphorus in a wide-mouthed bottle. Add enough oil of turpentine to cover the phosphorus; then mix in 10 grains of flour of snlphur. Put the bottle in hot water until the phosphorus is entirely dissolved; stop the mouth of the bottle with a cork, and well shake the whole until it has become cold; afterwards pour off the supernatant oil of turpentine. Into the mixture of phosphorus which remains in the bottle, dip the extremities of the matches; and after some time, when they have become dried, drop them into the following mixture: Dissolve 30 grains gum arabic in a small quantity of water; add to it 20 grains of chlorate of potash, and mix them intimately together; then add 10 grains of soot previously mixed with a few drops of spirits of wine. In about 20 honrs, the matches will be perfectly dry, when they will ignite on rubbing them over a rough surface. For lncifer matches, use one-third of phosphorus, and the remainder of gum arabic water and coloring matter like minium or Prussian blue. Mix in a water bath and muller carefully. The dipping is performed in the following manner: The melted composition is spread upon a board covered with cloth or leather, and the workman alternately dips the two ends of the matches, that are fixed in a frame. The fumes are very poisonous.

The Philosophy of Rain.

To understand the philosophy of this beautiful and often sublime phenomenon, so often witnessed and so very essential to the existence of plants and animals, a few facts derived from observation and a long train of experiments must be remembered:

1. Were the atmosphere here, everywhere, and at all times, of a uniform temperature, we should never have rain, hail or snow. The water absorbed by it in evaporation, from the sea and the earth's surface, would descend in an imperceptible vapor, or cease to be absorbed by the air when it was once fully saturated.

2. The absorbing power of the atmosphere, and consequently its capacity to retain humidity, is proportionately greater in warm than in cold air. The air near the surface of the earth is warmer than it is in the regions of the clouds. The higher we ascend from the earth, the colder do we find the atmosphere. Hence the perpetual snow on very high mountains in the hottest climate.

Now, when, from continued evaporation, the air is highly saturated with vapor, though it be invisible and the sky cloudless, if its temperature is suddenly reduced by cold currents descending from above, or rushing from a higher to a lower latitude, its capacity to retain moisture is diminished, clonds are formed, and rain is the resnlt. It condenses, it cools, and like a sponge filled with water and compressed, pours out the water which its diminished capacity cannot hold.—*Ex.*

New Method of Preserving Wood.—A new method of preserving wood from decay has been recommended by Hatzfeld. It seems that, in 1830, specimens of oak were dug up in Rouen, which had been buried since the year 1150. This wood was quite sound, but had acquired a black color like ebony, and an astonishing hardness. Hatzfeld ascribed its preservation to the joint action of the tannin in the wood and the oxides of iron in the soil. Accordingly he now proposes to preserve wood artificially by means of tannin and the pyrolignite of iron, a combinatiou which would in some measure bring about the same changes noticed in the specimens from Rouen. Hatzfeld impregnates the wood to be preserved, first with tannin, and subsequently with the pyrolignite solution. The latter substance has long been used alone as a preservative of the best character, and it is doubtful whether the addition of the tannin, as proposed by Hatzfeld, will prove of sufficient advantage to warrant the extra expense.

A Home-Made Barometer.—What is known as Babinet's baroscope is a simple and convenient instrument for foretelling a storm by change of atmospheric pressure. To construct it, take any bottle, and pour colored water into it to one-fourth its depth, insert in it a glass tube, from three to four feet long and passing air-tight through the stopper, which must also be air-tight. Let a paper index, divided according to any scale of division, say into inches and fractions of an inch, be glued to the glass tube. Blow into the glass tube, so as to cause the water to rise in it a few inches, say ten inches, and the instrument is construoted. The bottle must be placed in another vessel, and protected by sawdust, or some other material, from the influence of change in the atmosphere. This very sensible instrument records faithfully any changes in the density of the external air, and the approach of a storm will be indicated by a sudden rise of the water in the glass tube.

Gun-Cotton.—A loose yarn of gun-cotton, if gently set on fire by a spark, smoulders slowly away, but burns rapidly if lit by a flame. A charge of cotton in blasting a mine or quarry, or in a rifle, explodes after the manner of gnnpowder; but it fired by a few grains of fulminating mercury, it "goes off" with terriffic violence, and can therefore be applied for blasting purposes on a tremendous scale.

Photo-Mechanical Engraving.

The attention of experts, both in this country and abroad, has of late been largely taken up with perfecting the methods for producing or copying engravings by a combination of photographic with mechanical means. For a long time, it seemed that the arts of photo-lithography and photo-plate printing were the limits beyond which it was impossible to pass with any substantial practical results.

Quite recently, however, public attention has been attracted to the performance of a process styled by its operators, "Photo-Engraving," which beyond question effectually solves the problem of the cheap, rapid and faithful production or copying of engravings, to a degree which promises to fully realize all the demands which can be made npon it. Of the precise nature of the details of this process, we are not able to communicate more than to state that its efficiency depends mainly upon the peculiar photo-chemical properties possessed by gelatin, and various gums, when treated with bi-chromate of potassa.

It is possible to produce with its aid metal plates in relief of any engraving, whether in lines or dots, (and of course of any original pen design). This plate may be either an electrotype or stereotype, as may be wished, and this may of conrse be printed in the ordinary typographical press. This plate may either be enlarged or reduced in size, as may be wished.

In this resides the great advantage of photo-engraving, or the photo-mechanical production of relief metal blocks, over photo-lithography and allied processes, but its advantage for reproducing line or dot engravings, or original pen sketches, are especially manifest for the almost innumerable forms of newspapers and catalogue advertising; for book and other illustrations. In short whenever a line engraving is needed, whether it be an original or a copy, it is possible to have the same produced with exquisite fidelity, and, it is said, more cheaply than by any other process yet devised, and far more so than by the usual system of wood engraving.—*Trade Journal.*

The Polyspheric Ship.—This is the name of a novel vessel, recently invented in England by Mr. Charles M. Barnes. The bottom is flat and fitted with three inclined planes with square ends, the effect being as though three teeth of a gigantic saw were moved through the water with the sloping portion of the teeth first. The inventor has tested the device by means of small models impelled by rockets. A seven pound model was driven, by a three pound three ounce rocket, a distance of 105 yards in three seconds, or at the rate of 63 knots per hour. The motion is said to resemble sliding over ice. There is scarcely any water disturbance, and the decks were apparently motionless. When drawn slowly over the water. the vessels offered more resistance than models of the ordinary shape; but when the equilibrium, between the horizontal pressure of the inclincs forward and the pressure of the water in the contrary direction, is destroyed, the model at once rises in the water and passes over the mass of hitherto obstructing fluid.

Another Incentive to Honesty.—An electrical recorder has been invented in England which is used to record the number of passengers in an omnibus or street car. This ingenious instrument is fixed in some convenient part of the vehicle; all the seats are in connection therewith, and every passenger by sitting down makes contact and records his presence. The record is a strip of paper on which four pens make a series of lines and marks. The first line counts the minntes spent on the journey; the second line marks the speed and the stoppages; the third line counts the number of inside passengers within each minute of the time line, and the fourth line does the same for the outside passengers. All this goes on, so to speak, of itself; the passengers are unconscious of it; the conductor cannot hinder it, and so at the end of each journey the inspector tears off the strip of paper, and finds thereon an exact account of the number of fares he ought to receive. The applications of this instrument are obviously manifold, but in the manner described it is likely to be of most utility and supersede all other contrivances for the purpose.

A New Submarine Vessel.—A French industrial journal describes a submarine vessel which was invented in Paris during the siege, bnt not then brought into use. It is oblong in shape, both ends being cylinders in which pistons can be moved out and in, thus varying the volume of air, and making the vessel rise and sink as may be desired. To prevent the sea water interfering with the action of the pistons, the internal surface of the cylinder is protected by an arrangement like the bellows of an accordeon. The vessel has glass windows at different parts, and tools of various kinds can be protruded through caontchouc sheaths which prevent entrance of water. There are two screws, one vertical, the other horizontal, driven by compressed air, or by the hand; the latter being used in case of a slight vertical or longitudidal inclination. There is, in addition, pneumatic apparatus for expulsion of vltiated, and supply of fresh air. This machine has made a very favorable impression on engineers and others competent to form an opinion of its merits.

Owing to the failure of water, the Bald Mountain company, Sierra county, have commenced paying their hands in script, redeemable on or before March 1st, 1875.

Raw Products at the Mechanics' Fair.

The Managers of the Ninth Industrial Fair have very properly placed raw products first in their list of classification. A knowledge of raw products should always be the first consideration with every reading and thinking person, since it is an essential prerequisite for the attainment of every material good. Every pursuit, whether for the necessity, convenience or luxury of man, has its beginning and end in the procurement and working or modification of raw products. Raw materials are usually found in particular localities, and generally in great abundance, and at small expense of labor or skill. It is their adaptation to the wants and conveniences of man that calls out ingenuity and demands skilled labor, and it is this which brings honor, and power, and wealth to a nation. Still, he who provides the raw material is just as essential, in the great hive of industry, as he whose more defty handiwork fits it to our needs.

The position of California, with its great commercial center at the gate of the Pacific ocean, is a most important and anomalous one in the industry of the world, whether in the original field of raw products, or in the more advanced one devoted to their multifarious modifications. First brought prominently before the world by the extraordinary richness of her mountains in mines of gold and silver, she has since reached an equal prominence by the wonderful adaptability of her valley soils to the production of the golden grain, and other fruits of the earth, which go to feed and nourish man and beast. The raw products of California, both mineral and agricultural, are each in their way effecting giant strides in the advancement and extension, not only of our own country, but of the world at large. Considering the importance of this class of products, and the abundance with which nature is handing them out with the least possible amount of toil, it is much to be regretted that so little attention has been paid to introducing them into the grand industrial display now in such successful progress in our midst.

Mineral Products.

First in the order of arrangement under this head are placed minerals, including ores, rocks, earths, salts, coals, petroleum, unwrought metals, etc. Mr. H. G. Hank's display of minerals is the only thing worthy of especial mention in this direction, and this is really fine—indeed, it is a prominent feature in the Pavilion, and has been set up at great expense and in the very best style and taste. It is a very complete and methodical cabinets, embracing not only the ordinary minerals found in first-class cabinets, but a wide range of those more rare and curious, embracing a large number of valuable specimens of gold and silver. It is just the collection needed by such an institution as the Academy of Sciences, or the State University, and just such an one as every person should have access to in order to become in any degree familiarized with the subject of mineralogy. It is the result of many years of labor and the most careful attention of the best practical mineralogist on the Pacific coast. The exhibition is a credit both to the owner and the Institute.

Aside from this, however, and a very credible exhibition of salt, by the Carmen Island salt works, and a show of coal in bulk, from the Renton Coal Co., located at Seattle, Washington Territory, we find nothing in the mineral line except the sample exhibits of the enterprising proprietors of the San Francisco *Journal of Commerce*, who have done what they could to keep up the reputation of the State by displaying, in samples, chrome iron ore from Del Norte county, pig iron of various qualities from Oregon, manganese from Red Rock, etc.

Vegetable Products.

In regard to vegetable products, which are even more abundant and, with the exception of iron and coal, far more important than minerals, we find a very small display. Had it not been for the publishers of the *Journal of Commerce* this great industry would have been almost entirely ignored. These gentlemen finding, just as the exhibition was about to open, that no space had been taken for vegetable products, outside of the horticultural department, hastily gathered together samples of cereal and other products with which they are enabled to make a very creditable exhibition. They have in their collection about 50 varieties of wheat; 20 of oats; 14 of barley; several of corn, beans, peas, etc. There are shown samples of different grades of cereals from California, Oregon, Australia and the Mississippi valley, placed in contrast with cereals from the various parts of Europe. Not less than 100 samples are shown from the great wheat centers of Southern Russia, Hungary, etc.

Flour of various brands is also shown, and samples of dried fruits, hops, etc. The latter exhibit is quite interesting, as showing the increased vigor of growth manifested by the hop plant in this State over anything met with elsewhere. Experts tell us that a similar superiority is observable in the intrinsic value of the hop, for all the uses to which it is applied.

Mr. Horace D. Dunn makes a fine show of woods from Japan, which were forwarded by the last steamer, with a view of bringing them to the attention of cabinet makers, carriage makers, etc. These woods can be laid down here much cheaper than they can be obtained from the Eastern States. They consist of thirty varieties; are from the Island of Yezo, of which Hakodadi is the port of entry.

Mr. Henry F. Stivers makes a very fine sample show of California woods in the western galleries.

The only show of raw fibers consists of a fine display of California wool, California cotton shown in contrast with that from the Marquesas Islands, exhibited by the JOURNAL OF COMMERCE; and a small lot of jute, shown by the S. F. Cordage Company, and another by the Pacific Jute Manufacturing Company, of Oakland.

The horticultural exhibit will be noticed in another connection.

Well Out of the Way.

By verbal order of Lieut-Col. Stewart, Capt. Weeden, of the Engineer Corps, made an examination of the ship Patrician, which has been lying on the bar at the entrance of the harbor for some time past. Having made the requisite examination, Capt. Weeden found that a spar was standing perpendicularly from the wreck, its top being but a foot or two under the surface of the water. Also, that a knee from the bow of the wreck protruded above the bottom. The remainder of the hulk has been covered by the sands, so there was very little obstruction to navigation therefrom. Upon a second examination, Capt. Weeden decided to remove the remaining obstructions. He left with the necessary apparatus last week, but was compelled to return on account of the high sea then running on the bar. He went again to the wreck, in order to remove the knee and spar with giant powder. To this end he ordered a three inch rubber hose eight feet long to be filled with No. 1 giant powder. This piece of hose contained twenty-seven pounds of the powder. He took also a specially prepared submarine fuse, and for the purpose of making sure work, filled several tin tubes with giant powder.

Mr. Charles Lougee, the well-known diver, had before examined the wreck and on close examination he found that the spar was the bowsprit, sixteen inches in diameter at the bottom, which had been broken off and was kept in its erect position by the bob-stay chain. Captain Weeden united the two ends of the hose containing the powder and cut two small holes in the rubber, in which he inserted the fuse, primed with Giant powder caps. The holes in the hose were bound up with tar and oiled silk to make it water-tight. Two fuses were used so as to prevent a misfire. The circular piece of hose was then slipped over the spar and the diver, Lougee, pushed it close down to the deck of the ship, where it was fastened.

The fuse was lighted, and Capt. Weeden retired to a safe distance with his men. The result of the explosion was that a large piece of the spar was thrown a hight of forty feet, and on the diver descending it was ascertained that the knee and spar had been totally demolished, and there was nothing of the wreck visible above the sandy bottom. Capt. Weeden has recommended to his superior officer that the buoy marking the wreck be now removed, as the obstacle is entirely gone. There are some five fathoms of water over the wreck, although the Coast Survey Charts only call for four fathoms.

ACTION OF EARTH AND OTHER SUBSTANCES ON ORGANIC MATTER.—At a recent meeting of the Chemical Society, a paper on the action of earth on organic nitrogen, by E. C. Stanford, was read, in which the author gave details of his experience on mixtures of earth and decomposing animal matter. From these it appears that the earth is but an indifferent drier, the mixture continuously losing nitrogen, which is evolved as ammonia principally; the earth also does not act as an oxidizer, and no nitrification takes place. Dr. Frankland stated that when decomposition was in the state of putrefaction, ammonia was always produced from the nitrogenous matter, but much nitrogen also escapes in the elemental form. The action of charcoal is very different; seaweed charcoal mixed with excrementitious matters and allowed to dry is found to retain almost the whole of the nitrogen. These facts are of interest to sewage economists and the advocates of the dry-earth system.

A TERRIBLE TORPEDO.—The *Borsen Zeitung* says that the German Admiralty has decided to adopt a new kind of torpedo, which can be moved about while under water from the shore. The weapon consists of a long, hollow cylinder, containing, besides the fulminating powder, a sufficient quantity of air to enable it to float. It is moved by means of electric currents passing through wires which connect it with the land, and by an air-propelling apparatus also fixed on the shore. The speed of this torpedo can be raised so as to exceed that of the swiftest ships. A detonating apparatus is attached to it in front, which explodes on contact with any solid body. A number of torpedo boats are also to be built for the purpose of pursuing hostile ships and attacking them unobserved. These boats will be propelled by a screw moved by hydraulic power, and will be steered under the water by means of a compass. They are to be capable of performing four days' journey at sea.

THE analyses of fertilizers, for the purpose of the control of the trade in these articles, are becoming year by year more common, and their necessity better understood.

Creeping Clay.

A peculiar kind of clay is found in many places in our mines, which is not a little curious on account of its creeping propensities. A stratum of this clay will crawl out into tunnels and other openings in a manner much resembling the action of the toy known as Pharoah's serpents. You can't see where it is coming from or what moves it, yet it is constantly crawling out. In the drift which is being run into the American Flat mine, at a depth of 750 ft., they have a stratum of this clay. In order to keep the drift open, it is necessary to keep one man constantly engaged in cutting away the clay as it pushes itself into the drift. This is not owing to the slaking and swelling of the exposed surface, as in that case after a few removals of the surplus material a hole would be left. The whole body of clay appears to be creeping. It has the almost imperceptible motion of the glacier, and, like the glacier, irresistibly advances, smashing everything in the shape of timbers that may be placed in its way. The cause of this creeping is probably to be found in the pressure of the superincumbent or surrounding strata of rock. Its motion is not unlike that seen during the straitening out of a piece of pith which has been compressed. There appears to be a limit to this creeping of the clay, but it is not reached until many feet have crept out into the drift, tunuel, shaft or chamber, and been cut off and removed. Its action is so mysterious that some of the miners are ready to explain it by simply saying that it is because "nature abhors a vacuum." If left to its own course it would very soon close the drift, tunnel or other opening so completely that no one could see that an opening had ever been made in it; indeed, thousands of feet of drifts and tunnels in our mines are now so closed. In the Caledonia mine much trouble was experienced with this creeping clay. We have heard of a streak of it two or three feet in width rising up in the floor of a tunnel until over thirty feet had come up and been cut off. It is bad anywhere, but is most mischievous in main shafts. For this reason mining men always seek a sport, in which to put down such shafts, where they are likely to have solid country rock (rock outside of the vein) to a great depth below the surface. The sad experience of early days taught them the lesson. —*Virginia Enterprise.*

EDUCATION IN CALIFORNIA.—Mrs. Sarah B. Cooper, whose address is at the *Overland* office in this city, has issued a circular, in which she states that she has in preparation, for the United States Commissioners of Education, the annual report for the State of California. Circulars, soliciting information in regard to educational matters, including libraries, museums, medical, dental and pharmaceutical institutions, benefactions, asylums, schools of science, training schools, art, teachers' salaries, etc., have been circulated as extensively as possible, but the experience of former years have proved this plan to be inadequate. As the Commissioners desire the forthcoming report to be as thorough and accurate as possible, Mrs. Cooper solicits any information bearing upon the topics above named, or anything pertaining to educational growth and advancement that the patrons of education throughout the State may desire embodied therein. All such matter must be as clear and concise as the subject treated will permit.

THE oaks of Lake county being large, afford excellent material for the manufacture of staves. William Curry, of Sonoma county, is at present engaged in making oak staves in Scott's valley, for Fuller & Co., of Petaluma. He will have 30,000 staves ready for delivery by the 1st of September. They will be of different sizes, and used in the manufacture of wine pipes, barrels and butter kegs

PENNSYLVANIA COAL MINES.—All of the coal companies doing business around and in the Wyoming and Lackawanna valleys have stopped work, the market being overstocked. They expect to resume by September 1st. About 20,000 men and boys will have no employment during suspension.

TO REMOVE FUNGUS AND MOSS.—Hochberger recommends the use of petroleum to destroy fungoid growths on wood and stone. The green mold at once turns brown or black, and soon falls off after being moistened with petroleum.

NOTICE.

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SANTA CLARA, April 20th, 1874.
H. P. WAKELEE, ESQ :—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.
J. R. AROUELLO.

SAN LEANDRO, Cal., April 3d, 1874.
H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,
J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.
MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours. C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

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A long residence in the interior, preceded by a ten year's experience in this city, in the business of supplying help for both city and country, has given the undersigned such a general knowledge of the wants of the community in relation to help of every kind, and the sources of supply for the same, that we feel abundantly confident of our ability to give the best satisfaction to both those in search of, and those who are in need of help—whether for the chamber, the kitchen, the farm, the mine, the factory or for general work.

Send in your orders truetingly, and you can depend upon having them promptly and satisfactorily filled in accordance with the character of the labor called for—male or female, skilled or unskilled, and of any nationality that may be specified, and on the most satisfactory terms. Address, CROSSETT & CO., Agents, San Francisco, 606 Clay street. aul-tf

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Agricultural Notes.

California.

ALAMEDA.

Wheat.—Livermore *Enterprise*, August 29: Most of our farmers between here and Pleasanton will commence threshing next week. The wheat in this section looked heavier and promises a larger yield than has ever been harvested before from the same land. The amount of grain on Tuesday last in Edson's warehouse was 65,000 centals. There is being daily received from one to two thousand centals, and not less than twelve men are employed in handling the same. It is a grand sight to drop in and see the enormons stacks of golden treasure under roof, and at the same time to see from five to ten cars loaded and shipped daily. The Grangers are shipping their grain—or the most of it—direct to the city.

Hay.—Several cars of hay were shipped this week to parties over the mountains.

Hides.—On Tuesday and Wednesday 400 green hides were shipped to San Francisco from this place.

AMADOR.

Cotton.—*Dispatch*, Aug. 29th: The few stalks of cotton planted in this vicinity a few months ago are now in bloom and looking well. We were also shown a cotton boll the other day, about an inch in diameter, raised this year at the toll house near town, and were informed that the stalk from which it was taken contained about 50 more of the same sort.

COLUSA.

Raising Vegetables.—*Sun*, Aug. 29: It has been thought that vegetables could not be profitably produced away from the low, rich bottom lands along the rivers, and consequently but few have tried it. We have two instances of vegetables of all kinds having been brought to extraordinary perfection on land that was a few years ago considered second rate. Mr. J. P. Bainbridge, residing four miles below town, has raised all his vegetables for several years, and has had no more difficulty than those who had very low, wet land along the river. All he had to do was to *cuttivate* the ground. William Sweeney, residing five miles northwest of town, who is on land that a few years ago was thought too poor for wheat, has now corn 12 feet high, and all kinds of vegetables growing most luxuriantly. All this is the result of cultivation. We are only just beginning to find out the capacity of our soil. We believe that when our farmers find out just how to manage, and will do it, no such thing as a failure of crops will be known.

CONTRA COSTA.

Benefits of Irrigation.—Antioch *Ledger*, Aug. 29: The farmers in the vicinity of Point Timber have been at considerable expense to dig a canal to carry the surplus water of the Kellogg creek to the tule lands, lest damage should be sustained by overflow of the upland. Last winter, despite every precaution taken to keep the water in the artificial channel, it broke over the bank in one place and partially irrigated several acres of land bordering on the canal, which had been sown to grain. The result was that the land thus accidentally irrigated returned a yield to the farmer of forty bushels of wheat to the acre, while the adjoining portion of the field, carefully shielded from the overflow, yielded five bushels per acre. This is always the result of irrigation, and yet men, yes, farmers, are to be found all over these dry, burning plains who will tell you that it is impossible to increase the products of the farm by a system of irrigation.

FRESNO.

Fruit, Etc.—*Expositor*, Aug. 26: We noticed a couple of weeks ago that banana trees were growing on the ranch of Aug. Weihe, near Fresno. This spring four roots were planted on the farm of L. A. Gould, and they are now about four feet high and growing thriftily in open air. Our informant, Daniel Fuller, brought us in a lot of roasting ears, pulled from stalks from 12 to 15 feet in hight, and watermelons picked from vines that have borne one crop already this season. There are over 60 acres of corn, with stalks varying from 12 to 13 feet in hight. Experimeuts have been made in growing tobacco on this farm, and so satisfactory has been the result that it is contemplated planting a considerable quantity next season. The fruit trees and vines on this farm are growing thriftily.

HUMBOLDT.

Blooded Sheep.—*Signal*, Aug. 26: Mr. W. N. Henly received by the steamer *Coquille* six head of long-staple Spanish Merino bucks, direct from the flocks of premium sheep belonging to Mr. S. P. Rockwell, of Vermont. It is pronounced by good judges to be the best lot of sheep ever brought to this county. Forty head more of full blood and graded sheep arrived on the steamer *Pelican* for Mr. Henly. Mr. L. C. Beckwith, of Hydesville, came home on the steamer *Pelican*, bringing another lot of full-blooded and handsome Spanish Merino sheep, which are to be added to his extensive flocks in the southern part of the county.

KERN.

Shearing.—*Southern Californian*, Aug. 27: Fall shearing has commenced with our sheep men.

Tobacco for Sheep.—Sheep men pay from 8 to 10 cents per pound for tobacco for dipping purposes. Wouldn't it be a good crop for some of our farmers to make next season? The demand for tobacco for dip by our sheep men amounts to many thousand pounds every year, and we can see no reason why they should be compelled to send abroad for their supply.

LOS ANGELES.

Hops.—The editor of the *Express* has been sent from El Monte, an arm or side limb of hops from a main hop vine, which he says contains one hundred and thirty-three hop-pods, and in growth and vigor of vine, shows how remarkably this vine prospers in Los Angeles. Persons who have had experience in hop districts elsewhere pronounce this specimen unsurpassed.

MENDOCINO.

Fruit.—*Democrat*, Aug. 29: Fruit, with the exception of berries, this year has been uncommonly plentiful here and hereabout, a goodly share of it being of home production. For the moment there's an overstock, but that won't last long, so parties who want to can and preserve had better be supplying themselves. Good peaches can be had for two cents a pound, splendid gage plums for three, both being grown here, consequently fresh and nice. Watermelons are abundant, and can be had as low as four very fair ones for a quarter of a dollar. Many peach, plum and apple trees have their branches loaded so thick it's as much as they can do to bear up under it.

Crops.—Cor. *Argus*, Aug. 29: Crops of all kinds are good in this section. Grain will yield well, and corn extra well. The fruit crop is not heavy, but of fine quality. This is chiefly a grazing section, and in this respect it is not excelled by any portion of the State. Through droughts and floods, grass and grain have never failed to come sufficient to meet the demand.

MONTEREY.

Grain.—Hollister *Enterprise*, Aug. 29: We may safely calculate on from 60 to 90 days dry weather, during which period the grain must be stored here or elsewhere. It is our opinion that there is no time to be lost. Grain piled up in a field or corral, and exposed to the winds and sun for a month, will lose more in weight than will pay the month's storage, while the risk of fire is much greater on the ranch than in the warehouse. The entire storage capacity of Hollister is about 200,000 bags, and it is a low estimate to say, that after all this room shall be occupied, there will be as much more left unprovided for, as to storage.

NAPA.

Angora Goats.—*Reporter*, Aug. 29: Stalham Wing has been engaged latterly in experimenting with Angora goats, testing their endurance of the climate of Napa, and their ability to thrive upon the scant feed and wild shrubbery of the mountains. He finds that this breed of goats take well to locations where other domesticated animals would perish from starvation; that, in fact, the desolate, craggy hillsides, covered with scattered chemisal and parched and bitter herbage, seem to be a congenial habitat, on which they fatten and produce fleeces of the softest and most delicate texture. He is convinced that the animals can be introduced and propogated here with profit and advantage, browsing on the hills where nothing useful to man seems to be found, and which on such account have been condemned as worthless for apparently any good purpose in nature's wise economy.

NEVADA.

Potatoes.—Grass Valley *Union*, Aug. 29: Take Dodge's potato patch this year, as an illustration of his method of farming. The ground is broken up from as great a depth as can be reached. This is harrowed and a stone-boat dragged over it to break the clods. It is harrowed again and the clods are broken until the ground is thoroughly pulverized. Manure has been mixed in with the soil all the time of the harrowing and plowing. The potatoes are planted, one eye in a hill, and at just the depth which experience has shown the sprout will soonest reach the surface of the ground. Water is kept running on the potato beds all the time, in a stream which is regulated so that the surface of the potato hills are never overflowed. The ground under where the potatoes are expected to form is kept wet, but that in which they grow is merely moist from the capillary action of the ground. The potato patch cultivated this year by Mr. Dodge has produced an average of one pound of potatoes to every square foot of ground planted, which gives over 21¾ tons of potatoes to the acre. The potatoes raised are very fine, and always come out of the ground in symmetrical shape, since the ground is prepared so that they can grow as a potato should.

SAN BERNARDINO.

Reclamation.—Cor. Santa Barbara *Express*, Aug. 29: Thirteen years ago, M. H. Crafts, the owner of an 800-acre farm at Grafton, found this a treeless waste, green with grass through the rainy season; dry, hot and dreary in summer, and undertook to reclaim it with this flowing mountain stream. His success is a marvel. Surrounded by 30 or 40 acres of large orchard and forest trees, which he himself has planted (except forest trees along the stream), with large vineyards, and wheat, barley and corn fields beyond, he has completely changed the face of nature on this farm, and demonstrated what can be done by many thousands of idle acres in all the valleys in this county, and along the fertile foot-hills wherever water can be found, either from the mountain streams or artesian wells.

The gophers on John M. Price's farm, San Luis Obispo county, have been exterminated by cats.

Orange Sporting Powder.

The deer season has commenced, and on the 15th of this month it will be lawful to kill quail and other game birds. Thousands of enthusiastic sportsmen are anxiously waiting for the morning of the 15th, to commence their annual slaughter of the feathery tribe. Even now they are cleaning up their guns, getting out their hunting clothes and preparing for the fray; supplies of ammunition are now in order, and we direct the attention of those who are on the lookout for powder, etc., to the advertisement on the last page of this issue. The Laflin & Rand powder company, who are the largest manufactnrers of this article in the world, claim for their product superiority in many particulars. The agents here receive their powder in 21 days after it is manufactured, and therefore have a supply of fresh powder constantly on hand. This company are furnishing all the powder to the United States government, and supplying the Russian, Spanish, Roumanian and Egyptian governments with all the powder for filling their cartridges made in this country. In the late Franco-Prussian war, they also furnished the French government with their powder. The powder is exactly the same as the English Curtis & Harvey powder, which is celebrated all over the world. The sportsmen will find it to their advantage to use this powder, as the manufacturers claim that it leaves no residuum in the gun. Their Orange mill was established in 1802, exclusively for making fine grade sporting powder. They have besides this nine other mills, and produce 750,000 kegs annually, which is more than any other powder company in the world produces. The powder is offered by the agents to the trade only, but it can be procured from all dealers in sporting material.

In our advertising columns will be found a notice of interest to farmers desiring good stock. Wm. Evans, of Olema, Marin Co., has for sale 200 dairy raised calves of first-rate breed which are specially desirable for their good milking qualities. Parties desiring good dairy stock can communicate with Mr. Evans as above.

Farm Laborers, Engineers, Teamsters, Blacksmiths, Milkers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery steeet, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

We guarantee satisfaction. ag22-tf

For State of Nevada.—We have appointed Mr. F. B. Alderson our special agent and correspondent for the State of Nevada. He will visit our friends and patrons there soon.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Sept. 1st, 1874.

For Week Ending Aug. 18th, 1874.

Spring for Vehicles.—John Smith, San Francisco, Cal.

Tap and Faucet.—Michael Kreiss, Redwood City, Cal.

Gauge Wheel for Gang Plows and Cultivators.—Don Carlos Mattison, and Truman P. Williamson, Stockton, Cal.

Hay and Cotton Press.—Evilee T. Armstrong, Baker City, Oregon.

Paper Stock.—George B. Walker, Placerville, Cal.

The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

SATISFACTION GUARANTEED IN ALL CASES.



BROWN LEGHORN COCKS, $5 Each.

Wilson's Brown Leghorn Cock, "Eureka."

Fowls of all varieties for sale in pairs, trios or singly. Adult fowls, $5 each. Young fowls, $3 and upwards. Write for further particulars to

C. W. WILSON,
East Oakland, Cal.,
Breeder of Land and Water Fowls in variety. 10v8-1m

Chicago and Northwestern Railway.

Miles in Operation:

Illinois Division	486.5
Iowa "	432.8
Wisconsin "	585.4
Michigan "	168 7
Minnesota "	291.8
Dakota "	38.5
Total Miles	2,003.7

IN CONNECTION WITH THE

Central and Union Pacific Railroads,

—THIS IS THE—

PIONEER LINE

Between the Pacific Coast and the

EAST,

And was the first to connect with the great Pacific roads, and form the

OVERLAND ROUTE.

THIS LINE IS THE

Shortest Rail Line

—BETWEEN—

OMAHA and CHICAGO.

The track is of the

BEST STEEL RAIL,

And is well ballasted, and as free from dust as a road can be made; the bridges are strong and durable, and all the appointments are first-class in every respect.

The trains that run over this road are made up of elegant

New Pullman Palace Drawing Room and Sleeping Coaches,

Built Expressly for this Line,

Luxurious, well lighted and well ventilated Day Coaches, and pleasant lounging and smoking cars; all built by this company in their own shops. The cars are all equipped with the

Miller Safety Platform,

—AND—

PATENT BUFFERS AND COUPLINGS,

WESTINGHOUSE SAFETY AIR BRAKES.

And every other appliance that has been devised for the safety of passenger trains. All trains are run by telegraph, and are so regularly on time that one can safely set his watch by their arrivals or departures.

IN A WORD, THIS

Great California Line

Has the

BEST AND SMOOTHEST TRACK,

AND THE MOST

Elegant and Comfortable Equipment

Of any road in the West, and has no competitor in the country. It is eminently the favorite route with Californians traveling East, and is acknowledged by the traveling public to be the popular line for

Chicago, New York and all Eastern Cities.

Through tickets by this favorite route can be procured at all offices of the Central Pacific Railroad, and at the office of the.

CHICAGO AND NORTHWESTERN RAILWAY,

306 Montgomery street.

H. P. STANWOOD, Gen. Ag't for Calif'na.

M. HUGHITT, Gen. Freight Ag't. Chicago.

W. H. STENNETT, Gen. Passenger Ag't, Chicago.

10v8-1am-ly

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Sept. 2d, 1874.

The market thie week hae shown no epecial features of importance. Everything remains almost in the same condition as noted last week, as regarde quotations; while, it may be added, tbe general tone in Produce circles is much more cheerful. The market cannot yet be said to be particularly active, as in case of many articles of Produce holdere are inclined to hold off for better figures, which are promised on nearly every hand. We do not recollect a time in which price generally remained so steady; and the quietness of the market, considering that this ehould be the most busy time of the year, is a matter of surprise to everyone.

Receipts of State Produce for the week at this port wers as follows: Flour, 9,720 barrels; Wheat, 239,410 centals; Barley, 24,340 centals; Oats, 3,118 centals, Corn, 422 centals; Rye, 1,850 centals; Beans, 480 eacks; Mustard Seed, 792 eacks; Flax Seed, 610 sacks; Potatoes; 12,866 sacks; Sweet Potatoes, 1,590 sacks; Onions, 1,727 sacke; Hides, 3,001; Wool, 872 bales; Hops, 80 balee; Hay, 2,112 tons; Straw, 180 tons; Wine, 31,200 gallons.

The amount of Produce now being received and handled here, it will be noticed, is comparatively emall for this season of the year. The movement in Wheat is but moderats, while receipts of Flour, probably owing to the dull state of the market, are very light. The otber Cereals do not come forward very freely. Hay is being received in large quantitles at preeent. The supply of Calfornia semi-tropical fruits is practically *nil*.

Barley — Market quiet. There have been a few small sales of old. Brewing at abont $1.70, on the average, but there is little of it left. Dark Coast is sold ae low as 95c. The best samples of Light run up to $1.17½. A largo cargo cleared for England a day or two ago.

Beans—Are a trifle weaker, owing to large arrivals. Prices unchanged.

Broom Corn—Is dull, with no change to note.

Buckwheat—Quotations nominal.

Corn—Has been held up hy a strong combination until lately, and it was only natural to expect the decline which has taken place.

Dairy Produce—The peculiar couree of the market in Calfornia Butter is almost unexampled. It seems probable, in view of present high prices, that the tendency will be to extreme figures during tbe fall and winter. But the strangest phase of the matter is the comparative dullness, notwithstanding the advantageous offers made. There are immense stocks of Firkin stored in this city, waiting for a further rise, and dealers consider that article a very promising speculation. Very superior samples of Fresh Butter are held at 40o ₱ lb., tbough there is little for which such a price would be demanded. Prices have hardened a little since last week. The favorable turn in Csifornia Cbeese is sustained, and a slight advance ie reported. Eastern is in nominal requeet.

Eggs—No decline has yet taken place. Present rates are highly remuuerative.

Feed—Bran has declined, as have also Hay and Straw, wbile otber descriptions are firm.

Flour—Demand at existing rates is fair for export. No improvement in price.

Fresh Meat—Still tends downward. Bsef and Pork have fallen off considerably.

Honey—Market overstocked, but there is some movement Eastward.

Hops—Prospects are more flattering. Business is light so far, but quotations are stiffer.

Oats—Market firm.

Onions—Receipts heavy, and prices low.

Potatoes—Have declined about 5c ₱ cental throughout the list. Sweet are also lower.

Poultry—Chickens and Ducks are cousiderably cheaper. Geese are held at an advance.

Provisions—Demand good.

Seeds—Prices lower.

Wheat—Is dull. The range—from $1.40 to $1.60—represents tbe figures which dealers would like to give, an i which they are forced to offer, respactively. Tbere is not much being dons, except in handling contract Wheat.

Wool—The fall clip moves elowly. Receipts are light, and trade lighter. Eastern markets are telegraphed moderately active.

LEATHER.

WEDNESDAY M., Sept. 2, 1874.

Leather is improving in activity, if not in quotations. Still, businsss is as yet anything but satisfactory.

City Tanned Leather, ₱ lb	25@29
Santa Cruz Leather, ₱ lb	25@29
Country Leather, ₱ lb	24@28
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Beaumorville, 15 Kil	60 00@ — —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 35
California Kip, ₱ doz	40 00@1 60
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Baoks, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@ 5 25
Good Freuch Calf Boot Legs, ₱ pair	4 00@ 4 75
Frenoh Calf Boot Lega, ₱ pair	4 00@ — —
Harness Leather, ₱ lb	30@ 37½
Fair Bridle Leatber, ₱ doz	48 00@ 72 00
Skirting Leather, ₱ lb	34@ 37½
Welt Leather, ₱ doz	30 00@ 50 00
Buff Leather, ₱ foot	18@ 21
Wax Side Leather, ₱ foot	17@ 19
Eastern Wax Leather	—@— —

DOMESTIC PRODUCE.

WEDNESDAY M., Sept. 2, 1874.

BEANS.

Bsans, sm'l wh. lb	3¼@ 3½
do, butter	— @ —
do, large, do	— @ —
do, bayo	2 @ 2¼
do, pink	1½@ 2
do, pss	3¼@ 3½
do, Lima	5½@ 6½

BROOM CORN.

Per ton	$100 @175

COTTON.

Cal. 1873, ₱ lb	— @ 20

DAIRY PRODUCE

Butter, Cal. choice ₱ lb	25 @ 28
do, good	32½@ 35
do, infsrior	27½@ 32½
do, firkin	30 @ 32½
do, pickled	30 @ 35
Obesse, Cal. new	9 @ 14½
do. Eastern	12 @ 13½

EGGS.

Eggs, Cal. frssh	40 @ 45
do. Orsgon	30 @ 35
do. Eastern	25 @ 30
do, Ducks'	— @ 35

FEED.

Bran, per ton	17 00@18 00
Middlings	— —@30 00
Hay	10 00@14 50
Straw, ₱ bale	—55 @— 60
Oil cake mesl	—@32 50
Corn Msal	40 00@42 00

FLOUR.

Extra	4 50 @5 25
Superfine	4 00 @4 50

FRESH MEAT.

Bsef, fr quality ₱ lb	8 @ 8½
do, second do	6 @ 7
do, third do	4½@ 5
Veal	4½@ 6
Mutton	4½@ 5
Lsmb	5½@ 6
Pork, undressed	6½@ 6¾
do, dressed	9 @ 9¼

GRAIN, ETC.

Wheat, old	— @ —
do new	1 40 @1 60
Barlsy, coast	95 @1 05
do fisbt	1 05 @1 17½
Oats, choice	1 45 @1 60
do oommon	1 40 @1 45
Corn, Wbits	— @1 80
do, Yellow	— @1 85
Buckwhsat	2 75 @3 00
Rye	1 05 @1 10

HOPS.

California, 1874	22½@ 27½
East'rn, '73, ch'ice	30 @ 40

MISCELLANEOUS.

Beeswax, psr lb	25 @ 27½
Honey in comb	20 @ 25
do Strained	7½@ 10
Pulu	9 @ 10½
Onions	60 @1 00

NUTS—JOBBING.

Cal. Walnuts	14 @ 15
Peanuts per lb	8 @ 9
Cbile Walnuts	10 @ 11
Pecan nuts	13 @ 15
Brazil do	14 @ 16
Alm'ds b'rd sbell	10 @ 12½
do, soft	20 @ 25
Filberts	18 @ —

POTATOES.

Sweet, psr cwt	1 50 @1 62½
Cuffse Cove	— @ —
H. M. Bay	85 @1 00
Pigeon Pt	— @ —
Humboldt	— @ —
Petaluma	— @ —
Mission	85 @1 05
Salinas	85 @1 00
Bodega	— @ —
Sac. Rivsr	65 @ 95

POULTRY & GAME.

Live Turkeys, hens per lb	20 @ 22
do gobblers	18 @ 20
Hsns, per dz	6 25 @7 75
Roosters, young, largs	5 50 @6 50
Broilers, small	2 75 @4 25
do large	4 25 @5 25
Ducks, tame, doz	5 00 @7 50
Geess, per pair	2 25 @2 50
Hare, psr doz	2 50 @3 50
Snipe, Eng., doz	— @ —
Quail, per doz	— @ —
Mallard Ducks	— @ —
do small	— @ —
Wild Geess, gray	— @ —
do wbite	— @ —
Dovss, per dozen	1 00 @1 25
Prairis Chicksns	— @ —
Grouse	— @ —
Rabbits	1 25 @1 50
do tame	5 00 @6 00
Venison, per lb	6 @ 10

PROVISIONS.

Cal. Bacon, Light	14 @ 15
do Medium	— @ 13
do Heavy	— @ 12½
Eastern do	13½@ 14
Hams, Cal	15 @ 15½
do Whittakers	— @ 17
do Duffield, cb	— @ 16
do Plankton & Armour	— @ 15
do Boyd's	— @ 15½
do Stewart's	— @ 15½
Eastern Should's	9 @ 10
do nsw hams	— @ —
Cal. Smoked Bsef	10 @ 11
Lard	13 @ 14

SEEDS.

Alfalfa	12 @ 13
Canary	4 @ 4½
Flaxseed	3 @ 4
Ky. Blus Grass	40 @ 50
Millet	12 @ 15
Mustard, whits	1½@ 2
do. Brown	2 @ 3
Italian Rye	25 @ 30
Perennial do	30 @ 35
Timotby	8 @ 10
Sweet V. Grass	60 @ 75
Orchard do	30 @ 35
Red Top do	30 @ 40
Hungarian do	10 @ 13
Lawn do	50 @ 60
Clover Rsd	— @ 20
do Wbite	60 @ 75
Alsike	— @ —
Esparto Grass in Packsts	— @ —

WOOL, ETC.

Spring, short, lb	22½@ 25
do cnoice Nort	25 @ 31½
Medinin grades	18 @ 22
Fall clip	18 @ 20
Burry	14 @ 18
Flides, dry	19 @ 20
do wet salted	8½@ 9½
Tallow, Ornde	6 @ 7
do Refined	7 @ 7⅝

FRUITS AND VEGETABLES.

WEDNESDAY M., Sept. 2, 1874.

Limes are now much cheaper, selling at $7@10 ₱ 1,000. Australian Lemons are in better supply and lower. Apples are becoming much more plenty, and tbe price has hesn reduced. Blackberries are lc ₱ b bigher. There are a few Strawberries, of doubtful quality, on the market, which are held at 12½c ₱ lb. Peaches are still lower. Grapss are plenty; prices remain abont ths same, excspt for Tokay, which are now fully in season and consequently lower.

Drisd Fruits are steady and quiet.

The "Call" says: The accounts of tbe Almond orop from all parts of ths State are favorable, and tbsrs is a prospect that, the product will hs more tban sufficient for local consumption, leaving a small surplus for sbipment. There is no doubt tbat some portions of the State are eminsntly adapted to Almond growing, and in tbose sections that it will prove vsry profitable to the cultivator and become an important interest. The importations of Almonds at tbe port of New York for tbe first seven montbs of this year embraced 28,142 packages, valued at about $250,000. It is thus seen tbat there is a market for all that tbis State is likely to produce. The following item from a Malaga circular indicates that prices will be fair, from a sbort European crop: The crops of the leading descriptions, viz: Jordan Hard Shell, Tarragona and Ivica Soft do, will be short this year, owing to the cold winds experienced when the trees were in blossom. In the Tarrazona district only one half of an average yield is anticipated, and the few stocks of last year's Fruit are firmly held at advanced rates, wbich is a sure indication of prices opening high.

In Vegetables we note an advance of 1½c ₱ lb in Shell Beans, and 2c in Egg Plant.

FRUIT MARKET.

Tabati, Or. ₱ M	30 00@35 00
Lorita, do	— —@— —
Csl. do	— —@— —
Limes, ₱ M	7 00@10 00
Cal. Lemons, ₱ M	—@— —
Australian do	40 00@45 00
do per box	4 50@ 5 00
do Sicily ₱ b'x	—@— —
Bananas, ₱ bnch	— @ —
Cocoanuts, ₱ 100	9 00 @10 00
Pineapples, ₱ dz	7 00 @9 00
Apples, ₱ box	40 @1 00
Cherries	— @ —
Blackberries	3 @ 4
do wild	— @ —
Huckleberries	— @ 18
Strawberries ₱ lb	— @12½
Gooseberries	— @ —
Raspberries	— @ —
Currants	— @ —
do black	— @ —
Apricots	— @ —
Plums	1 @ 5
Peaobes, bskt	50 @1 00
do, ₱ box	1 00 @1 50
Pears, Eating	50 @1 50
do Cooking	40 @ 50
Crab Apples	5 @ 6
Nectarins	3 @ 4
Wat'rmel's ₱ 100	6 00@10 00
Muskm'l's ₱ 100	7 00@12 50
Pomegran's, ₱ 1006	00 @7 00
Figs	8 @ 10
Grapes, Bl'k H'g	2 @ 4
do Muscat	4 @ 6
do Malavo'e	4 @ 5
do Sweetw'r	1½@ 2½
do Mission	1 @ 2
do Roac of Peru	4 @ 5
do Tokay	4 @ 5
do Morocco	— @ —
do St. Petsr	— @ —

DRIED FRUIT.

Apples, ₱ lb	6 @ 7½
Pears, ₱ lb	10 @12½
Peaches, ₱ lb	10 @11
Apricots, ₱ lb	10 @12½
Plums, ₱ lb	8 @10
Pittcd. do ₱ lb	15 @18
do Extra, ₱ lb	— @—
Raisins, ₱ lb	5½@12½
Black Figs, ₱ lb	8 @10
White, do	10 @15
Prunes	6 @ 8
do German	16 @ 20
Citron	30 @ 35
Zante Currants	8¼@ 8½
Dates	12½@ 14

VEGETABLES.

Asparagus	7 @ 8
Beets	— @ 1
Cabbage, ₱ 100 lbs	— @ 2 00
do nsw, doz	50 @60
Carrots, ₱ 100 lbs	1 00@1 25
Cauliflower, doz	50 @60
Celery, doz	50 @65
Garlic, ₱ lb	6 @ 8
Green Peas	3½@ 4
Green Corn ₱ doz	15 @18
Sum'rSquash, lb	4 @ 5
Marro'tat Sq'sb, tn 60	00@—
Artichokes, ₱ doz	15 @25
String Beans, ₱ lb	— @ 5
Lima Beans	4 @ 5
Parsnips	12½@15
Shell Beans	3½@ 7
Peppers, ₱ lb	12½@20
Okra ₱ lb	25 @40
Okra, Green	6 @ 8
Cucumbers, doz	6 @ 8
Tomatoes	3 @ 5
Egg Plant ₱ lb	6 @ 8
Rhubarb	— @—
Lettuce	10 @15

RETAIL GROCERIES, ETC.

WEDNESDAY M., Sept. 2, 1874.

Thsre are no changes whatever in retail Groceries, etc.

Butter, Cal. ch'ice	35 @ 40
do common	25 @ 30
Cbeese, Cal., lb	12½@ 15
Lard. Cal., lb	12½@ 15
Flour, ex. fam, bl	5 00 @5 50
Corn Meal, lb	2½@ 3½
Sugar, wn. orsh'd	— @ 12
do lt. brown, lb	7 @ 9
Coffee, Sbarboro's family gr'nd, lb	32½@ —
Coffee, green, lb	24 @ 32½
Tea, fine blk, 50, 65, 75	@1 00
Tea, finst Jap, 55, 75, 90	@1 00
Candles, Admant'e	17 @ 25
Soap, Cal., lb	@ 10
Can'd Oysters, dz. 2	0 @2 50
Syrup, S F. Gol'n	35 @ 40
Dried Appiss	8 @ 10
Dr'd Ger. Prunes	15 @ 17
Dr'd Figs, Cal	9 @ 10
Dr'd Peaches	10 @ 12
Oils, Kerosene	30 @ 35
Wines, Old Port	3 50 @5 00
do Fr. Claret	1 00 @1 25
do Cal., dz. bot	3 00 @4 50
Whisky, O.B, gal	3 50 @5 00
Fr. Brandy	4 00 @10 00
Rice, lb	10 @ 12½
Yeast Powders, dz	1 50@2 00

GENERAL MERCHANDISE.

WEDNESDAY M., Sept. 2, 1874.

Another slight declins in English Wbeat Bags is noted. Coffess are weaker. Sugar and Tobacco are held very firmly. Spices are not quits so buoyant.

BAGS.

Eng. Stand Wht	—13 @13¼
Detrick's Machine Sewed, 2x36	—@13
do 22x36, do E W	—@13½
do 20x40, do A	—@14
Flour Sacks ½s	10 —@12
" ¼s	6 —@ 7
Stand. Gunniss, doubls seam	—15 —@16
single seam	—13 —@13
" Wool Sacks	65 —@—
Barley Bags 24x36	—@15½
do 23x40	—@15½
do 24x40	—@16¼
do 24x36	—@17
Oat Bags, 24x40	16 @16½
do 28x36	— @17
Hessian 40-in. gds	9½—@10
do 45	10½—@11
do 60	— @15

CANNED GOODS.

Asst'd Pie Fruits in 2½ lb cans	2 75 @ 3 00
do Tabls do	— @ 2 75
Jams & Jellies	3 75 @ 4 25
Pickles ½ gl	— @ 3 50
Sardines, qr hox	1 80 @— —
do bf boxss	3 20 @— —

COAL—Jobbing.

Australian, ₱ ton	10 00 @— —
Coos Bay	— — @10 00
Bellingham Bay	— — @ 8 50
Seattle	— — @11—
Cumbsrl'd, cks	22 00 @23 00
do bulk	18 00 @20 00
Mt. Diablo	6 25 @8 50
Lehigb	— — @19 00
Livsrpool	11 00 @12— —
West Hartley	12 50@— —
Scotcb	9 50 @10 00
Soranton	15 00 @17 50
Vancouvsr's Isl	11 00 @11 50
Cbarcoal, ₱ sk	75 @— —
Coke, ₱ bbl	— @ 60

COFFEE.

Sandwich Island	— @ 22
Central Amsric'n	20 @ 22
Costa Rica per lb	21 @ 22
Guatamala	19 @ 20½
Java	— @ 28
Manilla	20 @ 21½
Ground in os	— @ 30
Chicory	10 @ —

FISH.

Pac. Dry Cod, new	5 @ 6
csses	6 @ —
do honeless	11 @ 12
Eastern Cod	7 @ 8
Salmon in bbls	9 00 @9 25
do ½ bbls	4 50 @4 75
do 2½ lb cans	— @3 00
do 2 lb cans	2 65 @2 75
do 1 lb cans	1 75 @— —
Do Col. R. ½ lb	— @— —
Pick. Cod, bbls	22 00 @— —
do bbls	11 00 @— —
Bos. Sm'k'd Hsr'g	40 @ 50
Mack'l, No. 1, ½ bls	8 00 @8 50
" Extra	— @9 00
" in kits	2 00 @2 50
" Ex mess	3 00 @3 50
" Ex mess. ½ bs	—@12 00
Sm'k Hsrr'g, bx. 50	@ 60

NAILS.

Assorted size. ₱ lb	4¼ @ 7

OILS.

Pacific Glne Co. Nsat F't No. 1	— @1 00
Pure	1 25 @— —
Castor Oil, No. 1	— @1 75
do do No. 2	— @1 60
Cocoanut	45 @ 50
Olive Plagniol	5 00 @— —
do Possei	4 75 @— —
Palm	9 @— —
do Bagicalnpi	— @— —
Linsesd, raw	— @1 02
do boiled	— @1 07
China nut in os	— —@ 95
do bulk	75 @ 80
Sperm, crude	— @1 40
do bleacbed	— @2 20
Coast Whales	35 @ 40
Polar, refined	50 @ 55
Sperm	1 40 @1 50
Lard	1 00 @1 10
Coal, refiusd Pet	37½@ 40
Oleophine	— @ 34
Devoe's Bril't	25 @ 28
Long Island	— @ 34
Eureka	37½@ 40
Devoe's Petro'm	26 @ 29
Barrel kerosene	20 @ 25
Olive	4 00 @9 50
Downer Kross'e	35 @ 40
Gas Light Oil	— @ 34

PAINTS.

Atlan. W. Lead	7½@ 12½
Whiting	— @ 2
Putty	4 @ 4½
Obalk	— @ 2½
Paris White	2¾@ —
Ochre	4 @ 5
Venetian Red	3½@ 5
Red Lead	7 @ 11
Litbargs	10 @ 11
Eng. Vermillion	2 00@2 10

RICE.

Cbina No. 1, ₱ lb	6½@ 6¾
do 2, do	5½@ 5¾
Japan	5½@ 6
Siam Cleaned	7 @—
Patna	— @ 6¾
Hawaiian	— @4 50
Carolina	10 @ 10½

SALT.

Cal. Bay, psr ton	10 00@14 00
do Common	5 00@ 7 00
Carmsn Island	11 00@13 00
Liverpool fine	20 00@23 00
do coarse	15 00@20 00

SOAP.

Castile ₱ lb	10 @ 11
Local brands	5 @ 8

SPICES.

Allspice, psr lb	15 @ 16
Cloves	47½@ —
Cassia	22½@ 25
Citron	— @ 30
Nutmeg	1 20 @1 25
Whole Pepper	20 @ 22
Pimsnto	— @ 15½
Gr'nd Allsp'ce	— @1 00
do Cassia do	— @1 50
do Cloves do	— @1 50
do Mustard do	— @1 25
do Ginger do	— @1 00
do Pepper do	— @1 00
do Macs do	— @2 00

SUGAR, ETC.

Cal. Cube per lb	11½@ —
Partz' Pro, Cubs bblor 100 lb bxs	— @ 11¾
do in 50 lb bxs	— @ 12
do in 25 lb bxs	— @ 12½
Circls A orusbed	— @ 11½
Powdersd	— @ 11¾
Granulated	— @ 11
Dry granulated	— @ 11½
Hawaiian	8 @ 10½
California Best	— @ 11¼
Golden C	— @ 10½
do Key'g grade	— @ 6½
Cal. Syrup in ols	— @ 5½
do in ½ bls	— @ 55
do in kegs	— @ 60
Hawaiian Molasss	25 @ 27½

TEA.

Oolong, Canton, lb	19 @ 25
do Amoy	28 @ 50
do Formosa	40 @ 80
Impsrial, Canton	25 @ 40
do Pingsuy	45 @ 80
do Moyuns	60 @1 00
Gunpo'dsr, Cant.	30 @ 42½
do Pingsuy	50 @ 90
do Moyune	65 @1 25
Y'ng Hy., Canton	28 @ 40
do Pingsuy	40 @ 70
do Moyuns	65 @ 85
Japan, ½ obssts, bulk	30 @ 75
Japan, lacquersd bxs, 4½ and 5 lbs	45 @ 67
Japan do, 3 lb bxs	45 @ 90
do pl'n bx, 4½ lb	35 @ 65
do ½ & 1 lb paper	30 @ 55

TOBACCO—Jobbing.

Bright Navys	50 @ 60
Dark do	45 @ 55
Dwarf Twist	57 @ 62½
12 inch do	57 @ 62½
Light Pressed	65 @ 75
Hard do	60 @ 70
Conn. Wrap'r	40 @ 50
Penn. Wrapper	20 @ 30
Ohio do	7 @ 15
Virgi'a Smok'g	60 @ 95
Fine ot cbs'g, gr	8 50 @9 25
Fine cut chewing, buc'ts ₱ lb	75 @ 90
Banner fine cut	— @9 00
Enrska Cala	8 75 @9 00

TURPENTINE.

Eastsrn	60 @ 65

METALS.

WEDNESDAY M., Sept. 2, 1874.

There is nothing new to report of the Mstal market. Quicksilver is firm; Iron, Steel and Tin Plates in slightly better demand; Lead slow of sale.

American Pig Iron, ₱ ton	— — @ 40 00
Scotch Pig Iron, ₱ ton	33 00 @ 42 00
White Pig, ₱ ton	— — @ 44 00
Oregon Pig, ₱ ton	— — @ 45 00
Refined Bar, bad assortment, ₱ lb	— — @— 3½
Refined Bar, good assortment, ₱ lb	— — @— 4
Boilsr, No. 1 to 4	— — @— 5½
Plate, No. 5 to 9	— — @— 5½
Sbset, No. 10 to 13	— — @— 5½
Sheet, No. 14 to 20	— — @— 5½
Sbeet, No. 24 to 27	— 08 @— 09
Horse Shoes, per keg	7 50 @ 8 00
Nail Rod	— 9½@— —
Norway Iron	— 8 @— —
Rolled Iron	— 6 @— —
Otber Irons for Blacksmitbs, Miners, etc.	— — @— 4½
COPPER.— Braziers'	— 31 @— 32
Copper Tin'd	— 45 @— —
O. Niel's Pat	— 50 @— —
Sheathing, ₱ lb	— — @— 24
Sheatbing, Yellow	— — @— 25
Sbeatbing, Old Yellow	— — @— 12½
Composition Nails	— 24 @— —
Composition Bolts	— 24 @— —
TIN PLATES.— Plates, Cbarcoal, IX ₱ box	13 00 @ 14 50
Plates, I C Cbarcoal	12 75 @ 14 50
Roofing Plates	11 50 @ 14 00
Banca Tin, Slabs, ₱ lb	— 31 @— 33
STEEL.—English Cast, ₱ lb	— 20 @— 25
Anderson & Woods' Amcrioan Cast	— 10 @— 17
Drill	— 18 @— 22
Flat Bar	— 18 @— 22
Plough Points	— 16 @— 17
ZINC	— — @— 11
Zinc, Sbset	— — @— 11½
NAILS—Assorted sizes	— 5¾@— 8
QUICKSILVER, per lb	— —@ 1 45

LUMBER.

WEDNESDAY M., Sept. 2, 1874.

Lumber continues in good demand, though the trade is not yet what is confidsntly expscted by dealers.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00
Rougb refuse, ₱ M	12 00
Rougb clear, ₱ M	32 50
Rough olear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-incb siding, ref, M	16 00
Half-incb, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Plokets, rough, p'ntd	16 00
Piokets, fancy, p'ntd	25 00
Shinglee, ₱ M	2 25

Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal foot	1o
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Latbs, ₱ M	3 25
Furring, ₱ lineal ft	¾

REDWOOD—Retail.

Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	25 00
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Sept. 2, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

The retail markst is wsll supplied witb Msats and Fisb. Venison is moderately plenty. Poultry and Eggs remain bigh and scarce.

Spring Chioksns	50 @ 75
Hens	75 @1 00
Eggs	— @ 50
do Ducks'	— @ 40
do Farallones	30 @ 35
Turkeys, ₱ lb	25 @ 30
Ducks, CanBk, pr	— @ —
do Mallard, pr	— @ —
Tams, do	1 50 @2 00
Tsal, ₱ doz	— @ —
Gesss, wild, pair	— @ —
Tams, ₱ pair	3 00 @4 00
Snipe, ₱ doz	— @ —
Quail, per dozen	— @ —
Prairie Ch'k's, sa	— @ —
Pigsons, dom. dz	— @4 00
Wild, do	— @2 00
Squabs	— @4 50
Hares, sach	37½@ 50
Rabbits, tams, pr	75 @1 00
Wild, do, ₱ dz	2 00 @— —
Squirrels do	15 @ 20
Ssa Bass, ₱ lb	— @ 20
Bssf, tend, ₱ lb	— @ 20
Corned, ₱ lb	8 @ 10
Smoked, ₱ lb	— @ 15
Porter House St'k	— @ 20
Sirloin do	12 @ 15
Round do	8 @ 10
Pork, rib, stc., lb	— @ 15
Chops, do, ₱ lb	15 @ —
Veal, ₱ lb	10 @ 15
Cutlst, do	12½@ 15
Mutton-cbops, lb	12 @ 15
Lsg Mutton, ₱ lb	10 @ 12
Lamb, ₱ lb	10 @ 15
Vsnison	10 @ 15
Tongues, beef	75 @— —
do, do, smoksd	— @1 00
Tonguss, pig, lb	10 @— —
Bacon, Cal., ₱ lb	— @ 18
Hams, Cal, ₱ lb	17 @— —
Hams, Crose' s o	— @— —
Choice D'ffield	18 @— —
Whittsksr's	18 @ 20
Flounder, ₱ lb	— @ 15
Salmon, ₱ lb	15 @ 20
Smoked	— @ 10
Pickisd, ₱ lb	— @ 6
do Spr'g p'kl'd	15 @ 18
Salmon bellies	30 @ 35
Rock Cod, ₱ lb	— @ 15
Cod Fish, dry, lb	8 @ 15
do fresh	— @ 15
Percn, s watsr, lb	— @ 10
Frssh watsr, lb	10 @ 15
Lake Big. Trout	25 @ 30
Smslts, large ₱ lb	— @ 10
Small Smslts	12½@ —
Herring, Sm'kd.	75 @— —
do frssh	— @— —
Pilchards, ₱ lb	— @ 15
Tomcod, ₱ lb	8 @ 10
Tsrrapin, ₱ doz	— @6 00
Mackersl, p'k, ea	12½@ —
Frssb, do	— @— —
Ssa Bass, ₱ lb	— @ 20
Halibut	50 @ 75
Sturgeon, ₱ lb	5 @ 6
Oysters, ₱ 100	1 00 @— —
Chssp. ₱ doz	50 @— —
Clams ₱ 100	— @ 50
Mussels do	— @

Stock Notices.



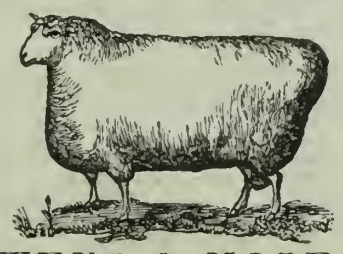
300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

N. GILMORE,

Importer and Breeder of

Angora or Cashmere

GOATS

—OF—

PURE BLOOD

—AND—

ALL GRADES.

For sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address

N. GILMORE,
El Dorado, El Dorado county,
11v6-eow California.

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m **THOS. BUTTERFIELD & SONS.**

For Sale.

About 200 Head of Dairy Raised Calves,

COMING TWO YEARS OLD,

The Progeny of the Best Dairy Stock in the State.

Apply to, **WM. EVANS,**
9v8-2t Olema, Marin Co., Cal.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

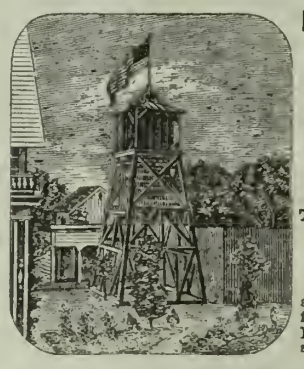


L. U. SHIPPEE, Importer and Breeder of Thoroughbred Spanish Merino Sheep and Short-Horned Durham Stock, Stockton, Cal.

I wish to call your attention to my flock of Spanish Merino Sheep, both Ewes and Bucks, imported during the last two years, and selected from the best flocks in Vermont. Unequaled on the Pacific Coast for quality and size, many of them having taken first premiums both in Vermont and California. Should you or any of your friends require sheep of this quality, you will do well to call and examine this flock before purchasing elsewhere, as I intend to sell them at greatly reduced prices from what they have formerly been sold.

My Flock Consists of 1,500 Sheep, 1,200 Imported and 300 of my own Breeding.

P. S.—This flock is not only the finest but the largest flock of imported Spanish Merino Sheep on the Pacific Coast. They have been selected from the flocks of the best breeders in Vermont, such as Rockwell, Sanford, Rich, Hammond, Saxton, Dean, Ellsworth, Remley, Stickney, and others who are acknowledged to be among the best breeders of Spanish Merinos in America. 24v7-eow-4m



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the **Plains of Kansas, Nebraska, Missouri, Iowa and Illinois**, where no other mills have been known to stand any length of time. All we ask is a full investigation of the **DEXTER.**

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OFFICE—428 Sansome Street.....SAN FRANCISCO
4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.



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Thoroughbred Stock Bred and Kept upon the MERINO RANCH



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our rauch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. **City Office—315 California Street, San Francisco.**

SEVERANCE & PEET,
10v7-eow Importers and Breeders of Spanish Merino Sheep.

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ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.
7v8-3m

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

Angora Goats and Thoroughbred Cattle.

I will sell at public sale, without reserve, on Friday, September 25th, 1874, at 12 o'clock M., on the State Agricultural Society's Fair Grounds, THIRTY-THREE HEAD OF PURE BRED ANGORA GOATS. Also, one Jersey Bull, one Ayrshire Cow, one two-year-old and two one-year-old Ayrshire Bulls. Pedigrees guaranteed. Terms Cash. ROBT. BECK.
Sacramento, August 24th, 1874. 9v8-td

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, Etc.

For Sale, wholesale or retail, by

B. F. WELLINGTON,
(Successor to E. E. Moore).
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TO WINE & BRANDY MANUFACTURERS.

Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

Send for Circular. Address,

GEORGE JOHNSTON,
Sacramento.

Or, W. F. JOHNSON, Folsom, Sacramento County, California. Refer to Lachman & Co., San Francisco, and Johnston Brandy and Wine Manufacturing Co., Sacramento and Marysville. 2v8-12w



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ALBERT E. BURBANK,
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CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

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Agricultural Articles.

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CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET..... .....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

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No. 9 Merchants' Exchange, California street,
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MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

BYRON JACKSON,

MANUFACTURER OF

Patent Self-Feeder & Elevator Attachment

For Separators, at the Yolo Planing Mill and Machine Shop, Woodland, Yolo County, Cal.

This improvement was patented in 1867 and in 1870. For the past two years I have been introducing it to the public with great success. It is pronounced by all that have tried it to be the greatest labor saving invention of the age. No Thresher will be without it after witnessing its operation. It saves all the hard work of feeding and injury to health, and one-half the labor required to unpply the grain from the stacks. It will pay for itself in less than thirty days, besides doing better work. For particulars send for circular; it gives all necessary information, besides the best plan for using the Horse Forks ever adopted. Entire satisfaction guaranteed if properly used. 21v7-3m

H. C. SHAW,

STOCKTON, CAL.

Agricultural Implements,

201 and 203 El Dorado St., Sign of "Webster Bros."

General Agent for the San Joaquin Valley for the Vibrator Threshers, Studebaker Farm Wagons and Improved Single Geared Headers.

The Baxter & Webster Single Gear Headers are built only at my establishment. Address, H. C. SHAW,
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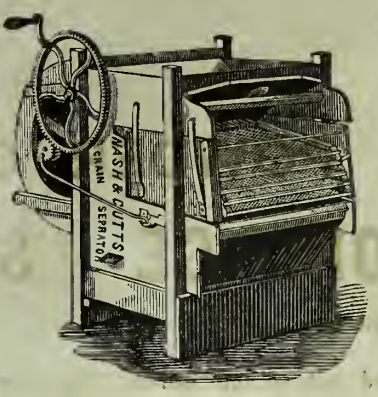
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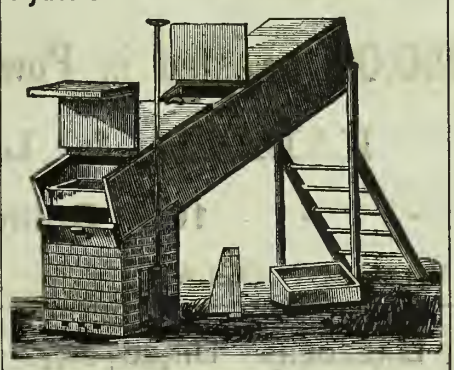
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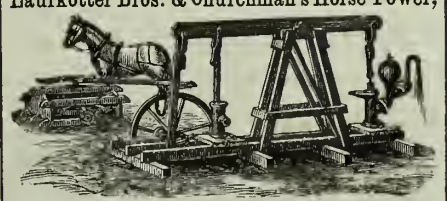
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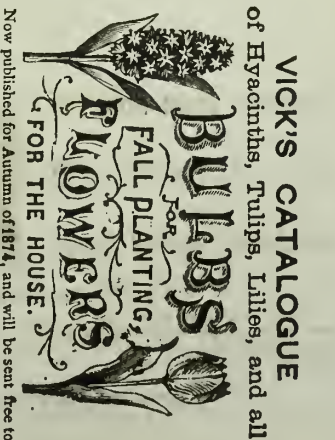
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8v26-2t

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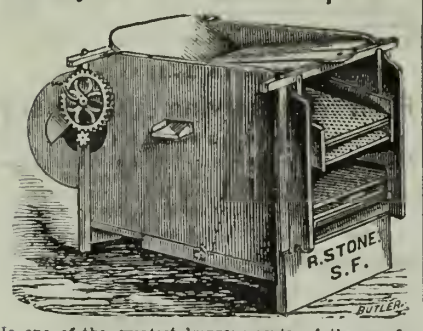
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Volume VIII.] SAN FRANCISCO, SATURDAY, SEPTEMBER 12, 1874. [Number 11.

Seed Tests.

Can not our agricultural scientists do something to save us from the affliction of bad seed? If any one could, by chemical analysis, or by microscopic examination, discover the presence or the absence of the germinating properties of the seed and could inaugurate any practicable process by which the buyer could ascertain the value or worthlessness of seed, he would be truly a benefactor to his race. The labors of this class have hitherto been confined too exclusively to what are known as "interesting" facts. The change which age produces in seeds should, it would seem, be discernible to the eye of science; and if seeds have never possessed the germ of fruitfulness we ought to be able to distinguish them from those that do possess it. It may possibly require a more intimate acquaintance with agricultural science than has yet been granted us, but the necessities of the case should stimulate research in this direction; and if the hidden information is ever revealed, even to the eye of patient and laborious science, we may reasonably hope to have the facts soon made available to the progressive, practical agriculturist, or at least to the legitimate seedsman. When we have arrived at this point—if we ever do arrive at it—government should lend its aid in securing to the farmer and gardener good seed. There are points, even in our present state of ignorance in the matter, where government could protect the sower against the grower and seller of worthless seed, by punishing the seller of seed that can be proved to have been kept beyond the known period of its fertility.

Meanwhile, the practical experience of the sower may be of service to the farming community. There are some kinds of seed that give, under a very hasty and inexperienced observation, evidence of the presence or absence of fertility. Other kinds require more experience and a closer observation. Now, we would like much to have the readers of the PRESS give through its columns any information which they may possess in this matter. Give us the rules by which you have been able to test the value of any seed; no matter what the seed may be. Such statements will certainly be interesting, and will probably be of practical benefit to some.

The present uncertainty in regard to the value of the seed that we sow, is one of the most harrassing things with which the farmer has to contend. No matter how faithfully and intelligently he may perform his part, or to what an extent the seasons may favor him, he is still the victim of doubt and uncertainty. Something may be done to remove this incubus from agriculture; and we believe the time will come when the seed sower will know what he is trusting to the earth. We again call upon our friends to contribute any mite of information which they may possess on this subject.

MOKELUMNE HILL was nearly destroyed by fire on Friday of last week; loss, $170,000. This is not the first time a fire has ravaged this neat little mountain town, once the center of an important mining industry.

CALIFORNIA peaches are selling in New Mexico at $1.50 per dozen.

Fruit at the Mechanics' Institute Fair.

The managers of our great industrial exposition are receiving so many compliments from all quarters that possibly they may suppose the public think them infallible. The people, it is true, have been extremely liberal, both in their pecuniary and complimentary encouragement of the fair; still the visitor will hear some adverse criticism in various parts of the pavilion. Especially is this the case in the horticultural department. People are disappointed here, not in the floral display, for this is apparently satisfactory, as one class in a horticultural display; but they expected an exhibition of fruit and vegetables. It is remarked, that of the three sisters, Flora, Ceres and Pomona—all of whom were expected to be present in what is denominated the horticultural department—only the gay Flora has hitherto been allowed to appear in public; her plainer sisters being kept out of sight, for some unaccountable purpose.

Ceres has evidently been refused admission here; and the presence of Pomona has scarcely been recognized. The display of fruit has been meager in the extreme; consisting, in the first week, of a few plates of plums and pears; inferior specimens at that. During the second week we were favored with the sight of four or five plates of peaches. These were certainly fine specimens of the peach family. We have hardly seen them equaled in size and appearance; and, from the delicious odor which they gave forth, are willing to pledge ourselves for their good eating qualities. They were labeled as being exhibited by E. M. Smith, of Coloma, El Dorado Co. Even these peaches—though really superb—were not strictly admissable at a fair exhibition; the variety not being stated. They were gratifying to the senses, but no practical results can be derived from such exhibitions. The third week was a slight improvement on its predecessors; showing twenty varieties of grapes; each variety being duly labeled. This is encouraging.

It is remarked concerning the horticultural department, that a florist evidently "runs the machine;" and that there is a little too much of the advertising odor about the place.

THE usual summer flood of this year so swelled the Sacramento river, that it backed up the waters of its affluent—the American river—to such a hight, that it destroyed several hundred cherry and peach trees at Smith's gardens, which escaped the floods of winter.



THE BIG TREES OF CALAVERAS.

THE STATE FAIR.—Applications for space in the State Fair pavilion, at Sacramento, and in the building for agricultural implements, at the park, are said to be coming in quite rapidly.

Our Big Trees.

The "Big Trees" of California are subects of great pride to the people of the State, and we never let an opportunity pass to brag of our pre-eminence in the size of timber produced. *The* big trees, are, however, natural curiosities, and the "Woodman spare that tree" rule has, for a wonder, been rigidly enforced. If it were not, no doubt some vandal would have cut them all down for lumber long ago. The dimensions and all the details concerning these monarchs of the forests are so well known, that we need not repeat them here. We give, however, an illustration of one of these trees, so that our readers who have never seen the trees can have some idea of their size by comparing the one in the engraving with the men, horses, and other surrounding objects. The artist, by placing other objects in juxtaposition, conveys an impression of size which a first glance fails to give. Our big trees are well worth a visit from all tourists.

NEW BEET SUGARIES.—Among the new beet sugaries in contemplation is one for Grand Island, Sacramento river. Geo. D. Roberts intends erecting works for next year's beet crop. Grand Island is safely reclaimed from flooding, and its soil produces a reliable crop of 20 tons to the acre in all seasons. The growth of the sugar beet is peculiar on these reclaimed marshes. On ordinary lands much of the beet root shows above ground, and the part thus exposed is rich in salts and poor in sugar. In the soil of our marsh lands the beet grows altogether downward, and shows only its leaves above ground. Accordingly the percentage of sugar is higher. Parties contemplating erecting sugaries are counseled to examine the matter of sub-soil growth, and make sure that it has the advantages claimed.

IMMENSE REAL ESTATE SALE.—The large amount of real estate recently deeded by Mr. James Lick, of this city, for charitable, educational, scientific and public purposes, is advertised for sale by the trustees on the 17th of November next. The property including the Lick Honse lot and other real estate in this city, Island De Santa Catalina off Wilmington harbor, and Mr. Lick's landed interests in Santa Clara and Los Angeles counties and Virginia City, will be sold at auction by Maurice Dore. The terms proposed are one-quarter cash, one-quarter every succeeding year until the property is paid for, deferred payments to bear interest at eight per cent. per annum. The sale is ordered with a view to speedily carrying out the bequests of Mr. Lick.

A MILL-STONE QUARRY IN PENNSYLVANIA.—In Locust valley, Lehigh county, amongst silicious pigments of many colors, China clays, etc., there occurs a stone having the appearance of French burr. Two mill-stone manufacturers pronounce it true burr-stone, and the only one yet discovered in the country. We have sent for samples. If it prove equal, or nearly so, to the French, it is an important discovery; for we pay dearly for our exclusive dependence on a foreign country for an article indispensable to the production of our grand staff of life.

THE Farmers' Union of Stockton have shipped three sacks of wheat to Anderson district, South Carolina, for seed.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

The Milk Business as Carried on in New England.

[Written for the RURAL PRESS by C. H. DWINELLE.]

In view of the increasing demand for fresh milk to supply our large towns, the readers of the RURAL may be interested, and perhaps profited, by a detailed account of the manner in which New England dairymen handle their produce, and send it to market.

During the summer of 1869 the writer of this article spent several weeks on one of the best dairy farms of Litchfield county, Connecticut, from which the milk was sent daily to New York city by way of the Housatonic Valley and New York and New Haven railroads.

The stock of cows numbered about 70 head, of which from 30 to 40 were generally in milk; some of them drying up while others came in fresh. In this way a continual supply of milk was secured from one year's end to the other.

In sending so delicate an article as milk to a distant market, during the hot and sultry weather of the Atlantic coast, of course the greatest care is needed to prevent any taint or sourness.

Mode of Cooling the Milk.

The thing next in importance to the cows in the milk business, was probably the spring-house. This was a very simple structure, with a large tank sunk in the ground within it, leaving the upper edge about level with the floor of the house. Into this tank water was running from a spring near by, and kept at such a level that when a 40-quart milk can was set on the bottom it was covered up to the neck. The milking was done in an open yard a few rods distant. As soon as a pail was filled it was brought to the house and its contents poured into one of the large cans, being strained very carefully at the same time.

The strainer was of the usual kind—of brass—soldered into a kind of funnel, which fitted neatly into the neck of the can. To make cleanliness doubly sure, a piece of cloth was placed over this, and the milk passed through both. When full the can was placed in the tank, only the neck being uncovered, and care being taken that the milk in it did not stand as high as the water outside. If this last precaution was not taken, the portion of milk above the level of the water would be almost sure to become sour, and taint the rest of the canful.

When the milking was completed, and as many cans filled as possible, the residue of milk, if any remained, was poured into long, narrow cans, called coolers, and also immersed in the water, to be used in filling up cans at the next shipping, or if not wanted for that, in the family.

The milk in the cans was then stirred until it became of the same temperature as the water in which it stood, by means of a sort of long handled milk-dipper with a hole through the bottom. The cans were then covered loosely, to keep out dust, but not to exclude the air, and left standing in the water until sent to the station.

About 3 P. M. each day the milk was started on its long journey to the metropolis. Each 40-quart can received a solid piece of ice as large as a man's two fists, the covers were firmly pressed down, the cans placed in a covered spring wagon and driven rapidly to the railroad station, three miles distant. There they were transferred to a refrigerated milk-car standing on a side track, waiting to be picked up by the regular milk train and hauled into New York in time to deliver its precious freight for breakfast next morning.

What was the Result of all this Care?

Simply this. The milk when delivered in New York was perfectly sweet, and would keep longer than equally good milk that was delivered fresh from the cow, and this in spite of the fact that some of it was 36 hours old. The principles observed to gain this very desirable result, were cleanliness, driving off the animal heat as soon as possible, and then maintaining a low temperature.

Large Returns and Small Expense.

In this way the New England farmer often sends his milk nearly, if not quite, 200 miles, and receives a greater profit than he would if he were to go to the expense and trouble of making butter and cheese. His wife also is relieved from the drudgery which attended the old way of carrying on a dairy. Of the bad effects of this continued drain upon the dairy farms, and some modes of avoiding them, I may speak at some future time.

The milk train which we have mentioned starts daily from Pittsfield, Mass., rolls down the Housatonic valley across Connecticut to Bridgeport, and reaches New York in the early morning. The business is conducted by an association of the farmers along the route, and since its establishment has added millions of dollars to the value of their farms. The railroad managers permitting, I see no reason why, in the near future, San Francisco should not draw her milk supply from the Coast range for 150 miles north and south, and even from the Sierras.

Notes of Review.

EDITORS PRESS:—The past month has been a busy one for those who have been engaged in tilling the soil. The fruit culturists find the season a prolific one; no mildew or any drawback to retard growth. Throughout the orchards the trees, with their boughs bending to the earth, are loaded with fine fruit. The vines are hanging in thick clusters of magnificent grapes of various hue that no country can excel, ready to pluck; and many are daily preparing them for shipment throughout to mountain cities and the East. The unsalable fruit is gathered, cut and dried. Grain is threshed, stacked and stowed away. The hay from the stack is passing through the press. Hops are picked, pressed and are being shipped Eastward. The wineries have been enlarged and are extending their space for the larger increase of wine. The sugar and chicory factories are in full operation. Gardens of mammoth vegetables are gathered and daily shipped.

Many are hauling their wood for winter use; weeds are eradicated from the strawberry beds, the runners are cut off, throwing the strength in the crown of the plant for the next spring crop. The old wood is being cut out of the blackberry and raspberry bushes after bearing, so as to throw the strength of the sap into the new wood, which should be nipped off during the season, making them stand by their own weight. Manure is being hauled from the yard and distributed over the garden trees and plants; with preparation and repairing of tools for fall work seed is being gathered for sowing crops—thus keeping the thrifty farmer's hand in motion and the busy mind active in the daily toils of life. Preparations for the State fair are rapidly going on, to which many are looking forward as occasion for a week's vacation from work.

Beautiful statuary is being placed on the capitol building, and its park is looking green and fresh. The various Grangee are flourishing, enjoying pleasant hours in their social meetings.

Fine climate, health and general good prevailing in the community make California the happiest country to spend the remainder of our days in. So be it. GEO. RICH.

Sacramento Co., Sept. 1st, 1874.

Farm Blunders.

EDITORS PRESS:—In your call for blunders which have proved of loss to farmers, you have struck a lead. For one, mine have been numerous. In a State like ours much has been learned by bitter experience only; but, in many matters, blunders could be avoided; such, for example, as hanging a fresh hide on the fence to dry in the sun, and afterwards selling it for 50 cts; whereas it would have brought $2 if well dried in the shade.

But the blunder of blunders of farmers has been the high rates of interest paid for the use of money. Much of the money borrowed from the banks on mortgage on the farm, is now drawing interest quarterly, and even monthly, and at ruinous rates at that.

Persons have run in debt under the impression that interest would be coming down lower and lower—when, of course, land would go up; and many of them have come to the conclusion that they have been making farm blunders.

Now, as "success is the measure of ability," let this class walk up meekly, weak sisters as they are, and take their black marks as bad managers; and before a streak of luck strikes them, let them caution the inexperienced ones, who have not yet "put their foot in it."

It is not always popular to tell the truth, but it is generally proper; and for the credit of our young State, let us advise beginners to go slowly and cautiously, and shun debt as much as possible, and especially at present rates of interest. E PLURIBUS UNUM.

Santa Clara, Sept. 2d, 1874.

Letter from Kalamazoo, Mich.

EDITORS PRESS:—I send you a few lines today. We are having very dry weather now; yesterday we had some very warm south and west winds, and corn and garden vegetables looked as if they would never revive again. Farmers are threshing in every direction from here, and wheat is turning out very well. Many who have had their threshing done are getting 20 bushels to the acre; wheat brings about $1.18 per bushel. Fires have been raging in many of the woods, and hundreds of cords of wood are getting burned up that were ready for next winter's market. Apples, pears, peaches and small fruits would be a good crop if it were not so dry. Cherries and other early fruits were better, as we had more rains in June than in July and August. Early pototoes are mostly ripened now, and some are digging their crop. I will not try to give you any more news about the season now, as it is only in August yet. HENRY H. MAHES.

Kalamazoo, Mich., Aug. 12th, 1874.

A Farmer at the Fair.

First Visit.

In strolling about the Pavilion and viewing the many beautiful and useful articles there displayed, no one can avoid comparing the utensils and appliances of art and labor of the present day and generation with those in use in that just past and gone. Nay, one scarcely need go back a generation for an illustration of mechanical progress; for many of the improved processes and implements on exhibition are the invention of the past ten and twenty years. For instance, could one for a moment imagine, after making a prolonged and careful examination of the complete "End Shake" separator, with its accompanying motive power in the shape of a steam engine, that thirty years ago all the farmers of America were threshing grain with the same old contrivance that Noah used—only that they doubled on his ignorance, and used two clubs to the man instead of one? And how often have the old men of the present—the boys of the past—eagerly and patiently tugged at "skinning eels" to get a good swing for dad's flail? And do they not well remember the hunt through the swamps for a stick with the right crook to make the sneath of the old cradle that had done duty for years in garnering the golden sheaves for the winter's threshing and bread?

And, to commence at the root of the matter, how well many of us remember the old wooden mould-board plow, that stood in the wagon shed through the winter, gaining strength, as it were, by rest preparatory to blistering our hands and jerking our shoes off in the spring as we impatiently followed its devious "nuzzling" among the rocks and roots—for plowing would be no name for it. And yet how, as boys then, we laughed at the idea of plowing with a forked stick, as we were told many nations then did—and do yet, for that matter. The "Garden City Clippers" and Napa gang plows are as far ahead of the old wood mould-boarded "clippers" as they were ahead of the Egyptian "forked clippers." No doubt some of the Egyptian boys hunted as faithfully for the right style of a fork from which to manufacture their plow as we did in our young days for the right crook to make our snath of.

Perhaps there is no portion of the exhibition that so especially stamps us as an agricultural and ingenious people as these large and well assorted displays of implements of husbandry.

Second Visit.

Well, again have I paid a visit to the Pavilion, and would say, "Give us this day our daily Fair," be it of bread and meat or "Mechanics." It will surely take a season ticket to cover the number of visits requisite to approximate a general understanding of the many industries there represented. We farmers have especial reason to thank the patient, plodding brains and persistent efforts of so many of our mechanics, for the useful, labor-saving inventions that now enable us to feed the millions of England so cheaply, and therein to compete with the wheat-producing countries of the old world, with its teeming population working at wages varying from six cents per day to ten shillings per week. Were we but using the rough, ungainly instruments of thirty years ago, how much wheat could we afford to export to Liverpool at present prices? Not much—in the full negative sense of the expression.

When we farmers make a critical examination of such a collection of agricultural implements as is now to be found under the arches of the Pavilion, and think for a moment of the style of those need before our day and generation, we certainly have cause to thank our parents for being born younger sons that we might live to see this day. As our grandsire moves around tottering, and sees the fine improved header exhibited by Treadwell, his mind reverts to the old pasture lot on the "north hill" that he cleared up and sowed to rye; and he thinks how he bowed his back to the summer sun, as with nimble stroke and dextrous "roll" he cut the bending grain with an "improved" sickle, at the same time wondering how farmer Jones could stand it to use those old hawk-bill pruning hook affairs, so long behind the style. His grandson now wonders how farmer Jones' descendents can stand it to use a reaper when such complete and beautiful headers are to be obtained in the market.

And as he strolls slowly along he comes to the machine that turns off a fully matured shingle in less time than it used to take him to barely "bud" the thought of making one. And then to that complete double circular saw mill, that is capable of turning of 30,000 feet per day. When he was a boy a real good mill could turn out as many hundred; or two men would "pit-saw" as many *tens* in a day. And as the thought of such work flits through his brain, he unconsciously passes his hand across the back of his neck as though he felt the dust from the old whip-saw still clinging to him.

Still further on and he espies the drills busily boring their way into the solid rock at a fabulous rate. And the old man's thoughts wander back to the time when he had the contract to grade the public road around the "blue rock," and he thinks of the old "churn" drill that blistered his hands, with hours of persistent labor, perhaps at last only to raise a *knot* on the rock he wished to bore. And as our good grandsire thus wanders around, he can but compare the present with the past, and think what "might have been" had he in his young days been blessed with such wonderful aids to progress as the inventions of the past thirty years have proved.

Had I been an exhibitor of such a fine assortment of buggies and carriages as the Carvill Company have in the Pavilion, I would have procured an old-fashioned "thorough-brace" buggy for a contrast, at any cost. Why they went by that name has always puzzled me to tell, unless it was for the reason that they were so thoroughly braced that they could not break. The last, and only one I remember, was housed with the old wood mould-board plow, and only did duty as a milling vehicle, or to take the shearing hands to the "off-pasture." It was almost as easy to ride in as an ox-cart, and the only spring about it was that experienced when it sprung from one stone to another. This is not questioning the fact that this old-fashioned vehicle would out-last one of the Carvill make; but the man who rode in it would wear out moderately fast.

But I become tedious, perhaps. I remember once visiting your office, and seeing therein a notice that short visits were the most acceptable, as the editor's time was money, and he had plenty to do. Now this sounds strange to me. Our country editors generally have more time to talk to us than we have to spare to them, and as for their time being money, that's all nonsense, or they would have been rich enough to quit long ago. But perhaps I had better say good-night, and thank you for not showing my previous letter the waste basket.

VISITOR.

THE SWINE YARD.

HOW TO FEED PIGS.—I used to keep them in my younger days to furnish meat for my family and to sell to get a little spare cash. The kind with small bones, small ears and short nose, that, with good keeping, at a year old, would make about 225 pounds of pork, was my favorite. The first one I ever fattened weighed 260 pounds at eight months' old. Milk and potatoes are the best food for pigs after they are weaned, to make them thrive; they also relish a few grains of corn at this time as well as a squirrel does a few nuts, as they grow along. In the season for it they should be supplied daily with fresh green weeds or clover; a few green cornstalks are also good to feed them in their season, and the slops and refuse of the kitchen with a little meal are also good. With this food they should be fed liberally, but not to surfeiting, and kept growing right along in a thrifty condition until about two months before killing time, during which they should be fed liberally with more concentrated and fattening food. Boiled pumpkins, thickened while hot with corn meal, are excellent food for them; so also boiled sweet apples, thickened with meal, and so is scalded meal alone. Some think that for some days previous to slaughtering time they should be fed with dry corn and pure cold water—that it makes their meat purer and sweeter.—*R. Smith in Germantown Telegraph.*

INTELLIGENCE OF HOGS.—Hogs often show great intelligence and aptitude to learn. A forester had a Chinese pig which followed him like a dog, came at call, and ran up and down stairs. It learned to bow and perform several tricks. It was very expert in hunting mushrooms; and, when told to keep watch, it would remain at its post until called away. When its owner said "I am going to kill you," it would lie down on its back and stretch out its legs. When Louis XI. was sick, in order to relieve the sadness of his mind, a nobleman thought of teaching a pig to dance, and bringing it before him. It was not long before a pig could hop about very well to the sound of a bagpipe; they then dressed it with a coat, pantaloons, nectie, hat, sword, etc.—in short, all that the court gentlemen of the time were accustomed to wear, and introduced it into the presence of the king. The animal bowed, danced, and followed all orders in the most artistic manner; until, getting tired, it became so awkward that the king roared with laughter, to the delight of his courtiers.

MANGE IN SWINE.—Mange, like the scab in sheep, is a cutaneous eruption, arising from the presence of minute insects called *acari*, and occasioned, in the majority of cases, by inattention to cleanliness. It appears in the form of blotchy sores, on different parts of the body, and is accompanied by a dreadful state of itchiness. The best local application is the sulphur ointment, consisting of sublimed sulphur, three ounces; prepared lard, eight ounces. If this should not be sufficiently powerful, a drachm of the common mercurial ointment may be added to every ounce of the former. Internally, from two to four drachms of the alterative powder should be given daily.

KIDNEY WORM.—The *Rural Alabamian* asserts that the kidney worm in hogs, and fluke in sheep, are identical, and are caused by a parasitic insect. The same authority states that lye made from hard wood ashes, if given daily, will work a cure; rubbing with turpentine is also advised. We have known of several cases in which copperas, dissolved and mixed with the slop, has cured the disease in pigs when taken early in its appearance. The *Alabamian* does not give the amount of lye per day to be given. A tablespoonful of copperas may be given daily to each pig, until three spoonfuls have been given, when it should be discontinued for at least three days.

HORTICULTURE.

Orange Culture.

Nearly all authorities, writes Mr. W. Day, Jr., of Daytona, Florida, ascribe the nativity of the orange (*citrus aurautium*) to Asia, but any one visiting the immense wild groves of Florida, some of which may be reckoned by the square mile, will find it difficult to arrive at any other conclusion than that it is also indigenous to the soil of our American States. The orange is the most beautiful of all fruit trees. It grows with a round, symmetrical head to the hight of 30 feet, haa a bright, glossy green leaf with an apron or wing upon the stem. The bark ia of an ash or steel-gray color, and the twigs, which are of a dark green, are profusely bestudded with the most aggravating thorns. The sweet and mild trees may readily be diatinguised by the leaf. The aweet leaf is of a darker green, and the apron upon the stem is larger in proportion to the main leaf. The tree flowera in January and February; the fruit begins to change its color iu September, but cannot be said to have fully ripened until the following spring. It clinga to the tree with great tenacity for many months, improving as it hangs, until during the following season it becomea perfectly delicioua. One who has not gathered directly from the tree an orange thus ripened, knowa little of its true flavor. Upon the wild trees the flowers, the gum fruit, and the ripe oranges, one and two years old, may often be found.

It is stoutly affirmed in Florida that the orange seed will always be true to its kind, but in the *Hearth and Home* of November 4th I find the remark "there is no certainty that the varieties of the orange will reproduce themaelves from the seed. If a particular variety is desired, it must be budded." I cannot agree with the writer. I have seen, in the vicinity of Daytona, aeedling orange trees in full bearing eight years old, the fruit the exact counterpart of that in Mr. Sutton's grove, whence the seedling was taken. But the wild grovea found in the true orange belt show most conclusively to my mind the seed is true to its variety. At Daytona we have very large groves of bitter, aweet and sour oranges. Now, if the seed is not true, and, as is affirmed, the sweet orange is an accidental offshoot from the wild orange, we ahould have in these groves an endless variety of oranges. There should be sweet and aour, bitter sweet, bitter sour, and bitter pure and simple, with every conceivable variation of form, color and flavor. I admit all that is done in the way of improving fruits by budding and croasing in various ways, but when "in the beginning the earth brought forth grass and herb-yielding seed after his kind and the tree-yielding fruit whose seed was in itself after his kind, and God aaw it was good," I think it was part of the divine plan that every aeed should be true to its variety.

Last winter, orange trees were killed at Jacksonville and in northern Florida, while on the Halifax they escaped, aud the trees are this year more heavily laden than ever. The orange will grow on almost any soil, but if planted upon pine lands fertilizera are necesaary. Burned shells, ashes, bones, etc., should be freely supplied. The advantage of planting upon hummock land is that it is exceedingly fertile, and it is often supplied with the needed alkali in ita shells and shell-marl. This is the case along the coast. From St. Augustine south, the coast soil is based upon immense beds of coral. Sometimea the shells have been broken up by the friction of the wavea of the sea when the land waa forming, and concreted into what is kuown as coquina rock, while the hummock lands—the lands which were last reclaimed from the waters—are filled with microscopic shells, constituting with the admixture of sand and vegetable matter, what we call shell-marl. Oftentimes the surface of the ground is mainly an immense mass of oyster shells, harder to spade than a gravel pit. Mr. Sutton's grove, near Daytona, stands upon such a bed, and his grove of 1,000 trees, with that of Capt. Burnham's, has made the reputation of the Indian river orange. The cluster of twenty-eight oranges upon a single twig twelve inches in leugth, brought to thia plaoe by Dr. P. A. Gordon, of Daytona, a few daya since, came from Mr. Sutton's grove. —*Trans. Am. Ins.*

WILLIAM MAWSON, one of the champion waterme lon-growers of Sutter county, relates the following novel way of producing seedleas watermelous: When the vine begins to bear he lets the first watermelon on each branch grow undisturbed; but oovers the branch np with dirt, from the first melon to the second one, or within six inches or more from the end of the branch, and the watermelon that growa near the end of the vine will be a seedless watermelon, the melon nearest the body of the vine having kept all the seed.

CABBAGE worms, as far aa we know, do not tronble early cabbage much. We know of no way of securing the butterflies. The worm should be hand-picked; every cabbage must be critically examined, as the worms lie close to the ribs of the cabbage and are of the same color.—*Ex.*

POMULAO ORANGE.—We are told that Mrs. Rev. Wm. Taylor, of Alameda, has a tree bearing the above named orange. Among other peculiaritiea it is said to be pear-shaped. We would like to present onr readers with an engraving and description of it.

STOCK BREEDERS.

Improved and Unimproved Pigs.

What do we mean by an improved breed of pigs? Usually we mean a breed that has fine boue and little offal. A breed that is very quiet and will turn the food it eats into flesh and fat. It is a breed that will eat and digest a stomach full of rich food and assimilate it. As a rule the weak spot in all high-bred pigs is that their digestive powers are not as good as their assimilating powers. They can assimilate more food than they can digest. On the other hand, onr common, coarse, unimproved hogs can usually eat and disgest more food than they can assimilate. They are accnstomed to forage for themselves. They have plenty of exercise and comparatively little food. Now, then, if you take such a breed of hogs, and endeavor to push them rapidly forward with rich food, it is easy to aee how their blood could be poisoned by the excess of material which the animal is not able to convert into flesh and fat.

My remedy would be to raise a better claas of pigs. I would raise such pigs as would atand high feeding until they were fat enough for market, and then I would dispose of them without delay. If you take pigs that are not accustomed to mature before they are three or four years old, and endeavor to so feed and force them that they shall be ready for the market at twelve months old or less, what can you expect but hog cholera? On the other hand, a breed that is accustomed, and has been for generations, to mature early can be puahed forward rapidly without injury.

I ahould expect the beat success from piga raised from a large, healthy, common sow, sired by the refined thoroughbred boar, of a breed distinguished for its gentleness, finenesa of bone, little offal, early maturity and fattening qualities. The mother would furnish the digeative powers, and the sire the assimilating powers. These qualities, combined with early maturity, fineness of boue, and high qualities of meat, would give you precisely what a good feeder wants.—*J. Harris.*

Selecting Stock.

The *Iowa Stock Journal*, apeaking of the snbject of selecting stock for breeding purposes, says very truly:

In the time of Bakewell, the sheep breeders were accustomed to select their breeding rams by a curl of the horn or the color of the nose. Sheep breeders laugh now at the idea, and do not realize the innovation that Bakewell made when he discharged these arbitrary aigns, and declaring mutton to be the chief end of sheep, aimed at that alone.

Yet to-day the purchasers of Jersey cattle select juat as absurdly aa did the shepherds about Dishley a hnndred years ago, when, instead of selectiug cows for their yield of butter, they pay great attention to color. The purchaaer, instead of asking to see the resulta of a week'a churning, examinea the tongue. If the color is aatisfactory, the oow is a treasure. Nothing more absurd than thia can be imagined and the natural consequence will be that the Jersey breeder will raise one atyle of cows for themselves, and another for the foreign demand. This ia aaid to be already the case. The intelligence of the 19th century in stock-breeding seems to be of a very low nature.

The farmer who chooses a Berkahire is careful to get the color right, whether the form and fattening qualities exist or not, and at Shorthorn sales the fashionable red color ia more looked for than good pointa. The whole farming community need to think more closely, and keep the object of bresding more steadily in view.

ANOTHER STITCH DROPPED.—Most horsemen have accepted the pedigree given of Rysdik's Hambletonian by Wallace's Trotting Register as true, ao far at leaat as it relates to the maternal ancestry. That statement is: 1st dam, Charlea Kent, mare, by Imp. Bellfounder; 2d dam, One Eye, by Bishop's Hambletonian; 3d dam, Silvertail, by Imp. Measenger. But now comes Dr. Townsend Seely, of Kane county, Illinois (aon of Jonas Seely, Sr., the breeder of Silvertail), and says that Silvertail was sired by a son of Measenger, owned at the time by hia brother-in-law and Cousin, Thaddeus Seely, and was out of our black, bald-faced mare they called "Old Jin." Thus it is stated by a writer in the *Turf, Field and Farm*, of the 31st ult. Dr. Townsend Seely is a gentleman of aome 84 summers, with a clear recollection of facts, and his testimony, which is unimpeachable, will radically affect the symmetry of the many "extended pedigreea" in which "Silvertail by Imp. Messenger" figures. It would be aome compensation for all this if the Dr. would only tell the worshippers of the "great source of all the trottera," what son, or at least what sort of son, of Imported Messenger, sired the grand-dam of Rysdik'a Hambletonian. We are dying to know.—*Prairie Farmer.*

DEATH OF A FINE SHORT-HORN COW.—A telegraphic despatch from Des Moiues, Iowa, aays: The premium short-horn cow Flora, of Dr. Sprague's herd, and valued at $1,500, was killed by the cars at Oakwood on Thursday. The track repairers, in fixing a culvert, left a fence down and she got on the track.

ALL cattle-breeders ahould have two pastures for summer grazing, and change the stock from one to the other frequently.

SHEEP AND WOOL.

How to Judge of Wool.

There is perhaps no defect which renders wool, and otherwise good wool too, so absolutely useless for manufacturing, and especially for combing purposes, as tenderness or breachiness; and it is my conviction that this defect is more general, and causes greater loss to the country throngh the pockets of our sheep-owners, than all the other defects in our wools together. However fine, or however much your wool in every other desirable quality may excel, no sooner is it aubmitted to the wonderfully acute and akillful examination of the European woolaorter, classer, buyer or manufactnrer, than its deficiency in this respect is detected, and a price is bid for it scarcely exceeding that offered for locks and pieces; in fact, nothing is wanting to reduce your fleece to that class, but the solution of continuity which is sure to take place in the course of the very first manufacturing process to which it is subjected. Except, however, possibly in cases where neglect or mismanagement have been the rule for generations, it is not hereditary; nor is any one breed of sheep more liable to it than another. To these conclusions I have come, by repeatedly finding an entire flock affected with break one year, and quite free from it the next, in consequence of a change in management. On the whole, it is to be feared that this defect is yearly gaining ground, and I am creditably assured that for the last two or three years we have produced more wool of this description than was ever known before.

Certain it is that wheresoever thia most objectionable tendency manifeats itself, aheer carelessness, neglect, ignorance, overstocking, inordinately large paddocks, or scarcity of feed or water—each or all will be found.

When sheep get into very low condition, the pores of the skin contract, and permit only wool of a very fine fiber to extrude. When the feed once more becomes abundant, the pores again expand, and permit the passage of a larger and stronger fiber. In consequence of this, the extremities of the fibers are stronger than their centers, and the wool upon the slighteat straiu snaps at the weakest place; namely at the portion which grew when the aheep were in the loweat condition.

But nothing is so sure to cause a break in wool, or indeed in many aheep a perfect stripping or shedding of the entire fleece, as want of water.

Trueness or Evenness of Fleece.

It is not only important that wools should be free from the defects above described, but it is desirable that the whole of the varions parta of the fleece ahould have as nearly as possible a uniformity of character; that is, as regards fineness, length of staple, density and softneas. The method of determining this quality of evenness is thus described:

"Always assuming that the wool to be inspected is really a fine wool, we first examine the shoulder at the part where the finest and best wool is usually found. This we take as the standard, and compare it with, iu turn, the wool from the ribs, the thigh, the rump and the hinder parts; and the nearer the wool from these various portions of the animal approaches the standard, the better. First, we scrutinize the fineness; and, if the result be satisfactory, we pronounce the fleece, in respect of fineneas, very 'even'. Next we inquire into the length of the staple; and if we find that the wool on the ribs, thigh and back approximates reasonably in length to that of our standard, we again declare the aheep, as regards length of staple, true and even.

"We next desire to satisfy ourselves of the deusity of the fleece, and we do this by closing the hand npon a portion of the rump, and of the loin wool, the fleece at these points being usually the thinnest and most faulty; and if this again give satisfaction we aignify the fact by designating the wool 'even' as respecta density. Now to summarize these separate examinations. If you find the fleece of nearly equal fineness from the shoulder to the thigh; of nearly equal length at the ahoulder, rib, thigh and back; and of equal density at the ahoulder and across the loins, you may conclude that you have a nearly perfect sheep." —*Bulletin Association of Wool Manufacturers.*

PNEUMONIA IN SHEEP.—The lung disorder an exchange thinks cannot be easily detected in time to save the sheep, as when the case becomes considerably developed the lungs have become discolored and beyond recovery. When symptoms are discovered early—*i.e.*, drooping condition, rapid and lapored breathiug, watery eyes, etc.—the following treatment is recommended: Two ounces of Epaom aalts, with half an ounce of ginger, given at the first appearance; bleeding from the ear; pure air, careful nursing in a dry comfortable pen, protection from sudden changes of temperature or cold and damp; good, sound food; pure water; a well ventilated and not too warm pen or shed, and a little salt and some linseed oake meal given frequently and regularly.—*Ohio Farmer.*

CLEANING WOOL.—Many of our farmers pay but little attention when cleaning wool to the kind of water used in the operation; but it will be seen that this should always be taken into consideration. Thns waters containing lime should be carefully avoided, aince thia constituent combines with the suint, thus forming an insoluble soap, which seems to produce unpleasant effects in the process of dyeing. For log-wood and red-wood dyes of like character, the effect appears to be unimportant; but when quercitran, fustic and madder are used the resnlt is quite different, and is ofteu very deleterious.

English Nobility Toilets.

A correspondent of a Boston paper describes some costumes worn at the Goodwood races: "The Princess of Wales wore dark pink silk under black lace, elaborately ornamented with bugles, arranged in a star pattern; her bonnet was of black and pink. The Duchess of Manchester was dressed iu cream white silk, unrelieved by any bright color; Lady Westmoreland was dressed entirely in green, and the Marchioness of Ailesbury in brown. Sir Garnet Wolseley escorted a lady who wore a dresa of the most delicate primrose tint, trimmed with Honiton and white bugle lace; her hat was white, with primrose feathers. A mauve costume, heavily fringed and embroidered with white, attracted great attention; the aleeveless velvet jacket worn with it was of a darker shade of mauve, and the skirt was deeply edged with the same material; the belt was of steel, the parasol and hat of the same color as the dress. The lady who wore the next costume must have had a faultless complexiou and wonderfully pretty face to overcome its glaring effect, for it was of light blue and pale pink, with deep trimminga of white bugle lace. The coquettish Tyrolese hat was covered with a profusion of light blue feathers, and the pink aunshade waa covered with Brussela lace. Two ladiea wore coatumes of canary and blue; white gauze over tea-rose ailk and white lace over amber ailk were the materials of two exquisite dresses. Among the combination dresaes waa one of dark brown and the palest primrose; the aleeves and skirt trimmings were of the dark tint, the tunic, aleeveleas jacket and skirt of the light; the hat combined both colors. Another combination waa of rose-pink and plum-color; the train and sleeveless jacket were of the latter shade; the skirt, hat and parasol of the former. Among what might be called the metalline dresses, three were particularly conspicuous. One consisted of an underdress of cream-colored silk, with an elaborate overdresa of blaok lace, almost covered with blue ateel ornaments, arranged in a convolvulus pattern; another was a black satin, with an overdresa of black lace, covered with gold embroidery. Another was a black ailk dress, with a polonaise of silver lace of a floral pattern. Bugles and jet, both as emboidery and aa armor, were abnndant, and braiding was uaed on many dresses. Two new tints were seen, one of which ia almost unpoetically declared to resemble nothing but strawberry ice, half smothered in cream; the other is a lilac so delicate that it looks aa if bleaohed by the sun."

THE PERILS OF PRACTICAL JOKERS.—A respectable person, says the *Pall Mall Gazette*, was arreated the other day in Paria on the charge of picking a pocket under circumstauces which must command the sympathy of the most rigid moralist. He was returning home from a social gathering, when the natural convulsion to which Lord Dundreary used to be subject overtook him, and he sneezed iu the moat uncompromising manner. Thia unusually satisfactory operation is not, however, entirely so to a civilized peraon unless he can command the assistance of a pocket-hankerchief. The snbject of this crisis, therefore, felt wildly in his pocketa for the desired article, but his faithful companion had disappeared. Snddenly an emotion of joy, such as that with which a shipwrecked sailor espies a diatant aail, lighted up his tearful eye. He saw depending from a pocket of a friend walking a few paces in advance of him a red silk hankerohief, large, aoft and lustrous. A few seconda more and he had buried hia still quivering and wiatful noae in those delicious folds, when the hands of a police agent waa laid ou his shoulder, and the owner ot the handkerchief turned round, revealing the countenance of a complete stranger. The pickpocket *malgre lui* was about to be led off to the station, when certain papers found on hia person established his respectability so conclusively that he was suffered to go home, duly provided with a pocket-hankerchief obligingly lent him by a police officer.

GEORGE STEPHENSON, of English origin, the inventor and father of the railway system, waa the aon of a poor miner, and was boin in 1781. Blacket, also an Englishman, made the first locomotive to travel on a smooth rail. Stephenson saw this engine, and decided that he could make a better one, and having $4,000 aaved, he put it all into the construction of a locomotive, that broke down at the first trial. His patience and perseverance, two qualities requisite in an inventor, did not fail him, and he aucceeded in making one of the grandest inventions of all the ages. At one step of his genius, he quadrupled the power of the engine, and in that invention he made a step so gigantio that it can never be forgotten.—*Ex.*

MANUFACTURE, OF GUN COTTON. — Samuel Joseph Mackie, Westminster, England, olaims: 1st. The treatment of the vegetable fiber with acids so as to transform it into gun cotton; the crushiug of the fiber so as to destroy its capillary structure and reduce it to an impalpable mass, and the granulation of said mass. 2d. The produotion of gun cotton in a moist condition, aud the drying of it iu vaouo, as set forth.

Patrons of Husbandry.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well as Treasurer's reports.

J. M. Hamilton.

State Grange Agency.

Patrons will please take notice that Bro. I. G. Gardner, State Grange Agent, the Farmers' Mutual Fire Insurance Company and the State Grange Secretary, Bro. W. H. Baxter, have removed to No. 6 Leidesdorff street, south side California street, next to Merchants' Exchange rear of Grangers' Bank of California (415 California street). sep5-tf

State Grange.

The California State Grange will meet at Stockton October 6th, not on the 13th of October, as has been announced in other papers. We call upon all eligible members, whether matrons or husbandmen, to see to it that no ordinary matter prevents their attendance at this meeting, which will undoubtedly be one of the most interesting and important ever held in the State. By that time the Order will have existed on this coast sixteen months. It has a history fraught with deep interest. Perhaps in no State in the Union has the Order accomplished so much in so short a time. It was met at the very outset by a powerful enemy, who has stoutly contested every inch of ground over which the contending forces have marched; nor is the battle over. Recent developments show how determined a foe we have to contend with, and to what unscrupulous lengths he will go to accomplish his base design. A crisis has arrived, and the closest and most careful council is needed to guide affairs aright. If we fail in this contest the success of the Order will be greatly delayed, if not entirely lost. The meeting of the State Grange at this time is of the most vital importance. But aside from these motives the pleasure of a meeting and reunion with brothers and sisters, the hope of a repetition of the delights of former meetings, the singing of our beautiful songs by hundreds of earnest voices, the forming of new acquaintances, and the interchange of friendly regards—all these should combine to entice us all to leave our homes for a few days, and hold council together. Let every one come with the determination to work for the greatest good of the entire Order, and particularly in our own dear State. Such meetings of intelligent, honest, industrious men and women mark an era in the history of our country, and the grand results to follow cannot be measured by time.

Grangers' Academy. — The Sacramento *Record* says: Among the good things projected by the Franklin Grange in this county is an Academy or High School at Georgetown, in Franklin township. The idea was suggested and the project put on foot by the Grangers. The building has been built by subscription of the farmers in the vicinity. It is nearly completed and will be ready for occupancy the coming winter. The farmers in that vicinity desire to give their sons and daughters an education without exposing them to the evil influences of a life in the city, and they have taken this course to accomplish this desired object The example of Franklin Grange could and should be followed by many other Granges in the State. Upon this plan farmers' sons and daughters could be educated at home, and without weaning them from home and farm associations. The practice of sending farmers' children to the cities for schooling has been a great disadvantage to the husbandman, and it is now in the power of the Patrons of Husbandry to check this evil by establishing home educational institutions.

Modesto Granges as Shippers.—The ship "City of Berlin" has been loaded at Oakland wharf by the Grange of this place with wheat. She sails for Liverpool, and should reach her destination some time toward the last of December. At that time wheat has generally reached its best figure. There is, at least, not much chance, with present prices, for the shippers to lose, and a fair probability of making a saving. We shall watch the experiment with considerable interest.—*Stanislaus News.*

Nearly Completed.—The fine new building of Capay Valley Grange is so near completion that the Grange will meet in it to-morrow, Aug. 29th. It will be dedicated about the 10th of September. The large store in the new building has been rented and will be stocked by F. S. Freeman.—*Yolo Democrat.*

Notes of Grange Travel.

Editors Press:—Thanks to good health and freedom from accidents, the long round of appointments to visit the Granges in twelve counties to the northward of San Francisco bay, from the 6th to the 24th of August, inclusive, was punctually kept. During this tour of steady traveling and work, so many pleasant meetings and incidents occurred, so many facts of interest to our brotherhood were learned, that are full of encouragement and hope for our noble cause, that quite a little volume might be written if they were all dotted down fully and faithfully.

But, between the constant motion necessary for such a trip, and the hours required for rest and refreshment, as well as the almost unceasing private converse with our members about matters pertaining to

"The Good of the Order,"

Little or no time was left to prepare for the Rural and the *Granger* such brief accounts of these visits and their attendant circumstances as are allowed, and perhaps desirable, for the information and encouragement of our people.

And now in the following bird's-eye view of a month's travel, the account must be even briefer than was in ended, could the matter have been written up in parts, as each week's work was finished.

Before my visits commenced to Granges already organized, I spent a week, beginning with the 28th of July, to pass through the mountain regions of Shasta and Siskiyou counties, and organize new Granges there. With the exception of very rough and dusty stage traveling over some of the roughest of mountain grades, this was one of the pleasant parts of the whole journey, so much is to be seen that is new, interesting and instructive. Much of the scenery there is indescribably grand, especially along the head waters of the Sacramento and Trinity rivers and around

Mount Shasta.

The latter rises almost alone and with gradually sloping sides from the surrounding valleys, until it towers in solitary grandeur a vast mass of ancient lava, some 14,500 feet high, covered for half its hight with perpetual snow, and ribbed on its northern slope with immense glaciers.

As you pass along Shasta valley, one glance from the base to the snowy peak of this huge mountain almost removes all wonder about the fact that on a clear day Mt. Shasta can be seen from the city of Sacramento, two hundred and fifty (250) miles away to the southward.

The whole contour of this grand cone, which bears every evidence of being an extinct volcano, is strikingly like Mt. Ararat, as it appears in the truthful photographs and engravings, with which Eastern travelers are now delighting and instructing the world.

Three most promising Granges, with 81 members to begin with, were left in Siskiyou county, at Callahan's, Rough and Ready and at Fort Jones, all in

Scott's Valley.

By the way, Scott's valley is one of the most productive and attractive regions of our State. It is some 4,500 feet above the level of the sea, about 30 miles long, and from 2 to 6 miles wide; has a delightful climate and is full of industrious, intelligent, thriving farmers, who have a good home market for all they produce. There I saw the finest timothy, red clover and buckwheat I have seen in California. They raise from 25 to 30 bushels of good wheat to the acre, and have their own mills. They sow but little barley, and for feed raise oats instead, which sometimes yield them 100 and 110 bushels an acre. They cut three and four tons of timothy hay per acre, and pay much attention to dairying. I there saw the largest and best hay and cattle shed that I have seen in this State. Their winters are not very severe, and they have no great amount of snow in the valley, although so far north and at so great an altitude above the sea. Yet their stock requires more protection in winter than is needed in the Sacramento and San Joaquin valleys. The surrounding mountains are covered in midwinter with many feet of snow, which completely blockades them at times. Indeed, almost the only thing that interferes with their complete prosperity—besides such difficulties as farmers have to contend against everywhere, is their great isolation from all other parts of the State. They may be said to have a little world of their own.

Though this was their first opportunity to organize a Grange, I found many who were already

Good Grangers at Heart.

They especially carry out the Grange precept, to make our homes comfortable and attractive. They cordially indorsed our principles, and when they understood them, concluded that there were no people who needed Granges more than they do, no matter how isolated they are.

It is an interesting fact, however, that this is the sentiment of our people, wherever the work of our Order is carried, and its principles are correctly understood. So, you see our brother of the *California Granger* was mistaken in supposing that we would have to make Grangers of miners, and that all the farming land in Siskiyou is owned by one or two men. Three good sized valleys there are filled with well-cultivated farms, and are also surrounded by an excellent mining region, where there are many successful miners. But only two out of 81 members I left there are miners, and they are also farmers. So they were admitted by the test, which must now be applied to all applicants for membership: that is, they are "engaged in agricultural pursuits, and have no interest in conflict with our purposes." Two more large Granges could have been organized in Siskiyou, but unfortunately, some of the letters written to appoint meetings fell into

"The Hands of the Philistines,"

And those interested in the Grange were not properly notified in time; so I had to hurry away to meet other appointments. It was a great satisfaction, however, to leave a well-posted deputy in the person of Brother I. S Matthews, Master of Fort Jones Grange. He is prepared to organize all the Granges needed in Siskiyou and Modoc counties.

On my return to Shasta county a large Grange of the very best material was organized at Millville, 14 miles east of Redding, with the kind assistance of Brother J. J. Bell, Lecturer of the latter Grange; and Brother J. F. Dinsmore, Master of Reading Grange, was qualified as deputy for his county. But the organization of these four Granges and Hamilton Grange, at Biggs Station, Butte county, on the 10th, and a sixth at North Buttes, Sutter county, on the 11th, you have already noticed in your columns.

Then began the

Series of Meetings

With Granges already organized, which ended with Danville and Walnut creek Granges in Contra Costa, at Danville, on the 24th.

This is the first attempt, since the organization of our State Grange, for its Lecturer to make a set of successive appointments, and the result of this first experiment is

Highly Satisfactory.

As the notice was necessarily short for some Granges, and as it was impossible to meet all the Granges on their regular days of meeting, and many members were still very busy harvesting, the attendance was not in all cases as full as could be desired for occasions which, of necessity, can rarely occur. Yet all our meetings were very pleasant, and promise future good.

No two features were more marked than the general and truest sympathy with our brother, Prof. Carr, on account of his removal; and the great rejoicing that Good Hope Grange, Illinois, instead of being disbanded, as reported, is now purified and stronger than ever.

On the 6th, 7th and 8th we spent many agreeable hours of fraternal work and converse with numbers of our most earnest workers, of Shasta, Tehama and Butte counties at Reading, Red Bluffs and Chico. At the two first places the attendance was small, for the reasons given above, and because many of their members, being wool growers, were absent in the mountains with their sheep.

But at Chico, the Grangers of Butte turned out very well, and the meeting was quite enthusiastic. Before the session of the Grange two hours were spent most delightfully at the splendidly improved home and well cultivated farm of General Bidwell, who, as you know, is a member of our Order. It will always be a pleasure to remember the Chico meeting.

Indeed, it was very gratifying to find how many

Live Members

We have in those three counties who are, as we hope, "baptized in the spirit of our work." That this letter may not become too long, a further account of this trip will be reserved for the future, after a brief statement of several conclusions drawn from an entire round of visits, which has been extended up to date to Merced Grange, on Aug. 29th, and to Santa Cruz, Monterey, and San Benito counties, at Watsonville, Castroville, Salinas and Hollister, on the 3rd, 4th, 5th and 7th of September. The lines are penned while enjoying a quiet rest under the hospitable roof of Bro. Uriah Wood, of Hollister Grange, who has near San Felipe, in Santa Clara Co., one of the best improved homes to be found in our State. Allow me to use this opportunity to return my earnest thanks to his household, and other members of our fraternity, from whom I have received numberless acts of kindness on this round of duty.

General Conclusion.

1. Continued inquiries while passing through 24 counties of our State, show that wheat is generally threshing out much less than the spring estimates, and confirm the belief, that the entire wheat crop of California for '74, is more likely to be under than over 30,000,000 bushels.

2. Never before have our opponents been making such persistent, subtle and unscrupulous efforts to defeat the Grange movements as at present.

3. Never before have the grain speculators so misrepresented, slandered, and worked against our leaders, agents, and plans for securing the independence and true welfare of our farmers.

4. Never before has the work of the Grange been so triumphant.

5. Never before have our Grange members so favored direct shipments of grain to Europe. For they reason thus: if it pays the speculator to buy our wheat and take the chances of shipping to Europe, why should it not pay the farmer better to do the same through E E. Morgan's Sons, who have secured him such advantages for direct shipments, as he never could secure in former years?

This is proved by the loading of 10 ships already by various Granges, and their application for more as soon as their grain can be ready. It is also proved by the loading of our ships at Antioch, Vallejo and Collinsville, though our friends (?), the monopolists, used always to insist that ships could be loaded only at San Francisco and Oakland wharves. Is there not much cause for congratulation in the latter achievements alone?

6. Never before has the Grange member known so clearly who are his enemies and who his friends, both outside and inside the Grange.

7. If we fail in any of our enterprises, and, thank Heaven, we have not yet failed in any, our members will have none but themselves to blame.

It will be Our Own Fault.

8. If the farmers of our State will now allow themselves to be deceived by their enemies—those who have misled and wronged them in the past—and will permit their own plans for self-protection and independence to fail, they will deserve to be overridden by monopolists and speculators, as undoubtedly they have been in the past, and more, perhaps, than any people in the world.

Then let each of us pay stricter attention to all the duties and interests of our Order, labor to perfect our work, each lend a helping hand by word or deed, purge the Grange of any who persist in violating duty, liberally sustain the papers which sincerely advocate our cause, and let us push our plans by united efforts to a more complete success. Yours fraternally,

J. W. A. Wright.

Hollister, San Benito county, Sept. 8th, 1874.

Correspondence.

Editors Press:—The Order is still advancing in Yolo. The Grangers have erected their warehouses in this county—one at Davisville, one on the river and one in Woodland, the latter being 192 feet long by 120 feet wide, with a railroad track through the center, and a storage capacity of about 7,000 tons. There are now in it about 4,500 tons of grain, and it will soon be full. We are receiving about 140 tons daily. The Grangers have shipped from this point and Merritt's station about 1,000 tons, through E. E. Morgan's Sons, direct to Liverpool, and are sending forward for shipment daily. Fraternally yours, S. D. Stephens.

Woodland, Sept. 5th, 1874.

Grangers' Mass Meeting in Indiana.—Muncie, Ind., August 13th:—To-day has been a gala-day for all the Grangers in this section of Indiana. From six or seven different counties they came pouring in, dressed in full regalia, with their banners flying. Some of the most prominent mottoes in the procession were: "Labor is Honorable;" "Onward and Upward;" "Plow Deep;" "We Farmers hold the Lines, and why not Drive?" "No Back-Pay Grabbers." There were no less than 5,000 persons on the ground to listen to the able speeches of D. W. Adams, Master of the National Grange; Henly James, Master of the State Grange; and the Hon. S. M. Smith, Secretary of the Farmers' Association, of Illinois. Mr. Adams spoke for about three-quarters of an hour, in a very able, interesting manner, debating the progress of the Order of the Patrons of Husbandry. At the conclusion of his speech the immense concourse of people partook of the bountiful repast that only such people can prepare. Re-assembling after dinner, the audience was addressed for two hours and a-half by Mr. Smith. He dwelt at length upon the oppression under which the farmers were laboring, and advocated a combination of the farmers for the purpose of fixing the price at which they would sell their agricultural products. He also talked for some time of the political corruption of the age. Mr. James followed in a short but very eloquent argument on the benefits derived from the Grange movement.

The Grangers' Fleet.—Three more ships of the Grangers' fleet are lying in the stream and will clear for England to-day—the "Pomah," "Triumphant" and "Imperial." The cargo of the first was furnished by the Grangers' Union of Stockton; the second was loaded by the Grangers' Union of Livermore; the last received her wheat at Vallejo from the Grangers of Yolo. The "St. Charles" is at Collinsville and has about half her cargo of wheat already on board. The "Alice Buck" succeeds the "Imperial" at Vallejo. The "Statesman" goes to Oakland to-day to take in her lading, and will commence with 260 tons left there by the "Imperial." These six ships average nearly 2,000 tons burden. The Grangers seem much in earnest in regard to this matter of the shipment of wheat. As fast as the vessels which they have chartered appear in port and are cleared of their cargoes, they are assigned to some convenient port, loaded with all possible dispatch, and cleared for foreign marts without an hour's needless delay. What with banks, narrow-gauge railroads and great manufacturing and shipping interests, the work of freeing the farmers of California from the toils of the monopolist seems nearly complete.—*S. F. Chronicle, 8th.*

Special Council Meeting.—There will be a special meeting of the Stanislaus County Council held at Modesto, September 16th. A full attendance of delegates is earnestly solicited, as matters of importance are to come before the Council. By order of

R. R. Warder, Master.

The Grangers' Fruit Association.

History of the Organization—Proceedings of the Recent Convention.

The Grangers' Fruit Association was organized by a call for a convention on the 18th of June, 1874. In response to that call, thirty-two delegates appeared as accredited delegates from Santa Rosa, St. Helena, Santa Clara, Sacramento, Yountville, Woodland, Temescal, Santa Cruz, San Josš, Haywood, Napa, Centerville, Franklin, Sebastopol, Rockville, Petalnma, Florin, Vacaville and Sonoma. The result was the

Organization of the Grangers' Fruit Association of California,

Which now numbers forty members. The President is William McPherson Hill, of Sonoma; Vice-President, James Shinn, of Centerville, Alameda county; Treasurer, John Llewellyn, of St. Helena; Secretary, A. W. Thompson, of Petalnma. The Board of Directors are A. P. Smith, E. R. Thurber, D. W. Harwood, J. B. Webster and J. M. Thompson. The first meeting after the organization was held at their office, room 14, No. 320 California street, on the 27th and 28th days of last month, by a call of the Board of Directors. The Society was fully represented, and at their meeting they were visited by Mr. Miller, Secretary of the Bay District Association, on behalf of the Managers of the Mechanics' Fair, with an invitation to the Association to join in the Pomological Exhibition on the fourth week of the fair, comm neing September 7th. During the meeting of the 27th and 28th ult., matters were discussed as to the relative value of the different fruit-drying processes, and the results were given and exhibited. Also as to the various kinds of grapes adapted to raisin-making, and the process of curing and marketing the same. The Black Malvoisie, Black Muscat, Flaming Tokay and the Malaga grape were conceded to be good varieties for raisin-making. The preponderance of opinion and evidence appeared to be in favor of the White Muscat.

Various Projects

Were discussed and conclusions arrived at with reference to the proposition of establishing a permanent Grange Agency for conducting the business of fruit selling for the year to come, and also the propriety of establishing and opening a regular fruit market for the reception and direct sale of fruit from producer to consumer. Resolutions condemnatory of the careless manner of handling fruits in the market were passed, and a committee appointed to take in charge the matter of attempting to correct that abuse.

It was also resolved that the Secretary be instructed to furnish to the RURAL PRESS, *California Granger* and San Francisco *Chronicle* so much of the proceedings of this Association as he may deem proper.

The next meeting of the Association was fixed by the Directors to be held at Sacramento on Wednesday, the 23d inst., at 2 P. M., at the rooms of the State Agricultural Society.

A. W. THOMPSON, Soc'y.

New Granges.

WASHINGTON GRANGE—Organized by A. Wolf, Aug. 28th, with 24 charter members. W. B. Stamper M.; M. S. Cook, Sec'y. P. O. and express offices, Comanche, Calaveras Co., Cal.

SAN JACINTO GRANGE—Organized by Thos. A. Garey, Aug. 29th, with 19 charter members. T. D. Henry, M.; Mrs. Martha Collins, Sec'y. Exp. office, San Bernardino; P.O., San Jacinto, San Diego Co., Cal.

PARADISE GRANGE—Organized by A. J. Hatch, Aug. 29th, with 20 charter members. B. F. Riley, M.; C. A. Nichols, Sec'y. P. O. Paradise, Humboldt Co., Nevada.

THE following are the officers of San Jacinto Grange, San Diego county, organized on the 29th ult.: T. R. Henry, M.; G. A. Collins, O.; J. M. Benson, L.; John Wakefield, S.; James Carroll, A.S.; Mrs. Mary Heroday, C.; John Flanagan, T.; Mrs. Martha Collins, Sec'y.; Allan Barr, G.K.; Mrs. Rosaline Fowler, Ceres; Miss Mary Worthington, Pomona; Miss Jenny Marine, Flora; Mrs. J. E. Benson, L.A.S.

THE chief aim of the Grangers seems to be to have picnics. If they will only confine themselves to such harmless amusement! The object is supposed to be to prevent husbands having a *monopoly* of the society of their wives and families. Monopolies must be crushed. Is there a railroad manager who does not tremble in his boots as he hears the announcement of another Granger picnic at Pumpkinville, Squash county?—*Railway Review.*

If that editor will please possess his soul in patience a few short months, he will have a little more light on the chief aim of the "Grangers."—*Ex.*

POTATOES.—The first shipment of Pigeon Point potatoes, from the ranch of Bro. N. Gorey, at Pescadero, was received by Agent Hegler September 8th. The samples sent to this office were unusually large, smooth and fine; and as perfect table potatoes as we have ever seen.

AN agency for the purchase of butter and a store under the auspices of the Nicasio Grange is talked of.

Grangers' Mass-Meeting at Anderson, Indiana.

This is the way the Grangers enjoy themselves in the East: The meeting of the Grangers at this place to-day reminded one of the times when

> "Twenty thousand was the tune
> For Tippecanoe and Tyler too."

The procession was over two miles in length, and numbered over 800 teams, and there were hundreds on the ground before it arrived. There were three bands of music; a number of eight-horse teams with glee clubs; a log-cabin, 8 x 16, on wheels, with stick-chimney, coonskins and seed-corn hanging by the door—a pioneer-cradle, made from the half of a hollow log, inside which, together with some half finished axhelves, harness pieced with rope, skillet and bake-kettle, made the early settler's cabin complete.

Arrived at the fair-ground and teams disposed of, the immense crowd was called to order by the Chief Marshal, W. H. Benfield, who introduced the Hon. David Kilgore, of Delaware county, who, in a speech of an hour, showed up the corruptions of the old parties, and how little they were to be trusted, notwithstanding Senator Morton's recent speech at Terre Haute, in their promises to carry out the reforms that the laboring and producing classes of the country demanded. He exhorted his hearers to stand by the nominations of the Independents, and go on in the well-begun work until our country was cleared from the dangers that now threaten it, and the rights of labor restored, and all classes made to bear their equal share of the burdens for the support of our common Government.

At the close of his speech the multitude dispersed for dinner, and were called together again at the sound of the bugle at 2 P.M., when, after a Grange song, splendidly sung by the ladies of Midway Grange, S. M. Smith, of Illinois, addressed the people for two hours, and, notwithstanding the heat, and that a large share of the people were forced to stand, they gave him close and earnest attention, and the crowd around the stand grew denser as he proceeded, none leaving until he closed.

Altogether this has been one of the grandest demonstrations that the Hoosier State has seen. All agree that there were more than 10,000 persons present. The mottoes upon the numerous banners—such as "Industry and Reform," "Labor is Chief of the Nation," "Onward and Upward," "Equal Rights to All," "No Compromise with Monopolies," "Salary Grabs Played Out," "Shall the Great Majority be Governed by the Small Minority?" and many others equally significant, together with the enthusiasm and earnest attention to the speakers—show that the people are thoroughly in earnest in this great popular uprising, and that they will make that great majority manifest in the coming elections.

Madison country is strongly Democratic, and both the old parties are making their nominations and have commenced the struggle, ignoring entirely the people's movement, predicting that the Grangers will return to their party-allegiance when election day comes, and all will be lovely as usual; but they will find their mistake. These immense meetings portend just what such gatherings did in 1840, and the people well understand that to go back to old parties, with the hope of reaching the reform they *will have*, will only be fastening the fetters more strongly upon themselves; and no such thoughts are entertained, save, it may be, by here and there a weak brother, who is perhaps "longing for the flesh-pots of Egypt." If they do not go back, I will agree with Hosea Bigelow that—

> The right to be a cussed fool
> Is safe from all devices human,
> And is common as a gin'ral rule,
> To any critter born of woman.

ROSEVILLE GRANGE now numbers 78 members, and 13 applications for admission. The Grange at Lincoln is also in a flourishing condition. Placer county was behind some others in organizing Granges, but she is fast making up for lost time. There are a large number of farmers near Auburn, and it seems to us a Grange might be organized here to advantage. Its result in promoting sociability is alone a sufficient inducement, say nothing about the other advantages derived from organization. *Placer Herald.*

THE Grange of Richland, Ohio, learned that Mr. Miner, a resident of the vicinity, had lost his team, had a sick family, and had fallen badly behind with his work. On the Monday, Tuesday and Wednesday following, gang and single plows and men turned out, and corn and barley were furnished and 25 acres were planted. Noble charity; and he not a member of the Order.—*Exchange.*

THE HOMESTEAD ASSOCIATION. — The prospects of the Grangers' Homestead Association mentioned by us several days ago, are very flattering. Parties are at work organizing in the several counties of the State, and some excellent work is being done in the same direction in Santa Barbara.—*Santa Barbara Press, Aug. 15th.*

GRANGE RESOLUTIONS.—Santa Cruz Grange at their harvest feast, August 29th, unanimously adopted resolutions similar to those passed by the Santa Barbara Grange, concerning the "vacant chair." They are more mild in tone but very decided and cover the entire ground They express the sentiments of perhaps nine-tenths of the farmers of the State.

Opportunities for Earning Money at the State University.

There have been several statements published lately in regard to the manual labor system at the State University which are not correct in all particulars, and which would be likely to discourage a man of moderate means from entering that institution. As a friend of free education and the rising generation, I doubt not that you will make public the following facts, and thus help to correct the mischief that may have been done.

During two terms of last year as many as seventy-five or one hundred students received assistance from their labor on the grounds, and although in the last term of the year but little work was done, next year there will be an abundance of work for such as wish it, in taking care of the green house, garden and other agricultural operations. The library has given some employment during the last year to several of the students residing in Oakland; and this and the museum will next year take up the spare time of perhaps half a dozen students who are anxious to work their way.

The printing office has given more or less employment to eight or ten, notwithstanding that the *Berkeleyan* (which, by the way, is a sample of what we can do in that line) is about all the printing that has been done. Some of the students are already fair printers, and one or two have paid their expenses of living from their profits in the office.

In regard to the terms to be given by the Loan Society, which is being organized by some of the friends of the University, no definite announcement has been made. Enough has transpired, however, to warrant us in saying that they will be very reasonable to the borrowers; but no student will be encouraged to live on borrowed funds who has the time and strength to work his way.

And finally, we have yet to hear an unkind word spoken of a student on account of his poverty by Regent, Professor or student.

The printing office next year will have at least double its present capacity for work; and this, taken in connection with the other opportunities, and the cheap living in the club houses, will warrant us in saying that no student who is willing to work need stay away on account of his poverty.

To any one having doubts of the usefulness of our State University we would say: Go and see for yourself; not on some state occasion, but go alone, when the regular work is going on, and visit the various recitation and lecture rooms, and the laboratories. If we mistake not, you will heartily wish you were young again, and could enter your name as a student. —*Cor. Post.*

First Annual Meeting of the Oregon State Grange.

From the Willamette Farmer.

Allow me to say that the State Grange of Oregon commences its first annual session on Tuesday, the 15th inst., at Salem, and as it is to be one of the most important meetings ever to be held by that Order, I wish to draw the attention of its members to the importance of all being present to assist with their experience to shape the future course of the Order. Each member should come forward with his notes of changes that he may deem necessary for the good of the Order, and each one should come prepared and determined to remain until the work is all completed, fixing no particular time for departure, but to remain and work with patience until the work is done.

Yours, DANIEL CLARK,
Master Oregon State Grange, P. of H.
Salem, Aug. 26th, 1874.

IN spite of the fact that one Grange recently disbanded in McDonough county, Illinois, the Order of Patrons seems to be multiplying beyond all precedent in the West. Now the Grangers are agitating the idea of sending agents to Central America to buy cargoes of sugar and coffee, and save 50 per cent. of the cost of these indispensable articles.—*West Coast Signal, Aug. 12th.*

AN Iowa Patron thinks that there is too much lawyer in our politics, and that as a nation we have gradually given up to the lawyer every place of honor and trust.

PROF. CARR.—San Joaquin Grange, No. 3, has adopted the resolutions passed by Santa Barbara Grange concerning the removal of Prof. Carr.

THE new warehouse of Alvinza Hayward, built on the wharf lately erected, is at last completed. It is without doubt the finest on the bay, and has an immense storage capacity. By the side of the wharf a boat house is being erected, wherein the pleasure boats will be secured from the high tides and the action of the sun.—*San Mateo Times.*

THE scarlet fever seems to be epidemic in the upper portion of San Ramon valley, Contra Costa county, to such an extent as to cause the temporary closing of the schools in the San Ramon and Amador districts.

WOOLEN MILL WANTED.—The Truckee *Republican* says that a woolen mill is needed in that vicinity to work up the wool from the sheep pastured in that region, which are daily increasing in numbers.

Orchards and Vineyards in El Dorado County.

Placerville is famous for its orchards and vineyards. Its fruits are among the finest in the State, and its wine is rich and of delicate flavor. It does not have the coarse, earthy taste of the valley wines. Indeed, the foothills are the natural home of the vine—a fact that Californians have been slow to learn, but which is surely forcing itself upon them. A few years hence, I am satisfied that all the sidehills about Placerville and far up the banks of the South Fork will be covered with vineyards. Every condition of climate and soil is present. Water is abundant, and by means of flumes and ditches, which can be constructed at comparatively little expense, it can be carried to the very tops of the sunny slopes. Placerville may justly pride itself upon the quality of its fruits. It holds in its lap the very nectar-sweets of the gods. Such peaches, pears and plums—so luscious and exquisitely flavored—I am sure I never tasted before. Among the orchards I visited was that of Mr. Parlow, to whom I am indebted for many interesting facts. His orchard stands upon the site of a former placer digging. You may even now in places see the out-croppings of the bed-rock. A thin layer of soil and plenty of water was all that was required to convert an unsightly slope, scarred with ghastly cuts and yawning drifts, into a garden of the gods. Following is a statement of the amount of fruit produced the present year within an area of three miles around Placerville:

	Grapes, tons.	*Apples, boxes.*	*Peaches, boxes.*	*Plums, boxes.*	*Pears, boxes.*
Negro Hill.....	70	3,000	2,000	300	300
Emigrant Ravine.	130	7,000	700	300	300
Sinan's Ranch....	2	2,000	200	200	200
Smith Flat	25	3,000	400	250	300
Weaver Creek	50	600	100	100	100
Coon Hollow.....	130	1,000	1,000	200	300
Hangtown Creek..	100	7,000	800	400	1,000
Hubbard Ranch...	50	1,200	400	300	300
Cedar Ravine.....	20	800	200	100	100
Tower Town.....	50	3,000	500	300	300
Middletown.....	50	2,000	400	200	200
Total.....	622	30,000	6,700	3,400	3,200

The yield of fruit trees about Placerville is enormous as to quantity. Apple trees (10 years old) will yield from five to ten tons per acre; peach trees (five years old), from five to ten tons per acre; pear trees (seven years old), from five to ten tons per acre. Blackberries, which nowhere else, so far as I know, have so delicious a flavor, produce from four to six tons to the acre. These are made into wine, and very pleasant wine it is too. The great drawback to fruit-culture is an inadequate market; but if the Aldine process for drying fruits does half what is claimed for it, there will soon be a demand for all these fertile foot-hills can produce. Already El Dorado fruits are slowly crowding the inferior plums and peaches of the coast valleys out of the San Francisco market.—*Cor. S. F. Bulletin.*

PREPARING CHICKEN FEED.—Poultry dough should not be made too thin. Many young chickens die, by being forced to take too much water with their food, whereas, if fed properly, they might live. Giving meal too wet will not prove fatal in the case of grown fowls, but they thrive better if the food is mixed stiff enough to crumble. The food is moistened while in the crop by secretions from glands. It next passes, a little at a time, into a pouch formed by the expansion of a part of the passage between the crop and gizzard. Here other digestive juices are secreted, also in the gizzard, and still further on. Now if the food contains too much water before it is fed, these digestive juices are diluted and impaired. All healthy animals regulate their thirst by the needs of the system, therefore, if they are always kept well supplied with water, separate from the food, they will drink only what is necessary, and in mixing food it is best to be on the safe side.—*Live Stock Journal.*

THE *Placer Herald* says a farmer near Clipper gap has been offered $10 a bushel for wild coffee, delivered at Sacramento. The parties making the proposition have tested this wild coffee, to their satisfaction, and say that it is as good a drink as they want. With machinery for hulling this berry, a man would want no better thing than furnishing it at this rate, and still that is cheap coffee.

FIRE FROM PHOSPHORUS.—It is stated that the fire in the vicinity of Mr. Livermore's place, which nearly communicated to his house and grounds, was caused by the sun's heat igniting some phosphorus, which had been strewed over the ground to poison squirrels.

SILK culture along the Pacific coast, and especially at the foot hills of the Sierras, is becoming a fixed interest, gradually developing a prosperous outlook that promises to be of great value at no distant period.—*Canada Farmer.*

NARROW GAUGE.—The iron for the entire length of the Santa Cruz railroad has been purchased, and every effort will be made to push the railroad to Watsonville, build all the bridges this fall, and have the road in operation early next spring.

THE Yolo *Mail* says the wheat yield of Yolo county will amount to something over 60,000 tons. The farmers find themselves very much better off after threshing than they anticipated, and the grain is the largest and plumpest ever seen. Most of the grain is being stored.



My Shop-Mate the Spider.

[Written for the RURAL PRESS by H. B.]

It was an Augnst afternoon; our trade was "rather slack;"
So on our old shop bench I sat leaning lazily back,
Viewing the storm over the western hills rise ominous and black.

But there was a fellow workman, in fact my only mate,
Whose labors were not governed by trade's brisk or langnid state;
Orders, or "no orders," he did not his toils abate.

It was a large, gray spider; that with my willing leave,
Outside the dirty window, a splendid web did weave.
It was a good location; just under the jutting eave.

I knew, as well as he, that this was not a work of love;
Yet I admired the workman as zealously he strove;
As he fastened the ends of the glistening threads, and the wondrous fabric wove.

His superior mechanic skill I acknowledged, as I ought,
But an envious chuckling, I confess, was rising as I thought
How he at his unfinished task would by the storm be caught.

I saw the storm had marshalled all its forces in the sky;
And I knew, or rather felt, just then, that the dreaded attack was nigh;
But the spider, somehow, seemed to know it quite as well as I.

As soon as o'er the hill's rough edge the storm's barbaric face
Lowered on this pleasant valley, its destructive course to trace,
The spinner of those even threads quickened his steady pace.

Like a racer in the arena, with long, spare limbs he sped;
Yet there was not a fastening loosened, nor the tangling of a thread;
There was hurry without confusion, and foresight without dread.

And now the task was finished, with some moments yet to spare;
For, though the storm glowered dark and close, no stir was in the air;
And the web so neat, and so complete, without a swerve hung there.

Close up in the window corner, safe from the wind and rain,
Where he might revel, or rest, or watch the whole of his domain,
The spider now betook himself; as I thought, a little vain.

I own that I was sorry that he had not been caught,
By the fearfully impending storm, while at his task he wrought;
For I had staked a prophecy, and it had come to nought.

And, in our simple Yankee phrase, "I felt a little flat;"
For there was something in his manner, as there he coolly sat,
Which said, "My neighbor critic, now what do you think of that?"

The storm, like me, seemed envious; and the onslaught now began:
An army of hastily mustered clouds this valley's arch did span,
While one, more threatening than the rest, came hurrying to the van.

Through woods, and fields, and dusty roads, its furious course it plowed;
Mingling the leaves, and stubble, and dust in a dark, bewildering cloud.
Chimneys toppled, and shingles flew, and the trees obedient bowed.

In the region of the spider's web I looked, and wondering saw,
How gracefully it swayed in the wind, without a rent or flaw;
But now against its sides there drove a flattened piece of straw.

It was no longer than my pen; but it was clinging fast,
With its splintered sides, to the slender threads; and every whirling blast
Seemed trying to rend the web thereby, and wrenched it as it passed.

'Twas wrong in me; but I was glad—as glad as I could be;
Exultingly I struck my fist down on my aproned knee
And said "Now, my conceited friend, we'll see what we shall see!"

Yes, I did see; and again I found that he was the better man;
For now he left his safe retreat, and o'er the cordage ran,
In a way that only spiders and skillful sailors can.

With fearful leaps he sped away to where the straw was lashed;
Drenched with the spatterings of the rain that against the window dashed;
While the thunder shrieked, and the rafters creaked, and how the lightning flashed!

But that bold, adventurous workman seemed not the least to care
For the storm or me; but toiled and tugged for some moments, and, I declare,
I quickly saw the loosened straw go whirling through the air.

* * * * * *

How long ago was this? Let's see. Well, now as I'm alive,
I was going to say some twenty years, when it was thirty-five;
Ah me, at what a break-neck speed these latter years do drive!

But of all the varied lessons that these flying years have brought,
And placed within my mental reach, not one of them has wrought
So deeply in my mind and heart, as that which here was taught.

Oh, many a careful web is wove, by human hand or brain,
Supposed to be proof in warp and woof against the wind and rain;
When the rending force of a straggling straw proves the skill and the labor vain!

Though we at our complicated tasks through years and years have spun,
And our neighbors may envy, or admire, the fame or fortune won,
We cannot leave our mortal toil, and say that it is done!

Hope begins, and faith sustains; but at the seeming end,
We must nerve while we rest, for the fearful test that tried our spider friend;
And be strong and brisk, at any risk, to come forth and defend.

Before People.

[Written for the PRESS by ELISA E. ANTHONY.]

"Take this easy-chair, dear mother, and let me throw this shawl around you; and I will close the window, so you will not take cold," said Polly Pax mellifluously, suiting the action to the word, shyly glancing at Alf Bond, who was secretly admiring her filial conduct, and vowing he would ask her before long to become his wife, as such a loving, obedient daughter could not fail of being a good wife.

"What beautiful taste you have, my love; I am a thousand times obliged to you," chirped pretty Mrs. Moss to her husband, as he bent and fastened a lovely bracelet on her snowy arm, in the parlor of the hotel, glancing around to see the effect of her words; and felt repaid on hearing a stranger remark, "What a lovely woman, and such an affectionate wife."

"Thanks, but I never drink wine; I am trying to become a moral young man," laughingly said handsome Steve Leroy, as a charming young girl offered him of a glass of wine; and she turned to a fair maiden who hung on his arm, and said merrily: "You are fortunate, Sybil, in having such a temperate lover." Sybil's cheek flushed as she replied: "Yes, Amy, Steve has promised to take the pledge before we are married, and I know he will keep his word," and she gazed fondly at him as she spoke.

"I am delighted to see you, my dearest Araminta, and hope you are as well as your appearance indicates: but you are one of the fortunate few, who always look charming," and Madame A-la-mode left a kiss on her visitor's artistically painted cheeks, and then continued: "You are engaged to Mr. Whitehead? Let me be the first to congratulate you, as you have made the best match of the season. I know that he is nearer seventy than sixty, but just think of his enormous wealth; why he is a veritable Crœsus. What a lovely hat and so becoming to you. I hear that Mrs. Spendthrift has separated from her husband, and I do not blame her; for she told me that she asked him for a check for a thousand dollars, and the wretch was heartless enough to offer her a beggarly five hundred instead. The idea! why, that alone was enough to cause a divorce in almost any family. Must you go? I wish you would spend the day. No? Addio, my dear."

"Will you take me to the concert this evening, Tom?" said Eunice Arthur in a timid voice to her husband, who was gaily conversing with a group of girls, who were all engaged to go with their escorts, and a brilliant brunette said merrily: "Certainly he will, Eunice, don't be afraid to speak to his lordship," and Mr. Arthur chimed in: "As Lotta says, certainly I will, Eunice; let me fasten this rose in your curls, there, run away, love, and dress," and they scattered in all directions.

When alone. "There! he's gone at last, and I am glad of it. Give me that chair, ma, and open the window; I thought I would smother while Alf was here; hand me a novel, and now, don't let the children come near me," crossly said Polly Pax. Her gentle mother looked at her in amazement, and said mildly: "Polly, how you have changed; when Alf Bond was here, you did not speak in that manner." Polly curled herself up in the chair, and answered: "Wait until I marry him, and then he will see a much worse change; we are alone now and politeness is not needed, but one must act becomingly before people."

"The idea of your buying such a cheap bracelet, and then making such a show of it down stairs. There! I won't ever wear it again," cried Mrs. Moss wrathfully, as she threw the luckless bauble across the room, and continued: "I wish I could select something tasteful like young Brainless." "Yes," responded Mr. Moss, "his name indicates that he is not fit for much else; and when in the parlor, you acted as if you were perfectly delighted." She interrupted pettishly: "Because I had to keep up appearances before people."

"Of course, I'll take a drink," said Steve Leroy; and after he had swallowed his fourth glass of wine, his face began to flush, and he said to his companion: "I told Sybil I would take the pledge to pacify her, but that is only for drunkards, while I only drink occasionally. After we are married, I will have wine at home, and drink whenever I wish; but now, for Sybil's sake, I have to refuse wine before people."

Madame A-la-mode, when alone, soliloquized thus: "I began to think Arsminta was intending to spend the day here, instead of a fashionable call of twenty minutes. Well, she is engaged at last, and to a man old enough to be her grandfather; all she came in for, was to tell me about it. Wearing her last year's silk dress, too; and her new hat makes her look hideous; but I never saw her look different. She will make his money fly. And she actually leaned back in her chair! That showed her idea of etiquette. I despise her, but must act cordially before people."

"You must think I am made of money. This is the third concert within the last six months, that you have wanted to attend. A wife's place is at home," fumed Tom Arthur, and his delicate wife said tearfully: "If you do not wish me to go, husband, I will remain at home, but you seemed so pleased when the girls spoke of going, that I asked you the favor." He answered angrily: "There you go again, crying as usual. A man cannot speak a word to you, but down come the tears. As to my consenting when Lotta spoke, I should think you would know by this time, that one has to be always pleasant and agreeable before people."

San José, Aug. 28th, 1874.

Wan Lee as a Printer's "Devil."

Bret Harte describes in "Wan Lee, the Pagan," in "Scribner's" for September, the exploits of a Chinaman in a newspaper office. He writes:

It was deemed advisable for the next three weeks to keep Wan Lee closely confined to the printing office and the purely mechanical part of the business. Here he developed a surprising quickness and adaptability, winning even the favor and good will of the printers and foreman, who at first looked upon his introduction into the secrets of their trade as fraught with the gravest political significance. He learned to set type readily and neatly, his wonderful skill in manipulation aiding him in mere mechanical art, and his ignorance of the language confining him simply to the mechanical effort—confirming the printer's axiom that the printer who considers or follows the ideas of his copy makes a poor compositor. He would set up deliberately long distribes against himself, composed by his fellow printers, and hung on his hook as copy, and even such short sentences as "Wan Lee is the devil's own imp," "Wan Lee is a Mongolian rascal," and bring the proof to me with happiness beaming from every tooth, and satisfaction shining in his huckleberry eyes.

It was not long, however, before he learned to retaliate on his mischievous persecutors. I remember one instance in which his reprisal came very near involving me in a serious misunderstanding. Our foreman's name was Webster, and Wan Lee presently learned to know and recognize the individual and combined letters of his name. It was during a political campaign, and the eloquent and fiery Colonel Starbottle, of Siskiyou, had delivered an effective speech, which was reported especially for the "Northern Star." In a very sublime peroration Colonel Starbottle had said, "In the language of the god-like Webster, I repeat"—and here followed the quotation, which I have forgotten. Now it chanced that Wan Lee, looking over the galley after it had been revised, saw the name of his chief persecutor, and of course imagined the quotation his. After the form was locked up Wan Lee took advantage of Webster's absence to remove the quotation and substitute a thin piece of lead of the same size as the type, engraved with Chinese characters, making a sentence which, I have reason to believe, was an utter and abject confession of the incapacity and offensiveness of the Webster family generally, and exceedingly eulogistic of Wan Lee himself personally.

The next morning's paper contained Colonel Starbottle's speech in full, in which it appeared that the "god-like" Webster had on one occasion uttered his thoughts in excellent but perfectly enigmatical Chinese. The rage of Colonel Starbottle knew no bounds. I have a vivid recollection of that admirable man walking into my office and demanding a retraction of the statement.

"But, my dear sir," I asked, "are you willing to deny, over your own signature, that Webster ever uttered such a sentence? Dare you deny that, with Mr. Webster's well-known attainments, a knowledge of Chinese might not have been among the number? Are you willing to submit a translation suitable to the capacity of our readers, and deny, upon your honor as a gentleman, that the late Mr. Webster ever uttered such a sentiment? If you are, sir, I am willing to publish your denial."

The Colonel was not, and left, highly indignant.

Webster, the foreman, took it more coolly. Happily he was unaware that for two days afterward Chinamen from the laundries, from the gulches, from the kitchens, looked in the front office door with faces beaming with sardonic delight; that three hundred extra copies of the *Star* were ordered for the wash-houses on the river. He only knew that during the day Wan Lee occasionally went off into convulsive spasms, and that he was obliged to kick him into consciousness again. A week after the occurrence I called Wan Lee into my office. "Wan," I said, gravely, "I should like you to give me, for my own personal satisfaction, a translation of that Chinese sentence which my gifted countryman, the late God-like Webster, uttered upon a public occasion." Wan Lee looked at me intently, and then the slightest possible twinkle crept into his black eyes. Then he replied, with equal gravity:

"Mishtel Webstel, he say: 'China boy makee me belly much foolee. China boy makee me heap sick.'" Which I have reason to think was true.

California Manners.

An incident on the Oakland boat the other day brought out a trait which distinguishes a California crowd—courtesy. Insane patients bound for Stockton are brought over this ferry. A crowd, attracted by the morbid interest all feel in lunatics, had gathered round the unfortunates. The mass grew denser and soon numbered at least a hundred. A few unfeeling fellows laughed boisterously at the antics of one of the madmen, which excited the wretch greatly. The keeper arose and, addressing the crowd, said: "Gentlemen, oblige me by not standing here. You see that you excite these men. Common humanity ought to make you keep away."

Without a word, and feeling rather ashamed of themselves, the men dispersed, and in two minutes not half a dozen remained. We overheard an English gentleman remark that it was an extraordinary thing; that an English crowd composed of the same class would have merely laughed and jeered at the keeper and gone closer.

No one who has seen chance and heterogeneous assemblages here, and who has had the thought of comparison suggested, but remarks this peculiarity of consideration for others. Between the public courtesy of our common people and that of those of Europe there is no parallel, and the Eastern States do not compare favorably.

This delicacy is not hard to account for. The more men know of life under guises, the more liberal and less provincial they become. The spirit of the old mining days, when all men had an equal footing, lingers with us. Men learned then that No. 1 is apt to meet quite as good figures as itself without going very far or searching closely. Thus it happens that the characteristic of "Forty-Niners" is real courtliness of manner, something more than mere politeness and bordering on chivalry. We late comers take our cue and in consequence have earned the distinction of being perhaps the best behaved people in the world.

To come down to the coarser manifestations of bad manners, fisticuffs, the police reports prove that in this respect San Francisco is much superior to the big cities of the Atlantic side. It is true that in the cutting and shooting line we rather lap over Eastern towns. This, perhaps, has not a little to do with our public civility. A row in California has a funeral among its possibilities. In older communities a broken head is the ultimate disaster. Disagreeable as both undoubtedly are, the latter is to be preferred. To be violently uncivil in public anywhere will raise a rumpus. You are not, therefore, anxious to create one in which you may figure as a corpse.

It would be pleasanter to assume that our good manners arise from strictly moral causes, but we confess that the sturdy disposition of every man to defend his rights looks suspicious. Pluck has more than morals to do with our good manners.

How Washoe Undertakers Set their Coffins for Customers.

A night or two since, while on his beat through B street, Officer Shirts found an inebriated individual reposing on a bench in front of Wilson & Brown's undertaking establishment. The officer shook the fellow until he awoke him from his drunken slumber, then explained to him that he would be obliged to escort him to the station house unless he hunted other quarters. The man told the officer that he was a stranger in town, that he had but four bits, and the night being warm he had concluded it would be good economy to sleep out of doors and save his four bits to buy his breakfast in the morning. Not being a hard-hearted man, the officer told the fellow that he might finish his snooze, provided he would get up and move out of sight before the people were astir on the streets. Passing that way again in the course of an hour or two, Mr. Shirts found that his snoozer had rolled off the bench and was lying in the empty case of a coffin which was sitting at the edge of the sidewalk. Rousing his man again, the officer told him he "must get out of there."

"Out of what?" grumbled the fellow.

"Out of that coffin," said Shirts—though it was but one of those large coffin-shaped cases in which coffins are shipped.

"Who's in a coffin?" said the fellow, rubbing his eyes.

"Why you are," said Shirts,

"If I am I don't know it."

"Well, I know it, and if you don't get out of that it will be the end of you. Don't you know that if the undertakers get up in the morning and find you snoozing in here they'll clap a lid on the coffin, nail you up and bury you, and then send in a bill and make the county pay your funeral expenses."

Crawling out of his narrow quarters, the fellow stood and gazed upon the coffin-case for a time, then said:

"What sort of d——d undertakers have you got up here in this country, that go and set coffins 'longside the sidewalks to ketch men?" and without waiting for an answer he shuffled away to find safer quarters.—*Virginia City Enterprise.*

THE Arabs, passing a rich harvest or a tree in full bloom, will greet it with a "Barak-Allah!"—May God bless you!

A California "Bull-Puncher."

The scene described is in the redwoods of Sonoma county:

The driver (or bull-puncher, as he is technically called) provides himself with a yard or two of hickory stick, tipped with a steel goad an inch long, and this pretty instrument is as busy as a drum-stick perpetually. The ox, with all his acknowledged virtues, is a most provoking beast. Years of goading give him an exasperatingly small store of wisdom. Hence, not an hours passes, but some unfortunate brute, by his stupidity or laziness, works the driver into an ecstacy of rage. Then, whang! pred and whang! Blasphemy, howls, blood and goads! Oxen are not unfrequently killed in these mad attacks. One pred behind the horns sends the poor devil to where logs and punchers are not. The bull-puncher is a man of trials. Only a strong constitution can stand the excitement of the trade. He must have a born gift for profanity, or he need never hope to reach high standing in the profession. "Mister," said the most gifted puncher in the woods, "don't shout when yer hurt? Ezakly. If I didn't cuss when the bull is contrary, I'd bust every blood vessel in my body in no time." For the time being, the bull-puncher yearns for nothing but to see his ten oxen pull together and act at the same moment. Even years of practice and perfect familiarity with his cattle, who understand every word and gesture, make this end not always so easy.

"Stand up, Bright! You, Brown!" shouts the puncher to the leaders, when the chain has been hooked to the log. Bright and Brown groan. "Stand up, Bright! You, Brown!" comes louder, and the puncher goes through a complicated manual of harmless passes with the goad. The oxen know perfectly well that this is an ornamental preliminary, and take no notice accordingly, unless it be to lock horns and low, as if in dread of the coming war. If after two or three repetitions of this a willingness to get ready is shown, the puncher is calm. It not, he jabs an innocent ox near him, and swears at the leaders, who bellow, and strive with their horns, each to keep the other from making the torturing start. Vigorous thrusting and yelling produce signs of animation along the line; and an extra prod of the steel sets several of the hinder oxen tugging. That is the moment for the leaders to start, but in spite of the cries of the puncher, they scarcely lower their heads again, and continue their lowing and hooking; so the opportunity is lost. Now the puncher stands forth alone. Such a howling shriek of tape-worm blasphemy never was heard outside of the woods. He dances and he foams, and tearing up knots and billets, rains them at the refractory leaders, who are beyond the reach of his goad. Perhaps the puncher throwns down his hat and stamps upon that article of raiment as he screams. Happily, a small log from his raging hand starts the leaders. Now, shouting, yelling, cursing, blaspheming and bellowing, till the sylvan echoes make a frightful uproar, the puncher leaps and dances along the line, goading and smiting till the united strength is brought to bear, when the log plows slowly over the slimy road till the next stoppage, and then the whole soul destroying performance is gone through with again. The puncher, in addition to all his other woes, must pass through life up to his ankles in mud. A man with a couple of mnles drawing a sled on which a pair of barrels are fixed, spends his time in dashing water over the ground before the log on its way to the road of skids. Thus a gutter of soft, slippery mud is quickly formed. The log gliding through this makes a sound oddly similar to a boat cleaving water, and the puncher plods on, cursing and plunging.

A Blissful Marriage of Convenience.—A writer in the *Galaxy* says: At the gaming table the Duke of Richmond incurred a debt of honor to Lord Cadogan, which he was unable to pay, and it was agreed that his son, a lad of fifteen, who bore the title of Earl of March, should marry the still younger daughter of Lord Cadogan. The boy was sent for from school and the girl from the nursery; a clergyman was in attendance, and the children were told that they were to be married upon the spot. The girl had nothing to say. The boy cried out: "They surely are not going to marry me to that dowdy!" But married they were. A post-chaise was at the door; the bridegroom was packed off with his tutor to make the grand tour, and the bride was sent back to her mother. Lord March remained abroad for several years, after which he returned to London, a well-educated, handsome yonng man, but in no haste to meet his wife, whom he had never seen except upon the occasion of their hasty marriage. So he tarried in London to amuse himself. One night at the opera his attention was attracted to a beautiful young lady in the boxes. "Who is that?" he asked of a gentleman beside him. "You must be a stranger in London," was the reply, "not to know the toast of the town, the beautiful Lady March." The earl went straight to the box, announced himself, and claimed his bride. The two fell in love with each other on the spot, and lived long and happily together; and when the husband died she also died of a broken heart within a few months.

"Speech is silver, but silence is golden." Hence the expression, "hush money."

A loose habit—getting tight.

Young Folks' Column.

Jack the Pelican.

A correspondent of *Land and Water* writes that paper as follows: I think some account of Jack the Pelican, by many degrees the oldest inhabitant of the Zoological Gardens in Dub'in, who lately died there at the ripe age of fifty years, as it is a well-authenticated instance of the longevity of birds under favorable circumstances, will be interesting to general readers. This fine specimen of the tribe of "Anser" (Linnæus) was brought to the gardens by a Mr. Egan, shortly after their original foundation, in the year 1831, and was then quite full grown, and supposed to be seven or eight years old; and as he lived and flourished there more then forty-two years, his age at his late lamented demise must have closely approached, if not fully reached, the half-century. Jack was generally about the first specimen which was introduced, or rather introduced himself, to the notice of visitors, as he was seldom shut up in a cage, but walked or waddled about where he pleased, usually on the green lawn sloping down to the lake, on which the waterfowl live; and was often rather an object of terror to juveniles and the ladies in charge, having at times a trick of opening his great beak, and snapping at them as they passed, quite harmlessly however, although the writer of this notice remembers a smart scratch received by him in a tender part, and through a pair of white russet ducks, when breakfasting in a tent in the grounds many years ago, and which was inflicted by the sharp hook on the point of the upper mandible.

He usually treated strangers with sovereign contempt, hardly designing to waddle out of their road; but when seized, and his beak opened to show his clift tongue which lay at the pouch under the bill, his eye, usually a splendid ruby or rather carbuncle color, got red as a coal with anger at the indignity. His plumage was always in the most beautiful order and the most brilliant white, except about the head, where the soft downy hackles assumed a pinky hue. Curiously enough, he never went into the water, except occasionally for the purposes of ablution, when he would duck and wash himself all over; then, returning to land, squeeze the water out of his feathers with his bill, just as a washerwoman does her clothes, and then stand in the sun to dry; but he never seemed to swim for pleasure or to fish, in which respects he differed from the three junior members of his tribe also located in the gardens, who spent their whole time in the water or perched on the little artificial islet in the lake, and rarely came to land, except to be fed, being with difficulty canght when desired to be caged for the winter, for fear of the cold.

Jack treated these juveniles with, if possible, greater contempt than human boys and girls, and never appeared to take the slightest notice of nor to recognize his brethren from the other water fowl in the garden. Another peculiarity of his was that he would never touch any food but fish, although it is the wise practice of the clever and careful curator, Mr. Garter, if possible to educate all his flock not to be too particular, in case of necessity. This practice might wisely be introduced into many seminaries for young persons of the present day. The others soon learnt to eat and relish horseflesh on occasion, but Jack stood out staunchly, and fish, and fish only, he would have, at whatever cost, all attemps at deceiving him being in vain—even a herring nicely stuffed with meat being instantly detected and rejected with scorn. He stood some twenty inches from the ground to the top of his back, and was about the same across when his wings were folded; when open they would stretch fully ten feet from tip to tip.

Jack knew his friends and enemies well. and when he first came, and until Mr. Egan's death, it was most absurd to see the way he attached himself to him, running to meet him on arrival at the gate, and never leaving his foot while in the garden, following as close to his heels as a retriever dog. He showed signs of age for some time before his death, and lost the sight of one eye, but went about as usual until the beginning of winter, when he drooped, and was only kept alive for a time on a diet of live eels and whisky-punch, of which latter he was very fond. Mr. Garter and all the keepers cherished and nursed him, with the respect due to his age and position, but in vain, and at last, to the great regret of is many and attached friends, he paid the debt of natnre.

A liberal-minded youngster was picked up by a visitor of the family, who, dapdling him on his knee, said: "I wish I had this little boy; I think there's money in him." To which promptlv responded the child: "I know there is, for I swallowed a cent when I was at grandma's the other day."

"My son," said a benevolent stranger to a lovely, golden-haired child, the other day, "you look like a boy who had been brought up by affectionate parents."

"Was I? was I?" exclaimed the excited lad; "just look at my back!"

A small boy in New Haven made a sensation for a short time by quietly transferring a card bearing the words "Take one," from a lot of hand-bills in front of a store to a basket of oranges.

To be a great man it is necessary to turn to account all opportunities.—*Rochefoucauld.*

Good Health.

English Food Adulteration.

It appears, from the statements of the New York *Herald's* London correspondent, that shipments of spurious teas, adulterated wines and spirits, and fraudulent packages of Roman cements, together with a number of other commodities, all more or less adulterated, find their way to our markets.

Tea is doctored in order to improve its appearance, increase its bulk, and add to its weight. For the two last mentioned purposes, finely ground quartz and iron or steel filings are employed. Catechu gum, an astringent substance, is also used, but the favorite ingredient seems to be "lie" tea, or old tea leaves once used and then worked over. This is mixed with low grades of new tea, and placed in cylinders under steam, together with a quantity of carbonate of magnesia, Dutch pink, and Prussian blue. The adulteration with "lie" tea is usually done in China before export, but the "facing," as the coloring is termed, is performed by people in England who become skilled in the fraud as a business. The dealers face the tea to render it black or green, according to the desires of customers. Out of 170,000,000 pounds of the commodity annually consumed in England, it is asserted that one fifth, or about 35,000,000 pounds, is open to suspicion.

British wines, according to the testimony of several analysts, are largely adulterated with potato spirit; sherry is doctored with sulphuric ether, and to other liquors fusel oil and French treacle or brandy, which is often nothing more than beet root spirit colored and flavored. Beer is now comparatively pure, and the main adulteration is simply water.

In butter, often as much as 40 per cent. of water is found; patents have recently been obtained for a compound called "butterine;" and two other artificial mixtures, known as "Australian" and "Dutch" butter, have appeared in the markets. The Australian stuff is bone fat extracted by steaming refuse bones. It sells for 15 cents per pound, and smells horribly. Dutch butter is a mixture of genuine butter and American lard. There is, beside, a French butter, compounded of drippings and kitchen stuff colored with annatto.

Corn flour, a material largely used for food for children, is described as generally worthless and unhealthy. Thirty-three out of seven thousand grains, a pound, one analyst states as the proportion of nutritious matter contained, where there should be at least eight or nine hundred grains. The article is nothing more than starch, a fact proved by the circumstance that a dog fed npon it died of starvation.

Other well known adulterations in bread and milk are noted; but as these commodities do not come nnder the head of possible exports, allusion to them is unnecessary.

Cautions Concerning the Use of Paris Green.—Those who use Paris green for the extermination of the potato beetle should bear in mind that it is a most dangerous and deadly poison, and they cannot be too careful lest it prove fatal to "larger game" than the bugs. All packages of these substances should be plainly marked Poison. There is great danger in the mixing of this green for the potato bug, owing to the fine dust which arises in the process, which is inhaled, and also rapidly absorbed by the pores of the skin, especially if the person using it should be in a state of perspiration. To guard against this, the hands and face (particularly the nostrils) should be protected as much as possible, and should be carefully washed after working with it, or with any of the preparations of which it is an ingredient. As it penetrates and poisons wood, gets into the seams and crevices of articles made of metal and even into earthenware that is at all porous, it is important that all household ntensils, or anything in barn or stable (which cattle or horses could have access to) in which the article may have been mixed, or from which it has been used, should be carefully set aside, and never again used for any other purpose. Malignant sores are not unfrequently caused by scratching the skin when itching or irritated from handling the green. —*Boston Journal of Chemistry.*

Dog Dentistry.—It is well known that the bites of rabid herbivorous animals are rarely dangerous, because their teeth are made flat-faced, for grinding their food without penetrating or tearing the tissues. Hence their bite is little more than a severe ornise, differing from that of a carnivorous animal, which pierces immediately throngh the skin. A veterinary surgeon of Paris, M. Bourrel, recently captured three mad dogs; and, tightly securing them, proceeded to file down the teeth. These animals he let loose with six other dogs. The latter were immediately furiously attacked, and frequently bitten, but in no case did the pointless teeth inflict more than a bruise. Not content with this, M. Bourrel put on a thin, kid glove and then worried the mad dogs with his hand, until they bit him several times. Although pinching quite hard, the glove was not broken in a single instance, while the skin beneath was uninjured. As to whether we had better substitute a city dog dentist for the present pound master, we leave the question to the humanitarians who are endeavoring to abolish carbonic acid and the muzzle. — *Scientific American.*

The Eyes and Spectacles.

We are glad to see that one man at least has been fonnd who is brave enough to face popnlar prejudice in the matter of spectacles—and he writes, in the Boston *Journal of Chemistry:* An old writer, living before the days of illuminating gas and kerosene, remarks that the "first sign of the need of spectacles is a tendency to bless ths man who invented snuffers." In this age we should say that the first sign is to find one scolding about the publisher of his daily newspaper, who is charged with filling his columns with type growing every day more diminutive and indistinct. When a man or woman reaches the age of 45 or 50, it is generally found that some aid to natural vision is required. The discovery of this want is very liable not to be made soon enough, and the eyes suffer greatly in consequence. There is also a foolish pride which prevents some people from adopting spectacles after the discovery is made. There is no truth relating to vision more important, and which therefore should be more clearly nnderstood, than this: that in every case of defective eyeslght, whether it proceeds from advancing age or from congenital causes or from accident, artificial aids should be resorted to without delay. The tendency is in all, or nearly all cases towards irreparable injury, when this aid is withheld. It is true, bad or ill-adapted spectacles may and do cause injury, and so do improper medicines, or injudicious food or regimen. If proper care is used in selecting glasses, and the right ones are obtained, they strengthen vision, and the vigor of all the functions of the organs concerned in the phenomena of sight is increased. A child discovered to be "near-sighted" should be promptly furnished with appropriate glasses, and they should be selected if possible under the advice of a competent medical man or optician. In the case of persons who have passed middle life, as soon as it is noticed that the best artificial light is sought, or that letters grow apparently smaller or less distinct, or that the near point at which one can see distinctly is more than eight inches from the eye, the time for spectacles has arrived.

Middle Age.

Here is some English advice as to the proper way to spend middle life, with a view to sanitary requirements: From 45 to 55 the recuperative powers should be enconraged and developed. There is nothing like work to keep an old horse sound. Sporting dogs should be thin, but obesity will set in. About this time man has his first serions illness, or he gets a heavy fall, loses his nerve, and becomes miserable. Anxiety ought to be staved off, hope encouraged, sordid cares avoided. If a grief exists, it should not be brooded over, but talked out with a friend, gauged, estimated at its worst, and dismissed to absorb itself. If a man at this time is much occupied in out-door sports—hunting, shooting, fishing, etc., and lives wholesomely and temperately, he is pretty sure to be clear of sedentary disease. But he may probably have to his account a broken rib or collar-bone, or get a heavy fall from his horse. The last is often owing to the greater caution in riding produced by age and increase in weight; for riding boldly at a fence, as young blood does and light weights can, frequently saves horse and man from disaster. For this reason middle-aged men should not ride old horses. Rheumatism, coughs, and inflammatory diseases arising from exposure to wet or cold a man of 45 will have to contend with, but his blood will be in good condition for the struggle. Moderate exposure to hardships of this kind, like moderate irregularity of mealtimes, never harmed man yet.

Eyes and Cold Water.—The *American Journal of Health and Medicine* says: Many persons are ruining their eyes by opening them in cold water of mornings. Cold water will harden and roughen the hands, and muoh more will it do so to the manifold more delicate covering of the eye; or the eye will, in self-defense, become scaly in the manner of a fish; that is, the coats of the eye thicken, constituting a species of cataract, which must impair the sight. That water, cold and harsh as it is, should be applied to the eye for cnrative purposes in place of that soft, warm, lubricating fluid which nature manufactures for just such purposes, indicates great thoughtlessness or great mental obliquity. Nothing stronger than luke-warm water should ever be applied to the eye, except by special medical advice, and under special medical supervision.

Obesity and Health.—The tendency to accumulate fat is not a sign of good health. Nor of long life either. If a man or woman be above the normal weight, and the weight be rapidly increasing, it is not a favorable condition; since such a person is quickly making fat, and may convert tissues whose integrity is necessary to life, into the same materials. Especially in such is there a tendenoy to apoplexy, fatty degeneration of the arteries of the brain being often a cause of this disease; there is also a tendency to fatty degeneration of the muscular fibers of the heart.—*Herald of Health.*

The Teeth.—It is known that the teeth decay more rapidly during ill health than when well, and Marshall Hall believes that long continued painful emotions cause the teeth to decay, as well as the heart to sink.

A mouth without grinders is like a mill without a stone. A diamond is not so precious as a tooth.—*Don Quixote.*

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SAN FRANCISCO:

Saturday, September 12, 1874.

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GOOD HEALTH. — English Food Adulteration; Cautions Concerning the Use of Paris Green; Dog Dentistry; The Eyes and Spectacles; Middle Age; Eyes and Cold Water; Obesity and Health; The Teeth, 167.

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MISCELLANEOUS. — English Nobility Toilets; The Perils of Practical Jokers; Manufacture of Gun Cotton, 163. Building Houses; Gilding and Silvering Silk Thread; Ornamentation of Glass; Thermometers; Vegetation Inside an Egg; Pig-pens; How Thimbles are Made; Aero-Steam Engines: Light and Electricity; Iron Clad Vessels; How to Make a Good Bed; Plate Polishing Powder; Test of Steel; Carriage Springs; Rawhide Journals; To Take Stains out of Ivory, 170. Character in Walks; An American Institution; The Microscopic Examination of Well Water, 171.

The Near Side of the Cow.

Some of our Eastern contemporaries are disputing as to which is the near side of the cow. They are all willing to admit that the "nigh" ox is the one that stands next to the driver, who, of course, goes on the left side of his team; but, in milking, it is asserted, the right side is the nigh side, for it is on this side of the cow that the milker sits. Various agricultural papers and their correspondents have come out and committed themselves on this subject, in a manner which does credit to their independence of character. At present those on the right side of the subject—of the cow, we mean—are in excess of those on the left. One of our most highly esteemed Eastern exchanges has quite recently left the left side of the subject and bounded over to the right side of the animal; impelled thereto by the recorded testimony of a negro, who explained to an Eastern court that the "near side of an ox is the left side, for the driver walked on this side, and the near side of the cow is the right side, or the side the milker sits on."

Now, we do not wish to be considered as astride of any subject, especially when the subject is a cow; and though we strive in all matters to take our position on the right side, in this case we shall take the left side. We fancy that we are here nearer the near side of the animal. We would ask these Eastern reformers, who are striving to get on the right side of the cow, how are we going to dispose of the horse? Do they deny that this question has two sides to it?

In ordinary horse talk—or, rather, talk about horses—it has been found very convenient to speak of the "off side" and the "nigh" or near side; but in this case the teamster does not stand on one side more than on the other; and the milkmaid does not take any side in this connection. Farmers, heretofore, when speaking of the "off horse" of the team, or the "off hind leg" of the horse, were supposed to mean the right side. Were they wrong in this? Can not some of our learned agricultural professors do something for us in this dilemma?

It may seem non-progressive, or even fogyish, but we confess our preference for the old style of calling the left side of the horse, and cow, even, as well as the ox, the "near side." Or, if female suffrage is to create disturbance even here, and the age is going to side with the cow as to which is the near side, why, then, let us have a radical change. Let the teamster take the right side of the ox-team. It will, we are aware, necessitate a slight inconvenience for the teamster, who, under the old style, found it quite handy—if he were a right-handed man—to have his whip in close proximity to the side of one of his oxen. But, in the course of humanitarianism, we shall probably be taught to dispense with the whip altogether; so this will really offer no objection to our "whipping round" on the subject.

In brief, we say concerning this projected reform in regard to the cow, the horse and the ox, "let us have the whole hog or none;" and if the learned in agricultural matters say that the right side shall be the near side, why we shall be perfectly willing to join in the stirring chorus,

"Keep to the right, boys, keep to the right."

Stock Exhibition at the Bay District Fair Grounds.

It was well known by all parties that horse racing was to be the principal attraction at this exhibition, but as a good display of live stock was expected, the RURAL PRESS sent forth a reporter on an exploring expedition, to ascertain what there might be worthy of note in this important department. In numbers the exhibit of animals far exceeded his expectations, and in quality it is enough to say that it was fully up to what he expected to see; conscious as he was that California is, at the present time, on an equality with any State in the Union. Especially is this the case in

Cattle,

The cattle breeders in this State having imported largely and judiciously of late, and the California-bred stock proving that the climate does not by any means necessitate deterioration. This is a point that has attracted a good deal of observation, and the showing of California-bred cattle is as good as could be desired.

George Benuett, of Napa, has on exhibition a beautiful Ayrshire cow, "Rosa Saul." Wm. Fleming, of Napa City, exhibits his Durham bull, "May Duke;" the Devon heifer, "Queen;" the Devon cow, "Victoria," and the Devon bull "Earl of Leicester." A. Mailliard has the finest display of Jerseys that we have yet witnessed; comprising the two-year-old bull, "Keystone;" "Cora," a four-year-old cow with bull calf five months old; "Floradell," a two-year-old cow with bull calf four months old; "Romana," a two-year-old cow with heifer calf four months old; "Bloomer," a one-year-old heifer, and "Lady Jane," a heifer-calf five months old.

Major Vernon had on exhibition on the day of our visit, the second day of the Fair, but one animal; but that was a somewhat famous one, the four-year-old short-horn Durham bull "Dandy Jim." M. Wick, of Butte county, enters a creditable stock of Durham cattle eight in number. The first is "Orlando," a Durham bull, sired by "Crown Prince;" "Eviva," a beautiful heifer three months old; "Belle of Butte," a three-year-old cow; "Carlotta," a one-year-old heifer; and "Prince Albert," a bull eight months old.

Col. Younger, of San José, has on exhibition a large and creditable stock of Durham cattle, consisting of all ages, sexes,—but not of all conditions—for they were all in fine condition; and would bear thorough examination. We noticed two particularly fine bulls in this herd —"Tempest," a three year old, and "Lord Nelson," a yearling.

Mr. J. Bridgford, of Missouri, has some Durham cattle on exhibition, also three horses.

Mr. Robert Ashburner, of San Mateo county, has a good display of graded and thoroughbred Durham stock. The graded bull, "Jupiter," is prominent among them. "Water King," is a thoroughbred bull, one year old. There are also three fine bull calves. There are two thoroughbred Durham cows—"Princess," three years old, and "Sarah," four years old, a splendid dairy cow. "Water Prince" is a large six year-old bull; he was weighed a year ago, bringing down the scales to 2,660 pounds. "Waterman" is a thoroughbred bull, four months old. Mr. Ashburner's stock entry numbers 21 head.

Chas. Clarke exhibits the graded heifer calf, "Mollie," the Durham bull, "Duke of Manchester," and other imported and graded cattle.

S. B. Cameron has on exhibition the thoroughbred four-year-old bull, "Sheriff," and the imported heifer, "Princess." He has also some fine Holstein cattle. The patriarch of this Holstein herd is here—a seven-year-old thoroughbred bull, who is famous for the uniformity of color and other qualities which he transmits to his progeny. "Opodose," is a yearling, full-bred Holstein; "Fairy Queen" is a three-fourth breed Holstein.

A. Whipple offers a good show of Durhams; conspicuous among which is the "Lady of the Valley," and "Mary Ann," a graded cow.

John Judson exhibits the Durham bull, "Grand Duke of Sonoma."

Carr & Chapman have on exhibition a large representation of their celebrated "Gaoilan herd" of Durham cattle. We recognize among these some of the bulls and cows whose portraits and pedigrees have been given in the RURAL PRESS of late.

Dean & Co. have in stall 23 a steer, exhibited principally for his weight. His keeper declared that his weight is 4,000 lbs. Perhaps he does weigh a couple of tons, but the bystanders—our reporter among the number—rather made light of this statement.

On the whole, the exhibition of cattle may be pronounced a good one; but we can hardly say as much for

The Horses.

M. L. Brittan, however, makes a fine show of just such stock as we want—a lot of heavy draft horses, mares and colts.

Mr. Hamilton exhibits a large and superior lot of horses of the "Elban Alten" stock. This stock is bred mostly for speed and as roadsters, being extremely kind and gentle, and easily broke to harness. Did our space permit, we would like to speak further of the merits of some of the horses in the stock of Mr Hamilton, and also of those exhibited by Jesse D. Carr and others, who also make a good display of horse-flesh here.

But we must pass on to the

Angora Goats.

Landrum & Rogers have three pens of Angora goats here, and J. P. Sargent has two pens of the same class. These animals show a splendid fleece. A larger exhibit of thoroughbred and graded Angoras was expected. But the disappointment was less in

The Sheep Department.

B. T. Watkins has a good exhibit of Spanish Merinos—twenty in number. Lewis Pierce has entered twenty-one of his Shropshire herd, his splendid ram, "Jack," being among the number. John Judson exhibits a Cotswold buck, three lamb rams, and a pen of fine ewes—all Cotswolds. George Bennett has a very fine display of Southdowns. Jesse D. Carr also exhibits some Southdowns. Wm. Blacow has a good display of French Merinos, and Severance & Peet have 68 head of Spanish Merino sheep on exhibition, including their rams, "California Chief" and "Big Leg." This ram is the grandson of "Gold Drop," of New Hampshire. Twenty of his lambs are here on exhibition, with the one-year-old ram, "Seville," and "Alameda," a ram two years old, a son of "Gold Drop." "Fremont" is another two-year-old ram of remarkably heavy fleece. He was sired by "Fremont," of Vermont. Young "Fremont" is valued at $1,000, while "Big Leg" could not be bought for $1,500.

The Pigs

Now demand our notice. R. S. Thomson, of Napa, has on exhibition 27 Berkshire pigs, among which are several imported boars. "Young Comet" is one of these—a fine boar two years and four months old. There is another splendid imported boar, bearing the suggestive title, "Souce Genteel." Mr. Thomson's large display is well assorted as to age, giving the observer a good idea of the characteristics of the breed. This is a breed of pigs peculiarly adapted to this climate, and is becoming popular at the East. They make fine hams and shoulders, the proportion of lean to fat being remarkably large. They can be brought to a good killing condition at any age.

Mr. J. C. Mills has on exhibition some fine Berkshire pigs, among which are two fine sows, "Princess" and "Victoria;" the latter accompanied by six pigs, her promising offspring. The splendid imported boar, "Wellington, Jr.," belongs to this exhibit.

Charles Clark has also on exhibition some fine Berkshire pigs, from four to six months old.

While the representative of the PRESS was on the grounds, the cattle and horses on exhibition were paraded on the track, and made an extremely satisfactory display, though there was a noticeable lack of matched teams among the horses, and too large a proportion were colts. They were, however, about as fine a lot of colts as we ever saw, though their appearance and conduct were rather suggestive of hoodlumism.

Generalities.

Although the horse racing element is the power behind the throne here, the exhibitors of farm stock were satisfied with the treatment received at the hands of the directors. The accommodations for stock are good, though somewhat incomplete. Why is it that the public cannot enter any industrial or other fair, at any time during the first half of its allotted time, without incurring the danger of being knocked over by a lot of belated carpenters? Is there no possible way of escaping this purgatory before entering the blissful regions of the exhibition?

The Bay District Fair grounds, it is plain to be seen, are destined to be a decided success. The race track is pronounced to be superior to any within reaching distance of San Francisco, and by many declared to be the best in the State. It affords the finest possible view of the horses during their whole course. A little change in the spirit of the exhibitions on these grounds—a change which we believe would not incur even any pecuniary sacrifice—would secure to this Association the hearty co-operation and support of the community at large.

Agricultural Implements at the Great Industrial Exhibition.

Among the first-class agricultural implements exhibited by Marcus C. Hawley & Co., and for which they are agents, is the

Garr Scott & Co.'s Threshing Engine.

There are several points claimed for this engine: one of which is the great steam space, in proportion to the size of the engine; another, its lightness and convenience for carting around the field. This engine has taken twenty-three premiums in agricultural State fairs in the Atlantic States within the last three years.

The Deere Gang-Plow

Is another implement exhibited by Hawley & Co. One of the claims for the superiority of the Deere gang plow is that it is easily raised from the ground. This point has been secured without sacrificing strength or simplicity, and requiring no outlay of strength on the part of the driver. He has simply to hold the lever in the proper position and the plow is thrown out of the ground, the team doing all the work of lifting. By the same lever the plow is locked into the ground at any depth, from two to eight inches, and the plows by the same operation become rigid, so that they can not be thrown out of the ground by any obstacles in the furrows; though the tongue, all the while, has a free up and down play. This is an important consideration in connection with the horses, as it relieves their necks of a rigid, steady pressure. It is adaptable to three horses abreast, or four or more strung out in pairs. This plow is made by John Deere, Moline, Illinois, whose work in this line has a good reputation. Hawley & Co., as agents for the Deere gang plow, introduced it here recently; the present season being the first in which it has been used here. A large number have already been in use, and the reports from farmers are extremely favorable.

This firm also have on exhibition the world-renowned

Buckeye Mower and Reaper.

Probably there is no agricultural implement more generally known in the farming world than the Buckeye mower and reaper; and from present indications it is destined to become as popular on this coast as in the Atlantic States and in Europe. Over nine hundred and fifty of these implements have been sold during the present season on the Pacific coast. Accepting success as evidence of merit, we must certainly concede to the Buckeye a high position.

Hawley & Co. have also on exhibition at the fair a Schuttler wagon, with Eastern bed and California brake. This wagon has the thimble-skein running gear. It has been in use more than thirty years—long enough to give it a thorough test—and has borne the exposure of different climates remarkably well. The climate of California is particularly hard on wagons; and a light-running, durable farm wagon is one of the most desirable of farm implements; for it is in use the year round, while other implements only have their comparatively brief season of usefulness. From our examination of the Schuttler wagon we believe that it will meet the wants of the country.

DRIED POTATOES.—Potatoes, cut and dried, are coming into favor East. They lose 84 per cent. of watery elements, consequently a ton is reduced in weight to 352 pounds. Thus dried, potatoes keep indefinitely. They are in demand for ship's stores and for inland places where freight is expensive, as in mining districts. By immersion in water over night they resume nearly their original bulk, without perceptible loss of flavor.

IMPROVING THE SAN JOAQUIN. — Lieutenant Weeden, of the United States Corps of Engineers, visited Stockton on Wednesday of last week, for the purpose of looking over the San Joaquin river from that place to Antioch, and of making a report to the Government on the probable cost of improving the navigation of the stream. He will probably put on a party of engineers to make a detailed survey before reporting on the matter.

FLOUR MILL BURNED.—The Antelope flouring mills, situated about six miles from Red Bluff, owned by J. S. Cone, and rented by T. R. Ryan, were destroyed by fire on the 31st ult. Loss between $40,000 and $50,000. The grain and flour were partially insured. There was no insurance on the mill.

SUGAR BARRELS.—The sugar barrels used by the Sacramento beet sugarie are made of cotton-wood. For this purpose, and doubtless for many others, it is well adapted. It is cheaply worked because the wood is soft.

BONE DUST.—We have received several inquiries about bone dust, to be used as a fertilizer. Is there any establishment near San Francisco where bones are ground? If so, they will do well to advertise the fact.

ON FILE.—"How to get rid of the Pods," by E. E. A.; "Buckthorn vs. Wild Coffee," by W. P. G.; "How to get a Reasonable Price for Fruit," by J. S. W.; "Inquiry about Grafting," by A. D. B.

J. McM. SHAFFER will deliver the annual address before the Sonoma and Marin Agricultural society this year.

Interesting to Farmers.

As banks of deposit gather surplus money and equalize its value, so there are banks of deposit for the wheat of the world, which prevent its sinking below a certain price in times of surplus, and check its advance when grain is scarce.

One of these great granaries we will describe as an example of all. It is in the Isle of Malta, in the Mediterranean sea, about midway between Gibraltar and Egypt.

Malta is a small, rocky isle, rising abruptly from the sea, belonging to England. It has a fine harbor, excavated from the rock, and it is made an impregnable refuge for the English navy in that sea. It is always well stocked with provisions. The government has excavated vast granaries in the free-stone rock, upon the steep hights. A bird's-eye view would show them as numerous holes, each covered by a large stone, requiring machinery to move them from the hatchways to the chambers below. Every chamber is protected from damp by a coating of cement, so that the grain is not affected by the frequent rains on the roofless surface. Many cargoes find storage in each.

A yearly rent charge is made, which includes the perpetnal guardianship of promenading sentinels. They are leased to a mixed company of English and Greek merchants of unlimited capital. Its rule of business is inflexible. When wheat falls below their standard prices, they buy and fill their granaries. When the price advances above a certain rate, they sell and empty their stores. It may be three or four or five years. They are patient. The turn is sure to come and their profits are reliable.

We presume that these great storehouses were emptied at last year's prices, and that the low rates of this year will fill them again, and materially aid in sustaining the demand.

Had Napoleon's reign continued, it was his design to establish such granaries, to save the wheat of France from being sent away at unremunerating rates one year, and the next to be bought back at exorbitant prices.

So long as California farmers depend on wheat, public reservoirs of this kind may be worthy of consideration. The French plan was to charter district banks with great privileges, to make advances on wheat in its stores, and to share in the profits realized. Suppose now that wheat is stored at, say, $1.40 per cental—$1 being advanced—and in a year or two prices advance to $2.25, the profit is easy to calculate. At our high rates of interest, the margin would be much smaller, of course, than in Europe.

How the Wheat Eating Population of the World Grows.

[From the San Francisco Journal of Commerce.]

There is one thing that is not at all taken into account in estimating the future market for California Wheat, and that is the rate at which the Wheat-eating population of the world grows.

In Europe that population may be estimated at 120,000,000, in the United States 42,000,000, and in all the rest of the world at 12,000,000, making a grand total of 174,000,000, consuming about 1,400,000,000 bushels per annum.

This population increases naturally at the rate of 3,000,000 per annum. The increase caused by those who adopt a wheaten diet in preference to that which they have been accustomed, is equal to 3,000,000 per year more. The majority of the people of Europe do not now use a wheaten diet, but the number of Wheat-eaters is increasing sensibly from the tendency of population to gravitate to great cities where a wheaten diet is invariably used, and from the change in the diet of the well-to-do peasantry. This gives 6,000,000 more mouths to be filled every year than were the year preceding. And the consumption of these at the generally estimated rate per head is 48,000,000 bushels a year. There are then 48,000,000 bushels more required this year than last, and 48,000,000 bushels more will be required in 1875 than are now.

If California was called upon to supply this increased quantity she could not do it, and considering how, even in the United States, the city is being built up at the expense of the country, and how the ratio of the agricultural population to the whole, in certain sections, is decreasing, it is quite certain that the united efforts of all the Wheat growing sections of the Union could not supply it. True it is, that the area under Wheat in Europe is increasing from year to year, but it is only in particular countries, and is not all equal to the increased demand. There need then be no fear of markets for our continually increasing surplus of Wheat.

But we must not confine ourselves to selling only to one people. There is not a country of Europe outside of Russia to which we could not send a few cargoes of Wheat. There is not a port of South or Central America of any importance to which we could not do the same. In short, if we mean to continue the production of Wheat on a large scale, and to increase year by year the breadth of land under it; we must imitate the example of the merchants of Great Britain, and seek for markets instead of waiting for foreign communities to invite us. Let this be done, and it will not entirely depend on the fluctuations of the Liverpool market as to whether we shall obtain $1.50 or $2.00 per cental for our Wheat, and the fear of overstocking one market will not be allowed to paralyze the progress of agricultural industry on the coast.

Dr. Carr's Record as an Educator.

To enable our readers to form an intelligent opinion of the merits of the controversy which has culminated in the expulsion of Prof. Carr from the chair of Agriculture in the State University, we present a carefully compiled statement of the educational and professional record of Prof. Carr, which we extract from the Sacramento *Record*, and which appears to be a conclusive argument as to the professional capacity of that gentleman:

Prof. Carr was educated and received the degree of Civil Engineer and Bachelor of the Natural Sciences in 1838, at the Rensselaer Polytechnic school, the school which graduated Prof. Henry, Prof. Hall, Prof. Bailey, and many of the most eminent of our practical scientists. [Judge E. B. Crockett was a graduate of the class of '33.] During the next three years he was assistant to Professors Hall and Vannxem, in the New York State Geological survey, carrying on his medical studies when not engaged in the field, in the Albany Medical College. Graduated in medicine in 1842, and was appointed in the same year Professor of Chemistry and Natural History in the Castleton Medical College, Vermont, where he resided twelve years, discharging the duties of Professor of Chemistry and Natural History in Middlebury College a part of the time. In 1847 was appointed Professor in the Philadelphia College of Medicine, where he lectured alternately with Castleton for several years. In 1853 was appointed to succeed Lewis C. Beck in the chair of Chemistry in the Albany Medical College, also to the chair of Chemistry applied to Agriculture in the University, made vacant by the death of John P. Norton. Through the liberality of the President of the University, a free course of thirty evening lectures was given by Prof. Carr to the working men of Albany, which had a crowded attendance and was "productive of great practical usefulness to those classes." He was elected and held during his residence in Albany the post of chemist to the New York State Agricultural Society.

In 1856 a movement was made for the "New Education." Active efforts were set in motion to secure liberal endowments from Congress, for the benefits of agriculture and the mechanic arts, and also to put the new wine into the new bottles—*i. e.*, the Western Universities, as they were successfully organized. Dr. Wayland urged Dr. Carr to go West, and help to carry out these measures. He sent Professor Carr a message, since become famous: "Don't stay here and waste your energies, but put them directly upon the masses of the people. Our colleges have become asylums for mediocrity; a progressive man in them is nibbled to death by ducks."

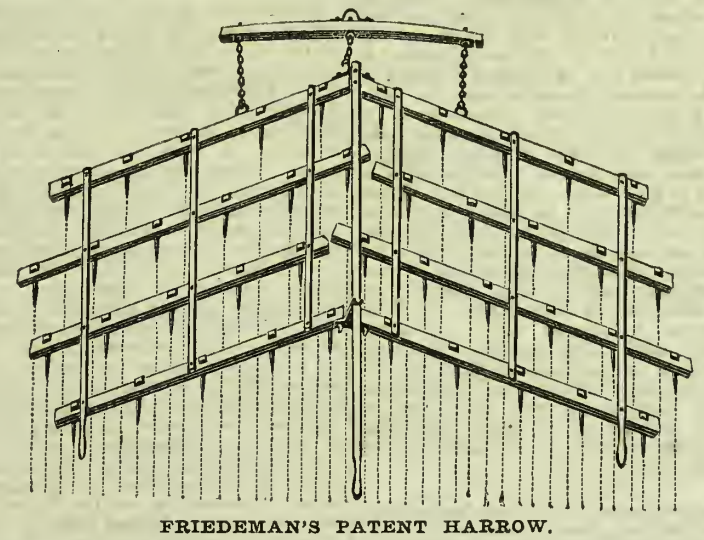
In 1856 Dr. Carr accepted an appointment tendered the previous year, as Professor of Chemistry and Natural History, applied to agriculture in the University of Wisconsin.

The Regents wrote to him that he was called to *build* up the department, and that the organization of the Geological Survey would be placed in his hands. He was inaugurated with public ceremonies in the State Capitol in 1856, and the papers spoke of him as one of the "first rank of lecturers, as a living encyclopedia of the stern facts of science, and a consummate artist in the use of those facts." They call attention to the fact that "his object in coming to the State was to diffuse among the people, and especially the farmers, an interest in scientific agriculture—the rational and progressive development of the art, and not the mere trade of farming; and eventually to establish a State institution that shall render farming what it should be—a learned profession." We quote from the Madison *State Journal* of February 6th, 1856: Professor Carr was eleven years Professor in that University, also discharging the duties of Professor of Medical Chemistry in the Rush Medical College, Chicago, during the war. For several years was one of three equal commissioners to carry on the Geological survey of the State, his special duties being Agriculture and Economic Geology. His share of the limited appropriation, $6,000 per annum, was mostly paid to Professor Whitney for examination of the lead region.

From 1857 to 1861, John W. Hoyt, of Wisconsin, Secretary of the State Agricultural Society, since United States Commissioner of Education to the Expositions of Paris and Vienna, and author of an able report to Congress on education; John W. McWynn, for two terms Superintendent of Public Instruction in that State; Professor Carr, and many others, east and west, through their Representatives in Congress, were active in promoting the passage of the Act of endowment of Agricultural Colleges, which passed in 1862. Michigan already had an Agricultural College. The men who had opposed the grant crowded forward to secure its benefits. In 1867 the Legislature of Wisconsin united the agricultural grant to the university, though there was much rivalry from other places, and many friends of agricultural education were afraid that union with literary or scientific institutions would defeat the purposes of the grant. The Legislature made an entire re-organization imperative. Dr. Carr was re-elected under the new organization. He had previously resigned his seat in the Board of Regents, which the Governor, at his request, filled by appointing Hon. Carl Schurz.

While our Regents were considering their appointments five years ago, the warmest recommendations from Governor Fairchild, of Wisconsin, from ex-Governor Salmon, President of the Regents during the later years of Prof. Carr's services, the Superintendent of Public Instruction, Hon. J. R. Doolittle, then United States Senator, and now President of the University of Chicago; from Senator Howe and others, indorsing his fitness for the position. He had all the degrees and titles which are supposed to attest distingnished attainments, even to that of LL.D. He was made Professor of Agriculture here when there was no place for special instruction in agriculture on the curriculum for the next two years, and sent out into the highways and hedges to drum up students for the University. He gave 50 or more lectures on chemistry at the Toland College; gave a course on the same subject in the Normal School, and was highly complimented for both. His general public lectures were warmly praised.

After this the Regents indorsed his fitness, by assigning to him the duties of Fisher's chair (chemistry), and at the same time made him Professor of Chemistry in the medical department. Physicians are generally thought to be the best qualified of any class to judge of the fitness of a professor for such a position. How have physicians indorsed Dr. Carr? He has twice been elected President of the State Medical Societies, and once Vice-President of the National Medical Association. His papers have been published at the expense of our State Medical Society, as valuable contributions. How have the temperance men of the country indorsed him? Before he came to live in a country abounding in pure wines, by electing him President of a State Temperance Society, and delegate to the World's Temperance Convention. He has spoken from our pulpits, he has worked in season and out of season for our higher and lower schools, for five years, in term time and in vacations, and hundreds of his former students are holding honorable places in society.



FRIEDEMAN'S PATENT HARROW.

Friedeman's Patent Harrow.

We give this week an engraving of Friedeman's patent harrow, which has recently been introduced on this coast by Linforth, Kellogg & Co., Nos. 3 and 5 Front street, and which is said to be coming into extensive use in the Eastern States. The harrow is made ten feet in width, and is light and strong. The peculiar construction of the harrow prevents clogging, while it is easily released from all obstructions or trash, by means of the handles shown in the cut. The harrow is recommended by the manufacturers especially for work on corn stalk or other trashy ground.

The mode of attaching the whiffle-trees prevents them from becoming entangled in the teeth and enables the driver to make a short turn without tipping one section on to the other; while the connection is perfectly pliable and allows the harrow to conform to all unevenness of surface. The teeth are so arranged that it is impossible for one to follow another, as the dotted lines in the cut show.

The Fair—Rules and Regulations.

The Board of Managers of the San Joaquin Valley Agricultural Society have adopted the following rules and regulations for the forthcoming exhibition, which commences on Tuesday, September 29th, and to continue four days. 1—All animals intended to compete for premiums must be entered with the Secretary at the Fair Grounds; and all articles to be exhibited at the hall for premiums must be entered with the Secretary at his office on or before 10 o'clock A M., Wednesday, September 30th, 1874. 2—All animals and articles placed on exhibition shall have a number with the name and residence of the exhibitor placed thereon. 3—The Board of Managers shall appoint committees to make awards of premiums on the animals or articles offered for exhibition, but no member of any committee, who is an exhibitor, shall take any part in the decision of the committee in the department or class in which he is an exhibitor; and if the remaining members of the committee cannot agree the Board of Managers may supply the vacancy or appoint a new committee, or may allow the remaining members of the committee to supply the vacancy. In case any person appointed on a committee refuses or neglects to serve, the Board of Managers may appoint some one to serve instead thereof, or may allow the remaining members of the committee to make such appointment. 4—Any stock exhibited for a premium shall be entered in the name of the owner; and any other articles exhibited shall be entered in the name of the producer, manufacturer or inventor thereof, or in the name of the person under whose supervision or control the same was produced, manufactured or invented. 5—No premium shall be awarded to any animal or article, whether there be competion or not, unless the same be worthy a premium. No article or animal shall be allowed to compete for a premium in more than one class at the same fair. 6—No premium shall be awarded to any but members of the Society, and the ladies or children of their families; but anything deserving of a special notice may be presented by any one for exhibition. 7—Every article or animal exhibited for a premium shall, during the fair, be subject to the control of the Board of Managers. 8—Children under fourteen years of age will not be admitted to the exhibition, unless accompanied either by their parents or guardians, or some person exercising control over them. 9—Any exhibitor who has objection to the judges, or either of them appointed by the Board, must inform the Board of Managers of the fact by filing with the Secretary, at least twenty-four hours before the time appointed for the action of the judges, a written statement of such objections, with the reasons therefor, which will be considered by the Board, and if deemed sufficient new appointments will be made—*Stockton Independent.*

THE Sacramento beet sugar company are making arrangements to add to their works a distillery for the manufacture of rum, intending to thus use up a quantity of syrup not desirable for the manufacture of sugar. A number of large vats and other material recently used at the Calistoga distillery have been procured, and it is expected that the works will soon be in operation.

FARM HOUSE BURNED.—The residence of John Thompson, a farmer, living in Pajaro valley, was burned to the ground on Sunday morning last. The loss is about $5,000; no insurance. There were eight hundred dollars in coin in the house at the time of the fire which at last accounts had not been recovered.

CRAZY BUT NOT MAD.—Charles Thomson, the young man who was last winter bitten by a wild cat, and who has since been subject to curious freaks of madness, imitating the actions of an enraged cat, has been taken to Stockton from Yreka.

A LARGE WAREHOUSE.—A warehouse of 40,000 tons capacity is said to be in progress of construction at Farmington, in the San Joaquin valley. A warehouse that will hold wheat sufficient to load 40 ships is pretty large even for the San Joaquin valley.

GRAPES FOR WINE.—Eberhardt & Lachman have purchased, for wine making in Sacramento, the vast crop of grapes on the ranch of Jeff. Nickerson, Placer county.

ALFALFA ON ADOBE SOILS.—Mr. W. N. Roberts, of La Patera, sowed about 15 acres last spring with mixed barley and alfalfa seed, on adobe land, and after cutting off a heavy crop of barley, now finds the alfalfa springing up from the hard, dry earth, without a drop of rain. Those who have experimented in that neighborhood are satisfied that alfalfa will be a perfect success, even on our average top lands, without irrigation, though it may take a year to get it fairly started. Once rooted, alfalfa is a determined grower, and will yield from three to 10 tons per acre each year, according to the character of the soil.—*Santa Barbara Index.*

FRUIT GOING TO WASTE.—We are informed by Mr. Ream, that he has had several tons of grapes go to waste this season, at his ranch on Feather river. Many a ton of fruit and vegetables are let go to waste annually in this county for the want of hands to preserve them. Why would it not be better for the poor people of Marysville, and even of our own county, to be informed of these great wastes, and invited to come and partake until their hearts content?

Miscellaneous.

Building Houses.

Every man who contemplates building a dwelling for himself, will mske it a home, a hospital, or a grave for his family, according to his plsn. The driest houses are the healthiest, hence those built of wood are the best; they are more lisble to complete destrnction hy fire, but not more complete than iron or granite. Brick houses are the least injured by fire, because they neither melt, scale nor crumble. The damages to whioh they are liable may be prevented hy two expedients. By placing a layer of slate or stone between layers of brick about a foot sbove the ground, the dampness from the esrth is arrested, as brick soaks up wster like a sponge.

The onter walls may be protected against the absorptiou of rsin and fog thus: dissolve three-quarters of e ponnd of mottled soap in one gallon of boiling water, and with a flat hrush spread it over the outer surface of the brick wall, while hot, without allowing it to lsther; in clear, dry weather; next day disselve a quarter of a pound of alum in two gsllons of wster, snd paint it over the soap costing; the two combine and form a film of varnish which the rain can not penetrste. There should be a spsce of about sn inch between the brick and the plaster. The old-fashioned comb roofs are best, ss they shed water more rapidly, and give a garret, which protects the upper rooms from the heat of the summer snn. If possible, let the house stand east and west, the front facing the south, thus exposing three sides to the sun, and let the family room and all the habitually occupied chambers face the south, so as to hsve all the advantages of the warming, drying, and cheering influences of the sunshine. Tne house should be on an elevation, to sllow the water to drain off in every direction. Plastered wslls sre cleaner than those papered; perhaps varnish is better than either, and is not so readily soiled, and is more easily dusted and clesned from stains or grease spots.

Bare wslls are dreary snd barn-like. They can be onamented with pictures and engravings, and thus made instrnctive, amnsing and diverting to a very high degree. If frames are preferred, a very neat and cheap pattern can he made by getting a place of pasteboard and a glass of the size of the picture, which should he placed hetween the two, and a rim made to answer the purpose of a frame, as well as to keep all in place, by doubling over the edges a ribbon or strip of velvet. Ornamentation may go still further, and be made to afford quite as much pleasure to the eye as paintings, hy simply placing a handful of heads of wheat in a vase of water. Each grain sends out bright green leaflets, and continues to replenish the fading ones for weeks together.

An exquisite transparency may be made hy arranging pressed ferns, grasses and autumn leaves on a pane of window glass, laying another pane of the same size over it, and binding the other with ribbon, leaving the group imprisoned hetween. It is well to secure a narrow strip of paper under the ribbon. The binding should be gummed all around the edge of the first pane, and dried, before the leaves, fern, etc., are arranged; then it can be neatly folded over the second pane without difficulty. To form the loop for hanging the transparency, paste a binding of galloon along the edge, leaving a two-inch loop free in the center, afterwards to be pulled through a little slit in the final binding. These transparencies may be hung before the window, or, if preferred, secured against a pane in the sash. In halls, a beautiful effect is produced by plscing them against the side lights of the hall door. Where the side lights are each of onty a single pane, it is well worth while to place a single transparency against each, filling up the entire space, thus affording ample scope for a free arrangement of ferns, grasses and leaves, while the effect of the light passing through the rich autumnal colors is very fine.—*Hall's Jour. of Health.*

Guilding ann Silvebing Silk Thread.—In a process that has been patented in England, gold or silver leaf is rubbed on a stone with honey until reduced to fine powder. The silk thread is soaked or boiled in a solution of chloride of zinc, and after being washed it is boiled in water with which the gold or silver powder has been mixed, When washed and dried, it will be found coated with a fine layer of gold or silver, which may even be polished in the usual manuer.

In dressing for photographs, remember that dark brown, dark green, maroon and dark plaid goods without gloss, will give a rich drab color. Silks of the same color will take considerable lighter. Snuff brown, dark leather, dark drab, scarlet, cherry, dark orsnge, crimson and slate will also prodnce a drab color Violet, blne, purple, magenta and pink will take very light, and should be avoided. The hair shonld not he very wet or glossy.

Ornamentation of Glass.—If a drawing be made upon ordinary ground glass with a mixture of horacic acid, gum and water, and when dry the glass be heated to a temperature sufficiently high to melt the boracic acid, the latter will render the glass transparent, and thus the drawings are fixed. Metallic oxides may be mixed with the boracic acid, and thus any desired color can be imparted to the drawing.

Thermometers.

The simple principle of the thermometer is that a chsnge in temperature produces a change in volnme; and upon the nnitormity of this increase depends the accuracy of the instrument. As instruments are usually made, this is assumed to be so throughout their entire range, but, in reality, this is not the case, either with a mercurial or spirit thermometer, especislly the latter at low temperature, or with either one as the heat approsches the hoiling poiut of the liquid. For measuring all ordinary ranges of temperature the expansion of mercury is so nearly uniform thst the gradustions are msde equidistsnt. If they were divided in accordance with the expansion of the mercury the spaces for each division would incresse from the zero point upward, and decrease from it downward.

The freezing and boiling points are defined for the thermometer hy immersion in boiling water and melting ice, and the space between these is then divided into any arhitrary nnmber of equal parts, according to the standard desired. In the common instrument, used for the ordinary observation of temperature, the space is divided into 180 equal parts, and is known as the Fahrenheit scale, so named after its inventor. In this instrument the zero point is 32 degrees below the freezing point of water —erroneously so placed hy its inventor, because he supposed that this wss the shsolnte zero of temperature.

Now, since the rate of expansion is not uniform in the tube of the thermometer, it follows that the divisions of the scsle are too short from the boiling point up or down, and too short from the freezing point up; consequently there can be only one point on the scale of a thermometer which is really accurate, all the others being only approximate, either sbove or below the truth.

There are yet several other unavoidable sources of error to be considered. First, the glass in which the mercury is contained also expands and contrscts with the changes of temperature, bnt at a rate corresponding to only one-seventh that of mercury; so thst, in order to be accurate, allowance must he msde for this, if the graduation is made upon the stem of the instrument; if made upon the metal scale to which the glass is usually attached, still another compensation must be made, as expansion of the metal is different from either. Erroneous, therefore, as the measuring of heat must necessarily be by the use of a thermometer, it is yet an instrument of the utmost importance to the practical scientist in every field of investigation and industry. Where very minute differences of temperature are to be measured an instrument called a thermo-multiplier is used. This ingenious instrument was brought to such a wonderful degree of perfection hy Tyndall that even the differences in the bodily temperature of insects could be measured, and by its nse many interesting and usetul discoveries have been made.—*Western Manufacturer.*

Vegetation Insine an Egg.—A foreign jonrnal states that Prof. Panceri made an interesting communication to the Institut Egyptien at its meeting in December, on the cryptogamic vegetation which he had found within the egg of an ostrich. This egg had been given him at Cairo, and was still fresh. the air space having not even heen formed. He soon, however, noticed the appearance of dark blotches within the shell, and having been broken open to ascertain the canse, he found that they were produced hy the growth of minute fungi. Instances of a similar kind had already been studied by him, and he had communicated the results to the Botanical Congress held at Lugano in 1859. The helievers in the reality of the spontaneous generation of living organisms have not heen slow to seize on these cases as an argument in their favor, since *a priori* it wonld seem that the shell of an egg would be quite impermeable to germs derived from without. Panceri has succeeded in satisfying himself, however, that the unbroken shell of an egg is permeable to liquids, and that these may introduce germs into its interior. He has, in fact, actually succeeded in inoculating other eggs with a fnngus which he had ohtained from the interior of one in which it had made its appearance in a way apparently so mysterious. He cultivated the fungus in egg albumen, and thus conveyed it to the uncontaminated egg.

Pig-pens.—Of the greatest importance is a good and well constructed pig-pen—something which is too often neglected, or not thought of; for almost every one seems to think that a porker is ever a "hog," and may wallow in the mud, or be exposed with impunity to frost and heat, to snow and storm, to the burning rays of the sun and to rain, to foul air, and to the influence of mud, dirt and every kind of nastiness. It is true a pig, as such, has a very good and robust constitution, and can stand many injnrious influences apparently with impunity, to which any other animal would succumb; but notwithstanding, a pig, although only a pig, is just as thankful as any other animal, and in some respects more so, for a good, comfortable, clean, dry, warm, well-ventilated and well-littered stable; and shou'd have it.—*Ex.*

The modern institution of railroad trains gives us occasion to observe the heat developed by frictional resistance in the heating of the railroad csr axles, which ofteu become so hot that the flame blazes out of them, setting the oil packing, and occasionally when not noticed, may in time set the car itself on fire.

How Thimbles are Made.

The manufscture of thimbles is very simple, but singularly interesting, and is described as follows: Coin silver is mostly used, and is obtained hy purchasing coin dollsrs. Hence it happens that the profits of the business are affected instantaneously by all the vsriations in the nation's greenbsck promise to pay. The first operation strikes a novice as almost wicked, for it is nothing else than putting a lot of bright silver dollars, fresh from the mint, iuto dirty crucibles, and melting them np into solid ingots. These are rolled out into the required thickness, and cut by a stsmp into circular pieces of any required size. A solid metal bar of the size of the inside of the thimble, moved by powerful machinery up and down in a bottomless mold of the outside of the same thimble, bends the circular disks into the thimble shape as fast as they can be placed under the descending bsr. Once in shape the work of brightening, polishing and decorating is done upon a lsthe. First the blank form is fitted upon a rapidly revolving rod. A slight touch of a sharp chisel takes a thin shaving from the end, another does the ssme on the side, and the third rounds off the rim. A round steel rod, dipped in oil and pressed upon the surface, gives it a lustrous polish. Then a little, revolving steel wheel, whose edge is a raised ornament, held against the revolving blsnk, prints that ornament just outside the rim. A second wheel prints a different ornament around the center, while a third wheel with sharp points makes the indentations on the lower half end of the thimble. The inside is brightened and polished in a similar way, the thimble being held in a revolving mold. All that remsins io he done is to boil the completed thimbles in soap suds, to remove the oil, brush them np, and pack them for the trade.

Aero-Steam Engines.—Mr. Richard Eston's paper on the use of heated air combined with stesm in locomotives, read before the British Association, has attracted considersble attention. The principle wss invented by Mr. Geo. Warsop, and a stationary engine on this principle was in daily work at tne International Exhibition of 1871. In the csse of the locomotive named, an air pump, single acting, driven from one of the main cross heads, and secured to the frame work of the engine, in the plaoe originally occupied by the feed pump, conveys a continuous supply of air, taken from the atmosphere, in its natural state, through a coil of pipes, fixed in the smoke box, into the hoiler, at an average temperate of about 650° Fah. Within the boiler, the heated air is distrihuted and is continually rising, scsttering the cohesion of the molecules of water, increasing the heating surface, promoting ebullition, joining the steam on its passage to the cylinder, and there greatly aiding the energy of the steam by retarding condensation, and following a higher curve of expansion. The action of the heated air also prevents a permanent settlement of incrustation on the boiler, fire box, or tubes, entirely obviates priming, aud diminishes the liability to explosion. The duration of boiler, tnbes, and fire box is prolonged hy the non-deposit of scale, and steam is more qnickly generated and more easily kept up.

Light and Eectricty.—The English electrician, Willoughby Smith, has recently discovered a most curious action of light in altering the electrical resistance of a metal. In experimenting for a special purpose, with some small rods of selenium, about one-twentieth of an inch in diameter by three or four inches in length, enclosed in glass tubes, with platinum terminals, he found that their electrio resistance varied most conspicuonsly and to a very great extent. He finally traced the disturbance to the action of light—finding that when the rods were enclosed in a dark box their resistance was perfectly normal, while even a slight exposure to light immediately rednced it some 10 or 15 per cent. On burning a magnesium ribbon at a distance of nine inches from the selenium rod, which, to cnt off all disturbing action of heat, wss immersed in its tube to a depth of several inches in a basin of water, the conductivity of the bar was at once increased nearly three-fold, remained constant while the light lasted, and as soon as the flame went ont immediately returned to its original valne. The discovery opens an entirely new field of investigation.—*Jour. of Chem.*

Iron Clan Vessels.—The invention of iron plates to protect vessels is far from being of as recent date as is generally supposed. During the 12th century, the Normans covered their ships from the water-line up with an iron casing, terminating in a ram on the how. Still earlier they had adopted a system of protecting the upper works with metsl shields. In 1534 Peter of Arragon ordered his ships to be iron-plated, in order to protect them from the burning missiles then in common nse. In 1530 the squadron of Andrea Doria contained a vessel built by the Knights of St. John, which was armored with several thicknesses of iron. At the battle of Lepanto, several ships protected their batteries with bars of iron. For two centuries no progress seems to have been made. In 1782, at the siege of Gibraltar, an engineer officer constructed six ships, which were the types of the modern iron-clad. They were covered with an armor of hard wood, leather and har-iron. It is said that they resisted the fire of the forts for a long period, but were finally sunk by red-hot shot.

How to Make a Good Bed.

Perhaps some housekeepers wonld like to know how they can make an inexpensive, and at the ssme time a good and durable bed, or mattress and bolster. I have a bed thst will (with good usage) last a lifetime. It is merely a tick, the same as for straw, or husks, with openings in the npper side to insert the hand for stirring, and filled with cut paper. Now, reader, do not throw aside the paper with disgust, but, if for nothing hut cnriosity, finish the article, it will do no harm; possibly yon may be induced to make one. The work of cntting the paper is not snch a long job as you wonld think. Take any kind of clean paper (except straw paper) and fold it, or roll, so that in can he cut with one clip of the shears, and then cnt it; you need not be particular as to the width. although the nsrrower it is cut the better. These clippings are like little curls or rings of psper, and lie almost as light as feathers, and sfter nsing the bed they will not break np and grow fine snd dusty, but are clean, and can be stirred as light ss when first nsed. I have heard people who have slept on them ssy "they were the best beds they ever slept on." I prefer them to feathers or common mattresses; hair msttresses are nicer, of course, bnt few of us farmers' wives can afford to buy them; whereas, the paper bed we csn have without cost, except the work, and that the smallest child you have who can use a pair of shears, will help you, and if not kept busy too long at time, will think it but play. The same material makes nice pillows for lounges, chair cnshions, cradle ticks, etc. I hsve a box to keep waste paper in, which is out of the way, and at the ssme time hsndier than the rsg-bag; and when it is full, I cnt them up into another box and pnt them into the tick. I use the same ticks that I have nsed for straw; wash them and sew up the openings, so they are jnst large enongh for the hand to pass throngh readily; three openings are sufficient.—*Cor. Cincinnati Times.*

Plate Polishing Powner.—The *English Mechanic* states that an excellent preparation for polishing plate may be made in the following manner: Mix together 4 ozs. spirits of turpentine, 2 ozs. spirits of wine, 1 oz. spirits of csmphor, and ½ oz. spirits of ammonia. To this add one ponnd of whiting, finely powdered, and stir till the whole is of the consistency of thick cream. To use this preparation, with a clean sponge cover the silver with it, so as to give it a coat like whitewash. Set the silver aside till the paste has dried into a powder; then hrush it off, and polish with a chamois leather. A cheaper kind may be made by merely mixing spirits of wine and whiting together.

Test of Steel.—Geo. Ede says, in the *Iron Age*: Good tool steel in its hard state on fractnre presents a dnll, silvery appearance, is more close in its texture than annealed steel, and is of a uniformly white color with the entire absence of sparkling particles. If aquafortis be applied to the snrface of steel previously brightened, it immediately prodnces a black spot; but if applied to iron the metal remains clean, so that it will be quite easy to select such pieces of iron or steel which possess the greatest degree of uniformity, as the smallest vein, either of iron or steel, upon the surface, will be distinguished by its pecnliar sign.

To ascertain if a mineral contains copper, it is only necessary to pulverize a portion of it, dissolve it in strong nitric acid (aqnafortis), and dilute a portion of the clesr solution, which will probably be blne, until almost colorless, then add ammonia carefully. If copper is present the color will become an intense blue. In another portion of the solution, somewhat dilnted, place a piece of perfectly clean polished steel or iron; in a few minntes the copper will be deposited upon the iron in a metallic state.

Carriage Springs.—Instead of using flat or elliptic springs an inventor uses a compound curved spring constructed somewhat on the principle of the *C* spring, and consisting of two or three springs connected together at their lower ends, while the npper ends which diverge are curved round and secured to any convenient part of the carriage fra ming.

Mineral Oil may be detected by its property of imparting a flourescence to animal or vegetahle oils, and by its aromstic odor in hurning. The presence of resin may be ascertained by its giving a deeper color with nitric acid than that given by the pnre oil.

Rawhide Journals.—A correspondent of the *Scientific American* says: I have run a piece of machinery in rawhide boxes for fourteen years without oil; it is good yet and runs at 4,500 per minute. I put it in while soft, and let it remain until dry.

Here is a Japanese receipt for keeping meat fresh in hot weather: Place it in a clean porcelain bowl and pour very hot water over it so as to cover it. Then pour oil on the water. The air is thus qnite excluded and the meat is perserved.

The metrio system of weights and measnres is to be made compulsory in all commercial dealings throngbont the Austrian Empire from January 1st, 1877; and in the pharmaceutical establishments it is required this year.

To Take Stains out of Ivory.—A little prepared white chalk, tinged with sweet oil and sal volatile into a paste; rub it on wet with a piece of wash-leather; let it remain until dry, then hrush it off.

Character in Walks.

It is amusing to sit on the hotel balconies in Saratoga aud watch the different ways people have of walking. The sentimental young lady comes hitching along with her dress tied tightly around her feet. This is the brainless noddle where the dress overcomes all character—where it gets bigger than the woman.

Sometimes a little happy womau comes walking down the dining room with her head up, heels down, aud patting her left palm with her fan. This is the walk of a happy girl—just engaged.

After studying the walks of men all summer I have prepared the following infaliible chart, whereby you can tell all human character just by noticing the walk:

Selfish, one-idea men, like Gov. Morgan and John Randolph "toe in" and look straight ahead.

Uustable persons, like Theodore Tilton, George Fraucis Train, Mrs. Woodhull, and Gov. Beveridge of Illinois, walk slow and fast by turns.

Fun-loving persons, like Sam Cox, Mrs. Harriet Beecher Stowe, Olive Logan and Oliver Wendell Holmes, teter and tilt up and down when they walk.

Careless persons, like Lincoln, Greeley, Zack Chandler and Susan Anthony, are continually stubbing their toes, or stepping on somebody's dress.

Retiring persons, like A. T. Stewart and Charles O'Connor, walk swiftly and slip through a crowd unobserved, like eels through a fish rack.

Good-natured persous, like Schuyler Colfax aud Frank Carpenter, pat an envelope or knife on the palms of their left hands or snap their fingers every few steps.

Strong-minded people, like Anna Dickinson and Secretary Bristow, toe straight ahead, shut their mouths, and plauk the whole foot down on the floor at once.

Wide-awake people, like Geu. Shermau, Gen. Sheridan, Speaker Blaiue and Senator Logan, swing their arms and "toe out," while their hands fly about miscellaneously.

Lazy people, like Senator Morton, Judge Davis of Illinois and Gen. Grant, slosh arouud loosely, first on one side of the walk, then on the other, while they skuff their heels along on the ground without lifting them up.

Managing and conniving persons, like Thurlow Weed, Gov. Fenton and Andrew Green, gsnerally walk with one hand clutched hold of an euvelope or stuffed into the pocket, while their heads lean forward, indicating subjective thought.

Timid people, like Jay Gould and Sam Tilden, hesitate as they walk, pass outside when they meet any one, go around a stone or stick instead of stepping on it, and step off the walk entirely on meeting several people at once.

Observing persons, like Wendell Phillips, Henry Ward Beecher, and Josh Billings, walk slowly, while their eyes look down on the grouud and on each side, and the body frequently turns clear around, as if the mind were reflecting on something passed.

Careful persons, like Peter Cooper, Geu. Dix, Fernando Wood and Augustus Schell, lift their feet high and bring them down slowly, often touching something with their canes or kicking a stone or stick to one side of the way.—*N. Y. Sun.*

AN AMERICAN INSTITUTION.—It must be said, however, that the charms of a journey up and dowu the Hudson are greatly enhanced by that purely American convenience, the river steamer. It is the Englishmen's fault that this magnificent institution has not yet been introduced all through Europe. They won't acknowledge its merits and comfort, solely because it is so "un-English;" and as everything connected with shipbuilding must come from England to be accepted on the Continent of Europe, the sumptuous American river steamer, and her more humble sister, the ferry boat, are still almost unknown blessings in Europe. When Pullman and drawing-room cars shall be introduced in Europe, railway traveling will be preferable there to what it is here. Order, speed, cleanliness and civility on the part of the officials are all greater in Europe. The stations give also more comfort, and the engine less smoke. But another century will probably pass before Europeans begin to understand steamboat comfort as the Americans understand it. I imagine all the contempt aud disgust which must take possessiou of a thoroughbred Yankee who, in his anxiety to get a little polished in Europe, "he goes on the other side," and has for the first time to put his foot on board a little river boat on the Thames or the Seine, or to undergo the sardine-packing process on board of a miserable old Rhiue steamer. He must be swearing at these damned jackasses for a subsequent fortnight, I fancy; and I cannot blame him.—*New York Sun.*

THE MICROSCOPIC EXAMINATION OF WELL WATER.—Reichardt has sought an expeditious method of determining the quality of drinking water, and recommends the use of the microscope in detecting salts iu solution by their crystalline form. For this purpose, a few drops of the water under examination are evaporated on a slip of glass either at a high or low temperature, aud the forms of crystals obtained, compared with those of knowu salts dissolved in water, and recrystallized in the same manner. In this way one can detect with dispatch and certainty, common salt, calc spar, gypsum, niter, etc., and to a certain extent the relative quantities present.

Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The RURAL PRESS—established Jan. 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfinities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *heir time* by *our labor.*

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast, that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the RURAL has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than has been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the RURAL PRESS.

The S. F. Market Reports

Will receive greater attention in the department of DOMESTIC PRODUCE than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the PACIFIC RURAL PRESS. We commence the new year with a regular circulation of

Over 5,000 Copies,

A far greater issue than that of any weekly on this Coast, independent of a daily publication. If our friends will continue to "help us help ourselves," we hope to reach a circulation of 8,000 this year, and do a correspondingly greater service of good. While we have the greatest advantages and can make by far the best weekly for

Agriculturists on This Side of the Continent,

We cannot expect one-half so large a circulation as journals in older and more populous districts. Consequently readers cannot rightly expect such a paper here at Eastern rates.

No Premiums But a Good Paper

Do we offer. A flashy chromo (or cheap map), with an ill suited paper, will hardly satisfy the farmers of this Coast, whose time is too precious for trifling. To many of you the benefit of a reliable and valuable paper should reach a hundred fold its cost, while to all a poor journal would be dear at any price.

Sample Copies Furnished Free

On receipt of stamp for postage.

Agents are Wanted

Who will do more or less active canvassing. To such we will furnish free samples and pay liberally for their services.

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SEND FOR CIRCULAR.

Hints to be Remembered.

A note dated on Sunday is vold.

A note obtained by fraud, or even from one intoxicated, can not be collected.

If a note be stolen it does not release the maker—he must pay it.

An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.

A note by a minor is void.

Notes bear interest only when so stated.

Principals are responsible for their agents.

Each individual in partnership is responsible for the whole amount of the debts of the firm.

Ignorance of the law excuses no one.

It is a fraud to conceal a fraud.

The law compels no one to do impossibilities.

An agreement without consideration is void.

Signatures in lead pencil are good in law.

A receipt for money is not legally conclusive.

The acts of one partner bind all the others.

Contracts made on Sunday can not be enforced.

A contract made with a minor is void.

EVERY MECHANIC should read and familiarize himself with "Brown's 507 Mechanical Movements," illustrated, published and sold by Dewey & Co., MINING AND SCIENTIFIC PRESS office, S. F. Bound in cloth. Price (very low), post paid, $1, coin, or its equivalent in currency. Inventors, Engineers, Students, and Apprentices will find it exceedingly useful and especially handy for reference.

HELP FOR TOWN OR COUNTRY.

The long established and well-known Intelligence House of Crossett & Co. is now receiving numerous applications from the rural districts for supplying help of various kinds for Domestic, Farm, Mechanical work, etc., and are thus supplying a want that has long been felt in all parts of the interior of the State.

A long residence in the interior, preceded by a ten years experience in this city, in the business of supplying help for both city and country, has given the undersigned such a general knowledge of the wants of the community in relation to help of every kind, and the sources of supply for the same, that we feel abundantly confident of our ability to give the best satisfaction to both those in search of, and those who are in need of help—whether for the chamber, the kitchen, the farm, the mine, the factory or for general work.

Send in your orders trustingly, and you can depend upon having them promptly and satisfactorily filled in accordance with the character of the labor called for—male or female, skilled or unskilled, and of any nationality that may be specified, and on the most satisfactory terms. Address, CROSSETT & CO., Agents, San Francisco, 606 Clay street. aul-tf

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— AND —

Business College.

The Twenty-Fifth Session commences July 20th, 1874.

A day and Boarding School for both sexes; the only Institute on the Pacific Coast where a thorough Academic and business education can be obtained.

The Business College Department

Is under the supervision of James Vinsonhaller, who for many years was at the head of Business Colleges of San Francisco.

For circulars address

26v7-3m JAMES VINSONHALLER.

Magnetic Spring House at Vine Hill,

EIGHT MILES FROM SANTA CRUZ, ON THE SAN JOSE ROAD.

The above house has been built for the benefit of Invalids, Hunters, Pleasure Seekers and those seeking recreation generally. The spring water is heavily charged with magnetism, charging knives at times so as to pick up a needle. Water has affected wonderful cures in Neuralgia, Kidney Disease and affections of the optic nerve. A splendid view of Monterey Bay can be had from the house. Guests giving me a call can rely upon it that no pains will be spared to make their stay an agreeable one. Board, $2 a day or $10 a week. Hot and cold baths, 25c each.

25v7-3m C. G. FISK, Proprietor.

STATE FAIR FOR 1874,

—AT—

SACRAMENTO, CALIFORNIA.

COMMENCING MONDAY, SEPTEMBER THE 21st,

—AND CLOSING ON—

SATURDAY, THE 26TH OF SEPTEMBER.

$45,000 CASH TO BE DISTRIBUTED IN PREMIUMS.

THE EXHIBITION will be divided into seven Departments, and the SOCIETY'S GOLD MEDAL to be awarded to the most Meritorious Exhibition in each department.

The Largest STOCK SHOW ever had by any State in the Union.

The most attractive SPEED PROGRAMME and LIBERAL PURSES ever offered by any Agricultural Society.

A PLOWING MATCH, giving all Plows entered a thorough test, will be had on the grounds.

A GRAND REGATTA on the river, which will be open to all Rowing Clubs in the State.

Public Sale of THOROUGHBRED STOCK at the Park each day of the Fair.

The Central Pacific Company's Railroads and Steamers will carry all articles to and from the Fair FREE OF CHARGE.

Wells, Fargo & Co's Express will deliver all packages FREE not weighing over twenty pounds.

☞ Applications for Stalls at the Park and Space at the Pavilion should be made to ROBERT BECK, Secretary, at once.

MEMBERSHIP $5 00
SINGLE ADMISSION 50

R. S. CAREY, President,
ROBERT BECK, Secretary.

VISITING GRANGERS.—Sacramento Grange, Saturday, passed this resolution: "*Resolved*, That all Grangers visiting at the State Fair are cordially invited to make the hall of Sacramento Grange, No. 12, their headquarters." The Hall is on Seventh street, between J. and K—Pioneer Hall. aep5-3t

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POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRREL, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

NOTICE.

To Farmers and Grangers.

LAIRD'S PATENT SEAMLESS BAG.

WM. LAIRD & CO., Manufacturers.

ELLIS READ, Agent.

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H. K. CUMMINGS. 1858.
H. H. BALATON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have no interests that will conflict with those of the producer. 4v23-1y

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A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER,
22v6-1y President Board of Directors.

Agricultural Notes.

California.

ALAMEDA.

Pleasanton.—*Enterprise*, Sept. 5: The watermelon crop in this vicinity is very fine this year. J. A. Bilz has purchased a barley mill and intends running the same for the benefit of the farmer in connection with his power lathe. The mill is a first-class one and he expects to give entire satisfaction.

Sunol.—The work of threshing is going on in this section in earnest, and the crops are turning out much better than anticipated. Most of our farmers are storing their grain, which makes work around the depot warehouses very lively.

Land.—We know of a piece of land containing 20 acres which was purchased for $1,000 about two years since, and now the owner has sold 10 acres of the same for the sum paid for the original and has the remaining 10 acres clear. Of course property is not worth much in Livermore.

Wool Clip.—Mr. J. A. Cleary informs us that he has just completed shearing his sheep—2,400 head—and the clip amounts to 26 bales of choice wool. This gentleman has some of the finest sheep in the valley.

COLUSA.

Cotton.—*Sun*, Sept. 5: Mr. Johnson, residing some eight miles west of Colusa, brought us this week several bolls of cotton grown on his place. He took out a few seed late last spring, when he was in doubt about there being moisture enough in the ground to sprout them, but they pretty much all came up, and the stalks did remarkably well, all things considered. They average about two feet and a half high, and are covered over very thickly with bolls and blooms. If cotton raising can be made a success in this valley it will add hundreds of millions of dollars to the wealth of its inhabitants. And in order to produce it in immense quantities, not one kernel less of wheat need be raised. It can be put on the summer fallow land, and by thus alternating the crops the same land will produce one-third more wheat. All this we have set out heretofore, but it will bear repeating until fully impressed upon all. Andrew Rutland went to San Francisco last Wednesday to engage Chinamen to pick his crop.

Fine Peaches.—The finest peaches we have seen this season, both as to flavor and size, were brought to our office this week, by Mr. R. H. McDow. They were grown upon seedling trees only three years old. The trees upon which they grew have never been irrigated a particle. People have been so in the habit of thinking that they must depend upon the river lands for everything but small grain, that but little else has been tried until very recently. The few experiments we have noted in these columns of a departure from this idea, sufficiently proves that almost any of the land on the plains can be made to produce almost anything by proper cultivation. Plow deep and plow often, and the earth will respond with a ten-fold measure.

Maj. Cooper's Cotton.—Major Cooper planted a small patch of cotton late last spring, just for the experiment, and he brought us in some of the open bolls yesterday. He did not plant it on his best land, but on some where the melon vines and other vegetables are dying, but the cotton looks thrifty and fine. We are now well satisfied that there are at least one hundred thousand acres of land in Colusa county, upon which cotton can be raised with profit. This alternating with wheat would alone employ more men than are now engaged in all the branches of agriculture in California.

CONTRA COSTA.

Beets Tested.—*Gazette*, Sept. 5: A week or two ago, Messrs. L. I. & C. Fish sent a small lot of sugar beets from their field-garden on the hillside south of their residence here, to the superintendent of the Sacramento beet factory for test. The beets have been found on the test to be of fine quality, yielding a large percentage of saccharine substance; and, as there is here abundance of the quality of the land on which they were grown, the practicability and advantage of securing the establishment of a sugarie here is suggested for consideration.

FRESNO.

Cotton.—*Expositor*, Sept. 2: J. Stevens left at our office a cotton plant, which he claims was not above the average on a 100-acre field, on the Groeningers' farm on Upper King river. The bush measured four feet five inches in hight, had 25 branches on it, the largest of which measured over two feet in length, and the bush had 248 bolls, blooms and squares on it. Several bolls of the cotton were open, and displayed a fine white lint of very superior quality. The plant is still green and vigorous, and had it been permitted, would doubtless have produced as many more bolls, blooms and squares as we have enumerated. He estimates that the field of cotton mentioned will not yield far from 30,000 lbs. of lint cotton. There are upwards of 1,000 acres of land devoted to cotton growing in this section, and the yield of lint cannot fall much short of 150,000 lbs. The average yield of the county, we are informed, will be about 800 lbs. per acre. This year will afford a full and efficient test of the capabilities of the county, so far as cotton is concerned, and the excellent condition of the fields at this time gives assurance of splendid crops, and in consequence a very large average of cotton may be expected in the future.

INYO.

Fruit.—*Independent*, Sept. 5: The fruit crop in this valley is much more abundant than ever before. Many new trees are in bearing for the first time, particularly apples and pears. Peaches sell at 12½ cents per pound at the orchard, and are plenty.

NAPA.

Prunes.—*Reporter*, Sept. 5: The fact that prunes can be grown in Napa valley, that will compare with those of any other locality, has been proved by W. W. Smith, of the Spring Garden Nursery, who brought some into town last week that measured 8½ inches in circumference.

Berryessa.—*Register*, Sept. 5: J. W. Kennedy and Wm. Grigsby have just finished threshing for Mr. A. Clark, of Berryessa valley, on whose place they have been at work with the machine known as the Russell Separator, during the past 14 days, threshing out in that time 10,000 sacks of wheat, averaging 138 pounds to the sack. They did some rapid work, one day putting through the machine 1,025 sacks. Mr. Clark's large yield of wheat is said to be of first quality.

MENDOCINO.

Smoke.—*Independent Dispatch*, Sept. 5: Our valley is now completely enveloped in smoke. It seemed to come into the valley on Wednesday last, from the north. Doubtless there are some heavy fires among the dry grass on the Eel river hills.

Storm.—A destructive wind storm occurred in Potter valley on Tuesday night last. There is no fruit left on the trees in any part of the valley above Pomo; even the trees are badly damaged, being twisted and torn to pieces. Corn fields look as though a heavy roller had passed over them. We learn that below Pomo but little damage has been done.

Crops.—*West Coast Signal*, Sept. 5: Heavy crops in the vicinity of Ten Mile river this year. Capt. G. W. Caxton will ship about 2,000 sacks of grain and about 200 sacks of potatoes. Others in the vicinity have very large crops. This is not to be wondered at when they have the best land in the county to produce it.

MERCED.

Fine Sheep.—*Tribune*, Sept. 5: We notice that sheep-men in this country are evincing a determination to improve the quality of their flocks. Smith & Chapman are daily disposing of large numbers of thoroughbred bucks; and last Wednesday we were shown 10 thoroughbred Spanish Merino bucks, purchased in Monterey county for Mr. J. F. Goodale, of this place.

What Irrigation will Do.—W. F. Clarke last Thursday sold to R. M. Wilson 60 acres of land at Badger Flat, on the west side of the San Joaquin river, for $40 per acre. All of Mr. Clark's land is subject to irrigation, hence the large price paid. Good land not subject to irrigation can be purchased for $10 per acre. The above sale is a practical illustration of what irrigation will accomplish.

MONTEREY.

Land.—*Democrat*, Sept. 5: The ranches are being subdivided; the wedge has been put into them. It is with great satisfaction that we can report a substantial and earnest movement toward the subdivision of the large grants in our valley, so long held intact, as they came from the Mexican authority. The sale of the Sausal rancho is progressing, and must continue to do so satisfactorily, as the terms of the seller are entirely reasonable, and the lands themselves offer uncommon attractions. It is a very fine body of land beyond a doubt, and we look in a year or two to see it covered with flourishing homesteads and farms. The great ranch owners are exhibiting good sense and moderation, while the ability of the actual producers is being shown in a marked degree. The prices now asked for the lands of this valley, which are now in market, display a wise liberality on the part of the sellers. They are the difference between wholesale and retail, but it is probable that they will almost double in figures within a short time after the transfers are effected.

NEVADA.

Fruit.—*Grass Valley Union*, Sept. 4: Apples, peaches, plums and other fruits of the very finest kind rotting by tons, on the ground, in Grass Valley and vicinity. Next year all of that sort of thing can be shipped to a market.

Sheep.—Truckee *Republican*, Sept. 5: The number of sheep pastured in this region increases rapidly each succeeding year, and the wool shipments from here are destined to be of no mean importance. A woolen mill is needed in Truckee. Twenty-two bales of wool, from lake Tahoe (5,000 pounds) lie at the depot awaiting shipment to San Francisco. This wool belongs to J. H. Miller, who is pasturing a large band of sheep near lake Tahoe.

A Granger.—Joseph Marzen, Sr., in so far as devolving himself to the development of the agricultural resources of this section is concerned, may be called a Granger. He is plowing and seeding one hundred acres of land at Donner lake with red top, timothy, clover and alfalfa. This is the first substantial effort at farming that has been made around Truckee. The soil Mr. Marzen is experimenting on is a dark loam, nearly level and situated if anything below the level of Donner lake.

PLACER.

Foothill Potatoes.—*Herald*, Sept. 5: Friend Myrick, who is always saying or doing something good for the foothills, came quietly into our sanctum last Monday, carrying in his hands a few potatoes, and laying them on our table he remarked, "There, sir, is a specimen of foothill potatoes, raised on sidehill red land; what do you think of that?" Without a word, we turned with mingled pleasure and astonishment to examine, what proved to be as fine potatoes as we ever saw; not the largest, but large enough. God knows, for all practical purposes. We teeted the largest, and found it weighed one pound, four ounces, and measured within a fraction of 13 inches in circumference. They were of the Peach Blow variety, very firm and possessing a flavor which would delight the palate of the most fastidious epicure. In color, the part which had been deepest was white, which shaded into a bright dark pink towards the surface side, which made them really handsome to look upon, and which, we are informed, is a peculiarity of the foothill potato.

SACRAMENTO.

Big Apples.—Folsom *Telegraph*, Sept. 5: We were shown a couple of apples the other day, by J. L. Burt, of extraordinary size and beauty, from the orchard of J. Beardsley, the largest of which was 13¼ inches in circumference, and the smaller but a trifle less.

Grapes.—Mr. H. T. Knight informs us that there will be gathered from the vineyard of the Natoma W. & M. Co. this season from 50 to 100 tons of grapes, principally of the Muscat and Tokay varieties. Considering that this is only the second year since planting the vines, the yield is unprecedented.

SAN JOAQUIN.

Farmington. — *Independent*, Sept. 5: The town of Farmington is rapidly growing in importance as a business center. A grain warehouse of 4 000 tons capacity will soon be completed and full of wheat. The building is of brick, fire-proof throughout, and is to be covered with an asphaltum roof.

SANTA BARBARA.

Carpinteria Grapes.—*Press*, Sept. 5: We can safely say after a practical test that the Barbarosa grapes, grown by Mr. C. W. Butler on his place in Carpenteria, are equal to the best, and the bunches are as perfect and pretty as any we ever saw. One of the clusters and by no means the largest, turned the scale at two pounds.

SISKIYOU.

Better than Expected.—*Union*, Sept. 5: The grain crops of Little Shasta are turning out, as threshing progresses, better than was expected. A good demand for grain, at fair prices, is all that is now required to secure the prosperity and happiness of that community. We sincerely wish the market was better than it promises to be.

Barley Crop Good.—W. T. Laird, who has been running a threshing machine the present season, and who has threshed about Cottonwood, on Willow creek, on the Julian and Orr ranches and about Butterville, informs us that the barley crops were unusually good in all these localities. The wheat crop was a little light, but there was so little wheat sown in these districts that it made but little difference whether the crop was good or poor. Oats turned out very well, though there was but little raised.

SOLANO.

Storage.—Benicia *Tribune*, Sept. 5: In occasional rides into the interior, which we are professionally called upon to take, we have noticed large amounts of grain stored in tiers on the ground where it has been threshed, without covering except that of the containing sacks. Our agricultural friends will do well to note that some canvas or cull-d lumber will be a good investment, as the depreciation of the grain from shrinkage during the day, and from the effect of the dampness during the night, more than balances the apparent cost of covering.

SONOMA.

Crop Notes.—*Democrat*, Sept. 5: Thos. Drenan's crop, on Mark West creek, averaged 40 bushels to the acre. He sowed the English White Club. Mr. Williams informs us that his grapes will produce a crop above the average. There is no appearance of mildew or any other disease among his vines. The fruit yield in all parts of the country is reported to be larger than ever before known. Fourteen thousand bushels of wheat has been threshed in the Guilucos valley, principally the crops of Messrs. Hood, Hutchinson, Reed, Jennella and James Shaw. The north wind on Tuesday night did some damage to the grapes in Sonoma valley, in exposed situations. In some instances the bunches were blown from the vines.

VENTURA.

Farming Items.—*Signal*, Sept. 5: Fred Wyman's Pitts thresher, during the 42 days out, threshed 29,000 sacks of grain. Mr. J. A. Day, one day this week, brought in from his ranch a plant which is worthy the name of tree, it is so large. It must be a bean, because we certainly counted—well, we got out of patience before we got through, but there was something less than a ton on the one stalk. J. Harrington, of Santa Paula, exhibits a stock of corn twenty feet high, upon which there are four ears.

SUTTER.

Cotton.—*Banner*, Sept. 5: J. M. Thomas has 24 stalks of cotton growing in his garden in this place, which he planted May 17th from seed sent to him from Louisiana. The stalks are over four and a half feet high, in full bloom, and promising a splendid yield. Mr. Thomas furnished a few farmers on the slough with seed, and we hope to hear from them how they succeed.

Occasionally we meet with a farmer showing considerable uneasiness about the future price of wheat. Some anticipate a glut in the fall market, but the rains of November will most likely affect the price on way or other. Should a drouth be in prospect wheat will look up.

YOLO.

Cotton.—*Democrat*, Sept. 4: We have seen a boll of cotton raised by Mr. Nason, four miles north of this place. It looks healthy, and is over an inch in diameter the smallest way. Mr. Nason has an acre growing as an experiment, and feels confident it will yield 250 pounds. We trust the experiment will prove a success, as it now certainly bids fair to do. Yolo's lands cannot be surpassed in the State for richness, and we believe it is only a question of time when cotton will be one of her main staples.

A Pile of Wheat.—*Mail*, Sept. 3: The warehouses at Woodland are about all full. The amount of wheat in store is not exactly known, but the most correct estimate by those who have had the handling of it is that there are at present about 10,000 tons in warehouses and on the track outside. This is about one-half of the wheat which will be registered in Woodland for the present crop. From present appearances, there will be in store in Yolo county alone, when the wheat is all hauled, 30,000 tons.

Oregon.

Farming Items.—*Oregonian*, Sept. 5: Cherley Rondeau, who lives about eight miles above Oakland, on the Calipooia, sowed four and a-half bushels of club wheat on two acres of ground, and threshed from the same 100 bushels of clean wheat.

The Baker City *Herald* of August 26th says: Harvesting is going on briskly all over the Powder river valley. Many of our farmers are cutting with the reaper instead of the header this year, in order to save the straw for feed.

The Albany *Register* says: The farmers talk of putting up a pool of 20,000 bushels of wheat as a market opener. Whether the pool will be offered to the highest bidder, or a price will be set at which it will be sold, we have not learned.

Crops in the Chehalis valley are very good—considerable above the average. The grains grown upon new ground have attained such a rank growth that they have fallen down, thus rendering the successful harvesting of them quite difficult.

The Lafayette *Courier* wants this beaten: Mr. J. K. Sampson, of this place, harvested a piece of wheat on the Millican farm, which he has rented, that yielded over forty-five bushels to the acre. We did not learn how many acres there was in the piece.

A gentleman just in from Washington county says a very large portion of the wheat crop is yet to thresh, and that comparatively the amount ready for market is small. In another week there will be much in the sack, as threshing is lively now, where the wheat is dry enough.

The Walla Walla *Statesman* of last Saturday says: The farmers are offering considerable wheat, but the dealers evince but little desire to purchase. We hear of a sale of 10,000 bushels at 35 and 40 cents, which we believe is the largest transaction this season. At these figures the purchaser furnishes the sacks.

The Dalles *Mountaineer* says: Wagon loads of wheat have commenced rolling into town.

Farm Laborers, Engineers, Teamsters, Blacksmiths, Millers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery street, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.
We guarantee satisfaction. ag22-tf

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington. D. C., Aug. 25th, 1874.

For Week Ending Aug. 11th, 1874.

Extra Seat for Cars, Carriages, Etc.—Chas. E. Baldwin, San José, Cal.

Hydraulic Jack. — Edward Biddle, Carlin, Nevada.

Car Coupling.—Harrison E. Smith, Portland, Oregon.

Gold Leaf for Dentists' Use —Chas. E. Blake, S. F., Cal.

Piano.—Christian Boerner, S. F., Cal.

Medical Compound or Bitters.—John Philip Edinger, Santa Clara, Cal.

Overalls.—Jacob Greenbaum, S. F., Cal.

Egg Carrier.—Joseph Perkins, S. F., Cal.

Traction Vehicle —Clinton V. B. Reeder, San José, Cal.

Balance Slide Valve.—Andrew J. Stevens, Sacramento, Cal.

The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISOO, Wednesday, Sept. 9th, 1874.

The Produce market, taken as a whole, is looking much better. In only a few lines of Produce are prices really high, and the movement in none is very brisk. but prospects are so much more favorable than all were led to expect that this alone is sufficient to cause satisfaction. The market during the week has been tolerably steady. In particular articles there have been some marked changes, as will be seen by our tables of quotations.

Receipts of State Produce at this port for the week were as follows: Flour, 6,820 barrels; Wheat, 218,112 centals; Barley, 32,300 centals; Oats, 6,920 centals; Corn, 790 centals; Rye, 2,118 centals; Beans, 665 sacks; Castor Beans, 86 sacks; Mustard Seed, 522 sacks; Flax Seed, 249 sacks; Potatoes, 16,404 sacks; Sweet Potatoes, 1,933 sacks; Onions, 1,480 sacks; Hides, 3,240; Wool, 1,860 bales; Hops, 315 bales; Hay, 1,328 tons; Straw, 146 tons; Wine, 40,336 gallons.

Barley—Is a shade lower than last week. The range in quotations is large, owing to the peculiar state of trade, as well as to difference in quality. A cargo of 10,000 sacks cleared for Australia the other day.

Beans—Market quiet, with low prices and small receipts.

Broom Corn—No change as yet.

Corn—Has declined no further.

Dairy Produce—The upward movement in Butter still holds. Prices are now very advantageous to the seller. Cheese is also more active, following up the improved tendency of last week. Eastern Butter and Cheese are in nominal request.

Eggs—Have shown a strange feature. Hens' Eggs have declined somewhat, while Ducks' Eggs have taken a sudden spurt and reached unusually high figures.

Feed—Is steady for all kinds.

Flour—A moderate export trade is going on, principally of Superfine for China, Central America, etc. Quotations show no advance yet.

Honey—Is depressed by the large stock accumulating.

Hops—The crop of 1874 is now being marketed rapidly. The yield is good. Most of the crop has already been taken up on contract, in which case producers will have the tantalizing experience of seeing the Hops advance in others' hands. The Hop crop will be a short one in Great Britain and on the Continent. The New York prospects are thus given by the Cooperstown *Journal:* The fine weather of last week has done much for the growing Hop crop, and the present indications are that it will, with occasional exceptions, prove to be an excellent one as to quality. Ten days more of good weather will ensure the result. As to the quantity, we do not estimate the yield, from all we have seen and heard, at over 400 lbs to the acre in the Hop districts of this State, nor is it likely to exceed that amount at the West. Picking will commence on the 31st in some yards; a week later it will be general. Growers, as a general thing, are not inclined to contract their Hops in advance of picking. They will wait for an established market. The Wisconsin crop promises to be full an average one, and there is but little complaint as yet of damage from insects or blight.

Oats—Dull.

Onions—Remain at same figures.

Potatoes—The first of the Pigeon Point Potatoes have been received, as noted elsewhere in this issue. Prices are low, under heavy receipts. Sweet are coming forward in large quantities.

Poultry—Turkeys are 2c. ₱ lb. higher. Chickens have declined considerably. Geese have advanced.

Seeds—Market unchanged.

Wheat—Is firmer in tone if not higher in price. Business is more lively. The advance of 2d in Liverpool has strengthened the local market, which certainly needed a little bracing. The San Jose *Mercury* says it is the impression among grain dealers that the farmers will be compelled to sell before long whether they wish to or not. They base this opinion on the fact that there is not warehouse room enough in the State to accommodate a quarter of the crop, and that an early rain will ruin all the grain exposed to the weather.

Wool—Market quiet. Receipts larger.

LEATHER.

WEDNESDAY M., Sept. 9, 1874.

Leather is now in tolerably brisk demand, for local makes as well as imported. We have no further changes in quotations.

City Tanned Leather, ₱ lb	25@29
Santa Cruz Leather, ₱ lb	25@29
Country Leather, ₱ lb	24@28
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@54 00
Jodot, 11 to 19 Kil., per doz	66 00@90 00
Jodot, second choice, 11 to 18 Kil. ₱ doz	55 00@72 00
Cornellian, 12 to 16 Ko	57 00@67 00
Cornellian Females, 12 to 13	60 00@64 00
Cornellian Females, 14 to 16 Kil	66 00@74 00
Beaumorvilla, 15 Kil	60 00@— —
Simon, 18 Kil., ₱ doz	61 00@63 00
Simon, 20 Kil. ₱ doz	65 00@67 00
Simon, 24 Kil. ₱ doz	72 00@74 00
Robert Calf, 7 and 9 Kil	35 00@40 00
French Kips, ₱ doz	1 00@1 15
California Kip, ₱ doz	40 00@47 50
French Sheep, all colors, ₱ doz	8 00@15 00
Eastern Calf for Backs, ₱ lb	1 00@1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@13 00
Sheep Roans for Linings, ₱ doz	5 50@10 50
California Russett Sheep Linings	1 75@4 50
Best Jodot Calf Boot Lega, ₱ pair	5 00@5 25
Good French Calf Boot Legs, ₱ pair	4 00@4 75
French Calf Boot Lega, ₱ pair	4 00@— —
Harness Leather, ₱ lb	30@37½
Fair Bridle Leather, ₱ doz	48 00@72 00
Skirting Leather, ₱ lb	34@37½
Welt Leather, ₱ doz	30 00@50 00
Buff Leather, ₱ foot	18@21
Wax Side Leather, ₱ foot	17@19
Eastern Wax Leather	—@— —

DOMESTIC PRODUCE.

WEDNESDAY M., Sept. 9, 1874.

BEANS.

Beans, sm'l wh. ₱ lb	3½@3½
do. butter	—@2
do, large, do	—@—
do, bayo	2@2¼
do, pink	1½@2
do, pea	3@3¼

BROOM CORN.

Per ton $100 @175

COTTON.

Cal. 1873, ₱ lb —@20

DAIRY PRODUCE

Butter, Cal. choice ₱ lb 37½@40
do, good 35@37½
do, inferior 30@35
do, firkin 30@33
do, pickled 30@35
Cheese, Cal new 10@15
do, Eastern 12½@15

EGGS.

Eggs, Cal. fresh 37½@40
do, Oregon 30@35
do, Eastern 25@30
do, Ducks' 40@42½

FEED.

Bran, per ton 17 00@18 00
Middlings 27 50@30 00
Hay 10 00@14 50
Straw, ₱ bale —55 @— 60
Oil cake meal —@32 50
Corn Meal 40 00@42 00

FLOUR.

Extra 4 50@5 25
Superfine 4 00@4 50

FRESH MEAT.

Beef, fr quality, ₱ lb 8@8½
do, second do 6@7
do, third do 4½@5
Veal 4½@6
Mutton 4½@5
Lamb 5½@6
Pork, undressed 6½@6½
do, dressed 9@9¼

GRAIN, ETC.

Wheat, coast 1 35@1 45
do shipping 1 45@1 55
do milling 1 55@1 60
Barley, coast 95@1 05
do light 1 05@1 20
Oats, choice 1 45@1 60
do common 1 40@1 45
Corn, White —@1 80
do, Yellow —@1 85
Buckwheat 2 75@3 00
Rye 1 05@1 10

HOPS.

California, 1874 22½@27½
East'n, '73 choice 30@40

MISCELLANEOUS.

Beeswax, per lb 25@27½
Honey in comb 20@25
do Strained 7½@10
Pulu 9@10½
Onions 60@1 00

NUTS—JOBBING.

Cal. Walnuts 14@15
Peanuts per lb 8@9
Chile Walnuts 10@11
Pecan nuts 13@15
Brazil do 14@16
Alm'ds h'd sbell 10@12½
do, soft 20@25
Filberts 18@—

POTATOES.

Sweet, per cwt 1 50@1 62½
Cuffee Dove 90@1 00
H. M. Bav 90@1 05
Pigeon Pt 90@1 05
Humboldt —@—
Petaluma —@—
Mission 80@95
Salinas 50@70
Bodega —@—
St Barbara 50@60
Sac. River —@—

POULTRY & GAME.

Live Turkeys, hens per lb 22@24
do gobblers 20@22
Hens, per dz 5 00@6 50
Roosters, young, large 4 50@6 00
Broilers, small 2 00@3 00
do large 3 00@4 00
Ducks, tame, doz 5 50@7 50
Geese, per pair 2 25@2 75
Hare, per doz 2 50@3 50
Snipe, Eng., doz —@—
Quail, per doz —@—
Mallard Ducks —@—
do small —@—
Wild Geese, gray —@—
do white —@—
Doves, per dozen 1 00@1 25
Prairie Chickens —@—
Grouse —@—
Rabbits, per doz 1 25@1 50
do tame 5 00@6 00
Venison, per lb 6@10

PROVISIONS.

Cal. Bacon, Light 14@15
do Medium —@13
do Heavy —@12½
Eastern do 13½@14
Hams, Cal 15@15½
do Whittakers —@17
do Duffield, cb —@16
do Plankton & Arm ur —@15
do Boyd's —@15½
do Stewart's —@15½
Eastern Smould's 9@10
do new hams —@—
Cal. Smoked Beef 10@11
Lard 13@14

SEEDS.

Alfalfa 12@13
Canary 4@4½
Flaxseed 3@4
Ky. Blue Grass 40@50
Millet 12@15
Mustard, white 1½@2
do. Brown 2@3
Italian Rye 25@30
Perennial do 30@35
Timothy 8@10
Sweet V Grass 60@75
Orchard do 30@35
Red Top do 30@40
Hungarian do 10@13
Lawn do 50@60
Clover Red —@20
do White 60@75
Alsike —@—
Esparto Grass in Packets —@1 00

WOOL, ETC.

Spring, short, lb 22½@25
do choice Nort 25@31½
Medium grades 18@22
Fall clip 18@20
Burry 14@18
Hides, dry 19@20
do wet salted 6½@9½
Tallow, Crude 5@7
do Refined 7@7½

FRUITS AND VEGETABLES.

WEDNESDAY M., Sept. 9, 1874.

Some Bananas have lately been received, and are held at $3@4 ₱ bunch. Cocoanuts are in better supply and $2 ₱ 100 lower. The price of Pineapples has been reduced to $4@5 ₱ dozen. Very choice Peaches from the northern counties are quoted as high as 8c ₱ lb. Watermelons are sold at a slight advance.

In Dried Fruit we note a decline of 2c ₱ lb in Peaches and Pitted Plums.

Vegetables are rated at about the same figure as last week. Asparagus is slightly cheaper. Garlic and Green Okra are also lower.

FRUIT MARKET.

Tsbati, Or. ₱ M	30 00@35 00
Lorita, do	—@— —
Cal. do	—@— —
Limes, ₱ M	7 00@10 00
Cal. Lemons, ₱ M	—@— —
Australian do	40 00@45 00
do per box	4 50@5 00
do Sicily ₱ b'x	—@— —
Bananas, ₱ bnch	3 00@4 00
Cocoanuts, ₱ 100	6 00@8 00
Pineapples, ₱ dz	4 00@5 00
Apples, ₱ box	40@1 00
Cherries	—@—
Blackberries	3@4
do wild	—@—
Huckleberries	—@18
Strawberries ₱ lb	—@12½
Gooseberries	—@—
Raspberries	—@—
Currants	—@—
do black	—@—
Apricots	—@—
Plums	1@5
Peaches, bskt	50@1 00
do, ₱ box	1 00@1 50
Figs	5@10
Grapes, Bl'k H'g	2@4
do Muscat	4@6
do Malavo'e	4@5
do Sweetw'r	1½@2½
do Mission	1@2
do Rose of Peru	4@5
do Tokay	4@5
do Morocco	—@—
do St. Peter	—@—

DRIED FRUIT.

Apples, ₱ lb	6@7½
Pears, ₱ lb	10@12½
Peaches, ₱ lb	3@9
Apricots, ₱ lb	10@12½
Plums, ₱ lb	8@10
Pitted, do ₱ lb	14@16
do Extra, ₱ lb	—@—
Raisins, ₱ lb	5½@12½
Black Figs, ₱ lb	8@10
White, do	10@15
Prunes	6@8
do German	16@20
Citron	30@35
Zante Currants	8¼@8½
Dates	12½@14

VEGETABLES.

Asparagus	4@5
Beets	—@1
Cabbage, ₱ 100 lbs	—@2 00
do new, doz	.50@60
Carrots, ₱ 100 lbs	1 00@1 25
Cauliflower, doz	.50@80
Celery, doz	.50@65
Garlic, ₱ lb	5@6
Green Peas	3½@4
Green Corn ₱ doz	.15@18
Sum'rSquash, lb	4@5
Marro'fat Sq'sh, tn	60 00@—
Articbokes, ₱ doz	15@25
String Beans, ₱ lb	—@5
Lima Beans	4@5
Parsnips	12½@15
Sbell Beans	3½@7
Peppers, ₱ lb	12½@20
Okra ₱ lb	25@40
Okra, Green	5@6
Cucumbers, doz	6@8
Tomatoes	3@5
Egg Plant ₱ lb	6@8
Rhubarb	—@—
Lettuce	10@15

METALS.

WEDNESDAY M., Sept. 9, 1874.

There is nothing new in the Metal market. Pig Iron is weak, with Oregon selling at $44@45 ₱ ton, as against $45@47.50 for Scotch. Quicksilver is steady at $1,45 ₱ lb.

American Pig Iron, ₱ ton	— —@42 00
Scotch Pig Iron, ₱ ton	45 00@47 50
White Pig, ₱ ton	— —@42 00
Oregon Pig, ₱ ton	— —@45 00
Refined Bar, bad assortment, ₱ lb	— —@— 3½
Refined Bar, good assortment, ₱ lb	— —@— 4
Boiler, No. 1 to 4	— —@— 5¼
Plate, No. 5 to 9	— —@— 5½
Sheet, No. 10 to 13	— —@— 5¾
Sheet, No. 14 to 20	— —@— 5¾
Sheet, No. 24 to 27	— 08@— 09
Horse Shoes, per keg	7 50@8 00
Nail Rod	— 9½@— —
Norway Iron	— 8@— —
Rolled Iron	— 6@— —
Other Irons for Blacksmiths, Miners, etc.	— —@— 4½
COPPER.—	
Brazier's	— 31@— 32
Copper Tin'd	— 45@— —
O. Niel's Pat	— 50@— —
Sheathing, ₱ lb	— —@— 24
Sheathing, Yellow	— —@— 25
Sheathing, Old Yellow	— —@— 12½
Composition Nails	— 24@— —
Composition Bolts	— 24@— —
TIN PLATES.—	
Plates, Charcoal, IX ₱ box	13 00@14 50
Plates, I C Charcoal	12 75@14 50
Roofing Plates	11 50@14 00
Banca Tin, Slabs, ₱ lb	— 31@— 33
STEEL.—English Cast, ₱ lb	— 20@— 25
Anderson & Wooda' American Cast	— 10@— 17
Drill	— 18@— 22
Flat Bar	— 18@— 22
Plough Points	— 16@— 17
ZINC	— —@— 11
Zinc, Sheet	— —@— 11½
NAILS—Assorted sizes	— 5¾@— 8
QUICKSILVER, per lb	— —@1 45

GENERAL MERCHANDISE.

WEDNESDAY M., Sept. 9, 1874.

Bags have steadily declined for some time past. Prices are now much lower than a few weeks ago. The demand this season has been great, but strenuous efforts have been put forth to meet it, and now the market is weak even at present rates. Wheat Bags would be more in request were the tendency to ship Grain greater. Coffees are still slow of sale. Oils are weak. Tobacco is buoyant, at the advance.

BAGS.

Eng. Stand Wht	—12¼@12½
Detrick's Machine Sewed, 22x36 E	—@13
do 22x36, do E W	—@13¾
do 20x40, do A	—@14
Flour Sacks ½s	9½@11½
" " ¼s	8—@7
Stand. Gunnies	
double seam	15@—
single seam	13¾@14
" Wool Sacks	65@—
Barley Bags 24x36	—@14
do 22x40	@11½
do 24x40	@15
do 24x36	@16
Oat Bags, 24x40	16@16½
do 28x36	—@17
Hessian 40-in. gds	9½@10
do 45	10½@11
do 60	—@15

CANNED GOODS.

Assd'dPie Fruits in 2½ ₱ cans	2 75@3 00
do Table do	—@2 75
Jams & Jellies	3 75@4 25
Pickles ½ gl	—@3 50
Sardines, qr box	80@— —
do hf boxes	3 20@— —

COAL—Jobbing.

Australian, ₱ ton	10 00@— —
Coos Bay	— —@10 00
Bellingham Bay	— —@8 50
Seattle	— —@11—
Cumberl'd, cks	.22 00@23 00
do bulk	.18 00@20 00
Mt. Diablo	6 25@8 50
Lehigh	—@19 00
Liverpool	11 00@12—
West Hartley	.12 50@— —
Scotch	9 50@10 00
Scranton	.15 00@17 50
Vancouver's Isl	11 00@11 50
Charcoal, ₱ sk	75@—
Coke, ₱ bbl	—@60

COFFEE.

Sandwich Island	—@22
Central America'n	20@21
Costa Rica per lb	21@22
Guatemala	19@20½
Java	—@28
Manilla	20@2½
Grond in cs	—@30
Chicory	10@—

FISH.

Pac. Dry Cod, new	5@6
cases	6@—
do boneless	11@12
Eastern Cod	7@8
Salmon in bbls	9 00@9 25
do ½ bbls	4 50@4 75
do 2½ ₱ cans	—@3 00
do 2 ₱ cans	2 65@2 75
do 1 ₱ cans	1 75@—
Do Col. R. ½ b	—@—
Pick. Cod, bbls	22 00@—
do ½ bbls	11 00@—
Bos. Sm'k'd Her'g	40@50
Mack'l. No. 1, ½ bbls	8 00@8 50
" Extra	—@9 00
" in kits	2 00@2 50
" Ex mess	3 00@3 50
" Ex mess, ½ bs	—@12 00
Sm'k Her'g, bx	50@60

NAILS.

Assorted size, lb	5 00@7 25

OILS.

Pacific Glue Co. Neat F't No. 1	—@1 00
Pure	1 25@—
Castor Oil, No. 1	—@1 75
do do No. 2	—@1 60
Cocoanut	45@50
Olive Plagniol	5 00@—
do Possel	4 75@—
Palm	9@—
do Bagicalupi	—@—
Linseed, raw	—@1 02
do boiled	—@1 07
Cbina nut in cs	—@95
do bulk	75@80
Sperm, crude	—@1 40
do bleached	—@2 20
Coast Whales	35@40
Polar, refined	50@55
Sperm	1 40@1 50
Lard	1 00@1 10
Coal, refined Pet	37½@40
Oleophine	—@34
Devoe's Bril't	25@28
Long Island	—@34
Eureks	37½@40
Devoe's Petro'm	26@29
Barrel kerosene	20@25
Olive	4 00@9 50
Downer Kerose'e	35@40
Gas Light Oil	—@34

PAINTS.

Atlan. W. Lead	7½@12½
Whiting	—@2
Putty	4@4½
Chalk	—@2½
Paris White	2¾@—
Ochre	4@5
Venetian Red	3½@5
Red Lead	7@11
Litharge	10@11
Eng. Vermillion	2 00@2 10

RICE.

China No. 1, ₱ lb	6½@6¾
do 2, do	5½@5¾
Japan	5½@6
Siam Cleaned	7@—
Patna	7@6¾
Hawaiian	7@7¾
Carolina	10@10½

SALT.

Cal. Bay, per ton	10 00@14 00
do Common	5 00@7 00
Carmen Island	11 00@13 00
Liverpool fine	20 00@23 00
do coarse	15 00@20 00

SOAP.

Castile ₱ lb	10@11
Local brands	5@8

SPICES.

Allspice, per lb	15@16
Cloves	47½@—
Cassia	22½@25
Citron	—@30
Nutmeg	1 20@1 25
Whole Pepper	20@22
Pimento	—@15½
Gr'nd Allsp'ce	—@1 00
do Cassia	—@1 50
do Cloves	—@1 50
do Mustard	—@1 25
do Ginger	—@1 00
do Pepper	—@1 00
do Mace	—@2 00

SUGAR, ETC.

Cal. Cube per lb	11½@—
Parlz' Pro. Cube bbl or 100 lb bxs	—@11¾
do in 50 lb bxs	—@12
do in 25 lb bxs	—@12¼
Circle A crushed	—@11½
Powdered	—@11¾
Granulated	—@11
Dry granulated	—@11½
Hawaiian	—@10½
California Beet	—@11½
Golden C	—@10½
do Re'g'n grade	—@6½
Cal. Syrup in bls	—@5½
do in ½ bls	—@55
do in kegs	—@60
Hawaiian Molasses	25@27½

TEA.

Oolong, Canton, lb	19@25
do Amoy	28@50
do Formosa	40@80
Imperial, Canton	25@40
do Pingsuey	45@80
do Moyune	60@1 00
Gunpo'der, Cant	30@42½
do Pingsuey	50@90
do Moyune	65@1 25
Y'ng Hy., Canton	28@40
do Pingsuey	40@70
do Moyune	65@85
Japan, ½ chests, bulk	30@75
Japan, lacquered bxs, 4½ and 5 lbs	45@67
Japan do, 3 lb bxs	45@90
do pl'n bx, 4½ lb	35@65
do ½ & 1 ₱ paper	30@55

TOBACCO—Jobbing.

Bright Navys	50@60
Dark do	45@55
Dwa f Twist	57@62½
12 inch do	57@62½
Light Pressed	65@75
Hard do	60@70
Conn. Wrap'r	40@50
Penn. Wrapper	20@30
Ohio do	7@15
Virgi'a Smok'g	60@95
Fine ct cbe'g, kr	8 50@9 25
Fine cut chewing, buc'ts, ₱ lb	.75@90
Banner fine cut	—@9 00
Enreks Cala	8 75@9 00

TURPENTINE.

Eastern	60@65

LUMBER.

WEDNESDAY M., Sept. 9, 1874.

The Lumber trade is fairly active, with light receipts the past few days.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	28 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref, M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

PUGET SOUND PINE —Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal foot	1c
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾

REDWOOD—Retail.

Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	38 00
Siding, ₱ M	25 00
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

RETAIL GROCERIES, ETC.

WEDNESDAY M., Sept. 9, 1874.

Butter and Cheese are higher, following the course of the wholesale market. Other Groceries, etc., are quiet.

Butter, Cal. ch'ice	40@45
do common	25@40
Cheese, Cal., ₱ lb	12½@17½
Lard. Cal., ₱ lb	12½@15
Flour, ex. fam, bl	5 00@5 50
Corn Meal, ₱ lb	2½@3½
Sugar, wh. crsh'd	—@12
do 4x brown, ₱ lb	7@9
Coffee, Sbarboro's family gr'nd, ₱ lb	32½@—
Coffee, green, ₱ lb	24@32½
Tea, fine blk,	50, 65, 75 @1 00
Tea, finest Jap,	55, 75, 90 @1 00
Candles, Admaut'e	17@25
Soap, Cal., ₱ lb	@10
Can'd Oysters, dz	2 0@2 50
Syrup, S F. Gol'n	35@40
Dried Apples	8@10
Dr'd Ger. Prunes	15@17
Dr'd Figs, Cal	9@10
Dr'd Peaches	10@—
Oils, Kerosene	30@35
Wines, Old Port	3 50@5 00
do Fr. Claret	1 00@1 25
do Cal., bz. bot	3 00@4 50
Whisky, O.B., gal	3 50@5 00
Fr. Brandy	4 00@10 00
Rice, lb	10@12¾
Yaast Powders, dz	1 50@2 00

AGENTS WANTED to canvass every town on the Pacific Coast for the MINING AND SCIENTIFIC PRESS, PACIFIC RURAL PRESS, and the ILLUSTRATED PRESS. Experienced canvassers preferred. Good men can make large wages besides learning much and improving their talents

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Sept. 9, 1874.

POULTRY, GAME, FISH, MEATS, ETC.

Poultry is in good supply at unchanged rates. It is noticeable that the retail market only sympathizes with the wholesale in the event of the latter going up. Ducks' Eggs are held at 45@50c, and are taken freely by bakers and others. Meat and Fish remain as before quoted. There is not much Venison in the market.

Spring Chickens	50@75
Hens	75@1 00
Eggs	—@45
do Ducks'	45@50
do Farallones	30@35
Turkeys, ₱ lb	25@30
Ducks, Can Bk, pr	—@—
do Mallard, pr	—@—
Tame, do	1 50@2 00
Teal, ₱ doz	—@—
Geese, wild, pair	—@—
Tame, ₱ pair	3 00@4 00
Snipe, ₱ doz	—@—
Quail, per dozen	—@—
Prairie Ch'k's, ea	—@—
Pigeons, dom. dz	—@1 00
Wild, do	—@2 00
Squabs	—@4 50
Hares, each	37½@50
Rabbits, tame, pr	75@1 00
Wild, do, ₱ dz	2 00@—
Squirrels do	15@20
Beef, tend, ₱ lb	—@20
Corned, ₱ lb	8@10
Smoked, ₱ lb	—@15
Porter House St'k	—@20
Sirloin do	12@15
Round do	8@10
Pork, rib, etc., lb	—@15
Chops, do, ₱ lb	15@—
Veal, ₱ lb	10@15
Cutlet, do	12½@15
Mutton-chops, lb	12@15
Leg Mutton, ₱ lb	10@12
Lamb, ₱ lb	10@15
Venison	10@15
Tongues, beef	75@—
do, do, smoked	—@1 00
Tongues, pig, lb	10@—
Bacon, Cal., ₱ lb	—@18
Hams, Cal, ₱ lb	17@—
Hams, Cross' & o	—@—
Choice D'field	18@—
Whittaker's	18@20

FRUITS, VEGETABLES, ETC.

The retail stands show a most inviting array of fine Fruits and Vegetables. Our list, to be sure, begins to show a number of blank spaces, but such things as are fully in season are for the most part of excellent appearance and quality and in good supply. The Grapes are especially noteworthy. Crab Apples and Nectarines are out of market; Bananas are again on hand.

Lady Apples ₱ lb	—@—
Apples, per lb	5@8
Pears, per lb	3@8
Apricots, lb	—@—
Peaches, lb	5@12½
Plums	8@20
Pine Apples, each	75@1 00
Crab Apples	—@—
Grapes	3@12½
Bananas, ₱ doz	75@1 00
Muskmelons	10@20
Watermelons	10@20
Blackberries	7@10
do wild	—@—
Cal. Walnuts, ₱ lb	20@25
Green Almonds	15@20
Cranber'es, Or.	50@75
do Eastern	—@1 00
Huckleberries	—@30
Strawberries, lb	15@20
Chili Straw'berries	40@50
Raspberries	12½@15
Gooseberries	—@—
Currants	—@—
do Black	—@—
Cherries, ₱ lb	—@—
Nectarines	—@—
Oranges, ₱ doz	50@75
Quinces	—@—
Lemons	50@75
Limes, per doz	25@—
Palm	—@—
Pomegranates, doz	—@—
Figs, dried Cal	12½@25
Figs, fresh	12½@15
Figs, Smyrna, lb	25@35
Asparagus, ₱ lb	10@12½
Artichokes, doz	25@35
do Jerusalem	6@8
Beets, ₱ doz	20@—
Potatoes, ₱ lb	2@3
Potatoes, sweet	4@6
Broccoli, each	10@15
Cauliflower	10@15
Cabbage, per lb	3@—
Oyster Plant, bch	—@—
Carrots, ₱ doz	20@—
Celery, ₱ dz	75@—
Cucumbers, doz	8@12½
Tomatoes, ₱ lb	5@6
Green Peas	5@6
String Beans	4@10
Egg Plant, lb	8@10
Cress, ₱ doz bun	20@—
Onions	3@—
Turnips, ₱ doz bunches	20@25
Brussels Sprouts	—@—
Escbalots	20@25
Dried Herbs, doz	25@35
Garlic ₱ lb	8@10
Horse radish, ₱ lb	—@35
Okra, dried, ₱ lb	—@50
do fresh, ₱ lb	10@15
Pumpkins, ₱ lb	6@8
Parsnips, doz	15@20
Parsley	15@20
Pickles, frsh, ₱ lb	4@5
Radishes, doz	20@—
Sage	25@35
Summer Squash	6@8
Marrowfat, do	6@8
Hubbard, do	6@8
Lima Beans, fr'sh	6@8
do fresh shelled	10@15
do dry shelled	—@12½
Butter Beans	5@6
Spinage, ₱ bskt	25@50
Rhubarb	—@—
Green Cbilies	15@20
Dry do	25@35
Italian Chestnuts	—@—

The Pacific Rural Press

Is a Large and Handsomely Illustrated Agricultural Home Journal; Original, Instructive and Attractive; its varied contents, ably written and condensed, render it popular with its readers. We endeavor to make it a credit to the field it occupies, and to every intelligent circle it enters. ENTIRELY FREE FROM POLITICS, its columns are filled with cheerful words of encouragement for our Pacific Industries and instruction for the people. It extends information of the growing wants and necessities of our rapidly increasing and progressing agriculture. You can read it with pleasure, for present and future profit; you can send it with satisfaction to your friends anywhere. Its editorials are earnest and its contents reliable. No questionable advertisements darken its pages. It is a journal for rural homes throughout the Coast. It is a handsome home print, without a rival on this half of the Continent. Subscription, in advance, $4 a year.

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Subscribers for this journal can obtain our Patent Elastic Newspaper File Holdor and Binder for $1.50—containing gilt title of the paper on the cover. It preserves the papers completely and in such shape that they may be quickly fastened and retained in book form at the end of the volume, and the binder (which is very durable) used continuously for subsequent volumes Post paid, 25 cts. extra. It can be used for Harper's Weekly and other papers of similar size. If not entirely pleased, purchasers may return them within 30 days. Just the thing for libraries and reading rooms, and all who wish to file the PRESS. lambp

PURCHASERS please say advertised in Rural Press.

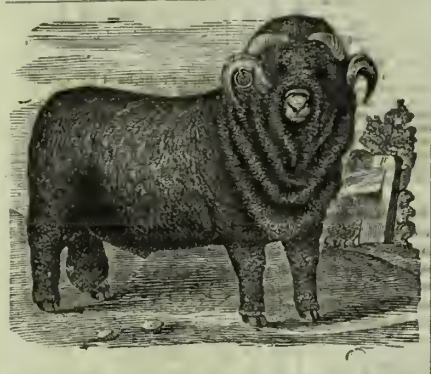
Stock Notices.



SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,
eow El Dorado, El Dorado County, Cal.



300 Head Pure Blooded French Merino Rams and Ewes.

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

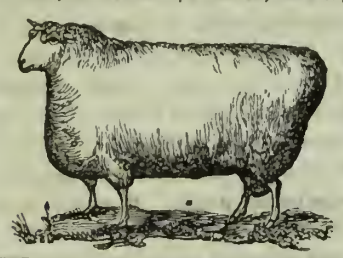
These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

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COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

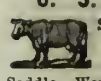
Office—405 Front street, S. F. 14v7-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



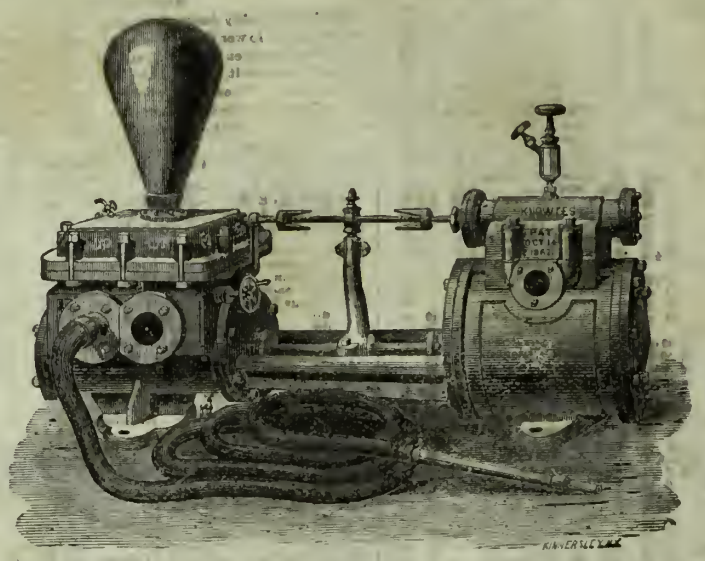
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KNOWLES' PATENT STEAM PUMP.



It has no Cranks or Fly-Wheel, and has no dead points where it will stop, consequently it is always ready to start without using a starting-bar, and does not require hand-work to get it past the center. Will always start when the steam cylinder is filled with cold water of condensation.

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Orders left with the latter firm will receive prompt attention.

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Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

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Angora Goats and Thoroughbred Cattle.

I will sell at public sale, without reserve, on Friday, September 25th, 1874, at 12 o'clock M., on the State Agricultural Society's Fair Grounds, THIRTY-THREE HEAD OF PURE BRED ANGORA GOATS. Also, one Jersey Bull, one Ayrshire Cow, one two-year-old and two one-year-old Ayrshire Bulls. Pedigrees guaranteed. Terms Cash. ROBT. BECK.

Sacramento, August 24th, 1874. 9v8-td

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GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, ETC.

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BROWN LEGHORN COCKS, $5 Each.

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Fowls of all varieties for sale in pairs, trios or singly. Adult fowls, $5 each. Young fowls, $3 and upwards. Write for further particulars to

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Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

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And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

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This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

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Declared by Connoisseurs to be the only good SAUCE.

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The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other limitations by which their right may be infringed.

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1255 Tons. A 1.

AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed hy the splendid iron ship

GLENGARRY,

1769 Tons,

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The New A 1 Clipper Ship

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Freight taken in lots to suit shippers.

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Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

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This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss hy fire, at actual cost of insurance, without being connected with city risks. a822-tf

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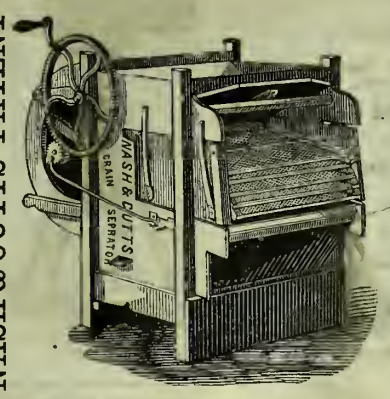
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GRAIN SEPARATOR AND FAN MILL.

THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mnstard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfaifa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a triai.

EVERY MACHINE FULLY WARRANTED.

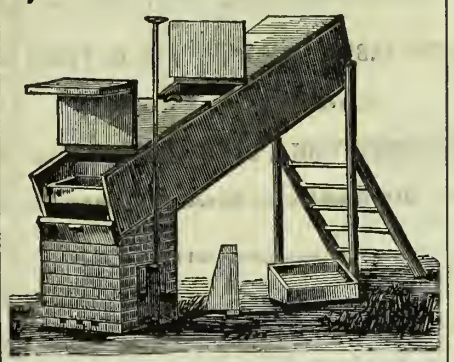
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For further particulars addr ess

NASH, MILLER & CO.,
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Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

Ryder's American Fruit Drier.



It is claimed no Drier can equal, and it is guaranteed no Drier can excel tho AMERICAN in the excellence of its work. We suit this Drier to the wants of Farm and Factory. We make one series, Nos. 1, 2 and 3; one line of trays, capacity, say of apples, 8, 12 and 20 hushels per day of 12 hours; prices, $100, $125, $150. Factory Series, Nos, 1, 2 and 3; capacity, 25, 40 and 60 hushels per day. Again we make a Douhie Factory over one Furnace with capacity over 100 hushels per day. Two of these Driers sbould turn off at least 1,200 pounds, or over half a ton per day. The prices given inciude the right and every item of expense to commence work, and are all constructed to he portable. Every variety of Fruits, Vegetahles, Cereals or Meats can he cured on this Drier for the home or foreign markets. The company have established depots in all the principal Eastern cities for the sale of Fruits, etc., prepared for the market on this Drier, and prices will from time to time he given to parties interested. This Drier took the first premium and silver medal at the Fair of the Maryland Institute, held at Baltimore in 1873. Send for Circulars, Farm, County and State Rights, and Driers complete with Heaters, sold hy

J. M. KEELER, General Agent,
306 California street, San Francisco

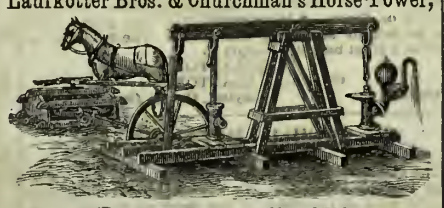
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfolly, yon must have the power tbat does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you bad all the wind you want. It is also snitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
v7-2m-3m Cor. J and 10th Sts., Sacramento.

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rate. Storage taken at lowest current rates. 4v8-tf

GRAPE PICKER.



Price, $1.00 each.

GATHERS GRAPES WITHOUT DROPPING OR BRUISING THEM, AND GREATLY ECONOMIZES TIME. ☞ Send for one.

LINFORTH, KELLOGG & CO.,
Hardware and Agricultural Implements.
Nos. 3 and 5 Front street, San Francisco. 8v8-1m

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liheral terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

NOTICE TO FARMERS.

Something Entirely New.

HOME SEWING MACHINE.

This machine is manufactured after an experience of twenty years. It contains within itself every known improvement. It is the best because the simplest, easiest to understand and by far the lightest to run, and the equitable adjustment of all its parts makes it the most durable Machine in the market. Take the INTERESTED STTEMENTAS OF NONE, but

EXAMINE for YOURSELF.

SEND FOR A CIRCULAR.

It uses a Shuttle, Straight Needle, Two Threads, and makes a stitch alike on both sides.

E. W. HAINES, Agent,
17 New Montgomery St., Grand Hotel Build'g, S. F.

We also continue to sell another machine, the

HOME SHUTTLE SEWING MACHINE.

Price, $45.

Mme. Demorest's Reliable Paper Cut Patterns. Send for a Catalogue. 15v7-eow-6m

Brittan, Holbrook & Co., Importers of

Stoves and Metals, Tinners' Goods, Tools and Machinss, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

Lands & Homes For Sale

RANCHOS

FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on hoth sidcs of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agricuiture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded hy Judge North, embraces a portion of the east end of this Rancho.

Also, for saie, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and contalning 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STREET,
ap25-tf N. E. Cor. Montgomery.

DAIRY RANCH FOR SALE,

Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Ohispo.
20v7-3m

GRAIN & STOCK FARM FOR SALE.

A FINE FARM OF 140 ACRES;

Good Grain Land; all plowed and ready for seeding and promising fine crops, and 360 acres of good tule land adjoining; excellent pasturage; situated in Suisun valley, within a mile and a half of landing at Suisun City and one mile of a railroad station. Has a good house, barn, corrals and fences; also work-horses and a full assortment of agricultural implements, seed feed, etc. Price moderate and terms easy. Apply to BERRY & CAPP, 418 Montgomery street, Real Estate Agents. 8v8-1m

THE NEW WINCHESTER

REPEATING RIFLE,

(Model of 1873.)

San Francisco Agency.



The Winchester Repeating Arms Company, of New Haven, Conn., have recently made still further valuable improvements on the celebrated Henry Rifle, which now make it, beyond doubt, the most magnificent weapon in the world. They have just introduced this beautiful arm upon the market, and their San Francisco Agency is fully supplied with all the various styles, together with cartridges for the same.

In the manufacture of the new gun, iron mountings (blued or case-hardened) have been substituted for gun metal or brass, thus increasing the strength of the arm and decreasing its weight. It is also now so constructed as to carry a Central Fire Cartridge holding one-third more powder than used in the cartridge of the model of 1866, thereby greatly augmenting the power and accuracy of the weapon.

THE SPORTING RIFLE

Has a Set or Hair Trigger which can be used at will—set or not set, as preferred. All the arms have a sliding lid which covers the opening in which the Carrier Block moves up and down. This lid, by the action of the Carrier Lever, is always open when the gun is fired, and closed by hand when the firing ceases, thus protecting the lock and inner works of the gun from dust and rain.

Various other improvements, which it is not necessary to mention in detail, by which the strength of the several parts is increased and the general appearance of the gun improved, have also been made.

There is now a greater variety of the Sporting Rifle than heretofore. They can be had with a length of barrel (round or octagonal) ranging from 24 to 30 inches, fitted with Globe and Peep Sights, or any other kind in use.

The Carbine is now made with all the improvements above referred to, except the set trigger.

The Sporting Rifle and Carbine will also be made as Extra Arms, Gold, Silver or Nickel Plated, plain or beautifully engraved.

MILITARY ARMS.

Still further improvements have been accomplished which overcome all objections heretofore raised against the Repeating Rifle as an army gun. It is safe, certain and effective in fire, whether used with deliberation or during excitement in action, and no more motions are required than in operating the old model gun.

More extended and minute particulars concerning the new gun can be had by writing or applying to the San Francisco Agency for circular.

CARTRIDGES.

The trade is notified that the Shells of the Central Fire Cartridge for the new gun can be reloaded, and that the Winchester Repeating Arms Company are manufacturers of every description of Cartridge used for Carbine, Rifle and Pistol of any make, and that the Company have a full stock constantly on hand at their San Francisco Agency

JOHN SKINKER,

Sole Agent for Pacific Coast,

NO. 108 BATTERY STREET, SAN FRANCISCO.

NOTE.--Also Agent for the Dupont Powder Company and Eagle Safety Fuse Manufacturing Company.
eow-bp

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA.

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to he the best method known for preserving Fruits, Vegetahles, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.
11v7-6m

EUREKA WAREHOUSE,

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY 1ST, 1874.—First month, 50 cents per ton; each month thereafter, 37½ cents per ton. At regular monthly rates not to exceed $2.75 per ton for the season. Season rates, $2.00 per ton. Second weighing, 10 cents per ton.

Grain received on dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to Messrs. E. E. MORGAN'S SONS, San Francisco.

4v8-4m A. J. GOVE, Manager.

FARMERS write for your paper.

THE PACIFIC RURAL PRESS has a larger Circulation than any other Pacific Coast Weekly, independent of a daily issue.

A Card to the Business Public of this City.

We beg to call attention to the following article, published in the *Commercial Herald* under date of September 3d, and also in the San Francisco Market Review of same date. The article speaks for itself, and we presume that it is quite unnecessary for us to denounce it as a false and malicious slander.

As regards the paper and the Review, we consider it beneath the dignity of our house to notice the fact that such a creature exists; but we believe that many merchants in this city are in the habit of having a certain number of these market reports forwarded to their friends with their names attached, which is virtually endorsing their contents. We fully understand that knowingly no honorable merchant would lend himself to such a transaction; and we now give due notice that unless these merchants, if any, who have forwarded the Market Review of the 3d of September, at once recall or disavow the articles referred to, by public notice, we shall commence suit against them for libel and slander. Respectfully,

E. E. MORGAN'S SONS.

The apathy and indifference shown by the farmers in seeking a place of safety for their surplus wheat or a market for the same is truly surprising, and can only be accounted for upon the supposition that the wants of the world the present season have been to them greatly magnified, and they have been made to believe a lie by designing men who seek to feather their own nests by misleading others not so well posted, and are thus dragging each other down to sure destruction. Our exports of flour during August embraced twenty cargoes and in July fifteen, when we ought to have dispatched sixty ships in all, instead of thirty-five. During the past two months we exported less than eleven million centals of wheat: and why this apathy this holding back of the staff of life—simply to try and force up the price of wheat to rates far beyond its actual value in the only market that is open to us, and at a time when crops in England and the European continent are fully up to an average, and by reason thereof prices in Liverpool steadily declining, as will be seen by reference to quotations herewith? There was a time in July when many thousand tons of wheat could have been contracted for by responsible parties at $1.50 per ctl. for delivery alongside ship all through the season, but that time seems now to have passed, and the market has relapsed into exceeding quietness, owing to the withdrawal of English orders, lessened limits for purchase and a general indifference to make shipments of either wheat or flour to the United Kingdom. It is well known to most of our readers that the average rate of freight paid on the ships loaded and dispatched the past sixty days has been fully up to £4. At this rate of freight and cost of wheat a serious loss stares the shipper in the face, with very little prospect of any permanent improvement in the English or French marts. Some of our wisest and prudent merchants have entirely withdrawn from the arena; others again seek to make their loss as light as possible by rechartering their ships at the best price they can get, and have thus broken the freight market and forced rates below £3 to the United Kingdom. This brings to view a question of some moment to our Granger friends, who are bent upon making shipments to England upon their own account rather than sell their wheat for spot price. The point is this: Ships are chartered at £4 5s, and vessel must be loaded in accordance with the terms of the charter party. Outsiders step forward and offer to freight their wheat to Liverpool at £3—a reduction, perhaps, of £1 5s per ton upon the ship rate of the Grangers' agent. Well, what does he do? To protect himself and give dispatch to the vessel and save demurrage, he agrees to ship the farmer's wheat as cheaply as any one else will, and make cash advances as liberally as they—say one cent per pound on the wheat, the usual customary advance—the commissions in both cases the same. The wheat, of course, is good for the freight money of £4 5s, or whatever rate the charter party calls for. The Granger takes a receipt or guarantee from his agent that the wheat is forwarded to Liverpool at £3.

Now for the sequel. The ship arrives out and cargo is sold; the freight paid for according to the bill of lading, and as called for in the charter party. The ship owner gets his pay for carriage; the account sales is rendered, freight charges deducted, and the Granger thus finds himself largely in debt to the Liverpool house or the San Francisco agent. The farmer takes his account sales and account current to the Grangers' agent, and says: "How is this? Did I not agree with you to ship my grain at £3?" "Oh, yes," is the reply. "Well, but I am charged freight at £4 5s (a sum far greater than was agreed upon), and instead of there being a balance due me, I am shown to be in debt." "True," says the Granger agent; "I will make that difference all right with you by giving you my due bill note of hand for the difference, and next year, or at some future time, I hope to make the account all square with you." This we think a supposable case, justified by the circumstances existing at this time, and shows the way the business is shaping and that as a result we find a shifting of the scene of disaster from a California failure on a huge scale to six months' extension, and then a final crash, which must fall upon those least able to bear it. It is only a question of time. The business of shipping grain abroad successfully requires honor, honesty, capital, a good name, and credit among one's fellows; and without all these, business cannot be done successfully here no more than elsewhere. sep12-1t

CAMPO, SAN DIEGO CO., CAL., July 3d, 1874.

MESSRS. DEWEY & Co.—*Gentlemen:* To-day I received the patent and other papers of my animal trap, that you so successfully worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long. I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into your hands.

I remain yours truly, A. M. GASS.

THE PACIFIC RURAL PRESS, a sixteen-page agricultural paper published in San Francisco, is alive to all interests pertaining to stock and agriculture.—*Appanoose Times, Centerville, Iowa.*

A LADY writes us that she keeps her "Blanchard Churn" in the parlor, because it is so handsome. It is as good as it is handsome. It is made only by Porter Blanchard's Sons, Concord, N. H.

FOR STATE OF NEVADA.—We have appointed Mr. F. B. Alderson our special agent and correspondent for the State of Nevada. He will visit our friends and patrons there soon.

More than double the number of Farmers and their families read the PACIFIC RURAL PRESS than any other journal on this Coast.

Patent, First Premium Windmills & Horse Powers,

W. I. TUSTIN, Patentee.

Pioneer and Largest Manufacturer of Machinery (in this line) on the Pacific Coast.

FACTORY, Corner Market and Beale Streets,
SAN FRANCISCO.

☞ Send for Circular and Price List. ☜



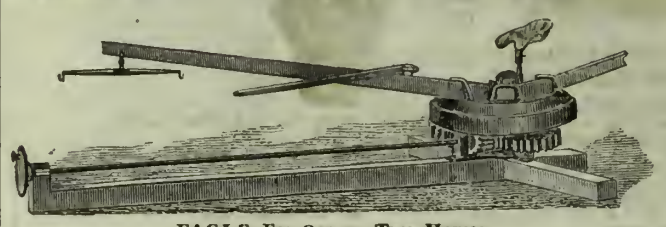
ECONOMY.



ECONOMY—For One or Two Horses.



EUREKA.



EAGLE—For One or Two Horses.

We have made the manufacture of Pumping Machinery a specialty for the past twenty-four years in California. Received all the First Premiums awarded by the Mechanics' Institute for the past seven years, in our line.

Our Windmills are preferred by the great Railroad Companies of this cast, and are in general use along their line, giving perfect satisfaction, which can be proved by reference.

9v7- am

Industrial Fairs for 1874.

CALIFORNIA.

The Annual Fair of the State Agricultural Society for 1874 will be held at Sacramento, to commence on September 21st and closing September 26th. R. S. Cary, President, Robert Beck, Secretary.

The Ninth Industrial Exhibition of the Mechanics' Institute, San Francisco, opening August 18th, continues thirty days. Persons desiring to exhibit will present their applications for space at as early a day as possible, addressing their applications or inquiries to the Secretary of the Board of Managers, Mechanics' Institute, No. 27 Post street, San Francisco, California. In order to secure space applications must be in before the 20th day of July, 1874.

The Fifteenth Annual Fair of the Santa Clara Valley Agricultural Society will be held at San Jose October 5th, 6th, 7th, 8th, 9th and 10th. William C. Nelson, President, D. J. Porter, Secretary.

The San Joaquin Valley Agricultural Society's Fair, at Stockton, commences September 29th, and will continue four days. H. T. Compton, Sec'y.

The Napa & Solano Agricultural and Mechanical Arts Society's annual fair commences on September 8th, and continues four days. J. B. Hoyt, President; J. E. Williston, Secretary; J. B. Frisbie, Treasurer.

The First Annual Fair of the Bay District Fair Ground Association will be held at San Francisco, Cal., commencing on September 7th, and ending on September 12th.

The fourth annual fair of the Southern District Agricultural Society will commence at Los Angeles on Monday, October 26th, and continue six days.

The Northern District Fair will open at Marysville, September 14th, and continue one week.

The Eighth Annual Fair of the Sonoma and Marin District Agricultural Society will commence at Petaluma on the 14th of September, and end on the 19th of September

Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

L. P. MCCARTY—General Agent.
W. H. RATTENBERRY—California.
CHAS. W. OTIS—Contra Costa County.
CHAS. T. BELL—Alameda, Santa Clara and Santa Cruz Counties.
J. W. ANDERSON—Orange and Santa Ana, in Los Angeles County, Cal.
HOOD ALSTON—San Luis Obispo, San Bernardino and San Diego Counties.
JAS. KEARNEY—Amador, Calaveras, Tuolumne and Mariposa Counties.
B. GOODWIN—Sacramento County.
S. G. CRAWFORD—Nevada, Sierra and Plumas Counties.
J. G. KELLEY—For Washington Territory.

Mining and Scientific Press,

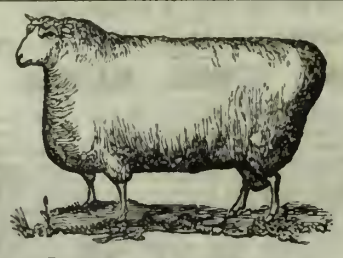
(Established in 1860.)

The oldest, largest and best Mining Journal. Devoted, also, to Science, Invention, Mechanic Arts and Industry on the Pacific Coast.

Subscription to the above, $4 a year; Sample Copies, post paid, 10 cts.—four for 25 cts. Address,

DEWEY & CO., Publishers,
No. 224 Sansome st., S. F.

WEDNESDAY AFTERNOON is the latest we can insert any notice in the RURAL PRESS. Communications should be received during the week previous to publication.



Cotswold Rams,

Half, three-quarter and seven-eighths (⅞) from Imported sires. Lambs—yearlings and upwards—for sale by LEWIS & McCRACKEN,
sep12-1m San Jose, Cal.

PEACHES.

An enormous stock of trees, exceedingly cheap, embracing the BLOOD-LEAVED RIVERS', and other new varieties. Our assortment of FRUIT and ORNAMENTAL TREES is unusually complete. New Trade List sent free.

HOOPES, BRO. & THOMAS,
Cherry Hill Nurseries,
10v8-6t Westchester, Pa.

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator" 429 Montgomery street, San Francisco. 2v7-6m

GEO. F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

And Tree Seeds,

GARDEN TOOLS, TREES, PLANTS, Etc.

No. 317 Washington Street, San Francisco,

Between Battery and Front.

jy11

IMPROVE YOUR POULTRY.



IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.

Oakland Poultry Yards,

Cor. 16th & Castro Streets, Oakland, Cal.

Young Fowls now for sale at reduced prices. Also a few of my Imported Fowls in pairs or trios. Send stamp for illustrated circular, containing a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,
4v8-tf P. O. Box 659, San Francisco.

MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to

B. F. CLAYTON, San Jose.
Or C. J. CLAYTON,
10v7-6m Clayton, Contra Costa Co., Cal.

ANNUAL MEETING.

The annual meeting of the stockholders of the Grangers' Bank of California, for the election of Directors, will be held at the office of the Bank on Tuesday, the 8th day of October next, at 1 o'clock P. M.

C. J. CRESSEY, Vice-President.
415 California street.
San Francisco, Sept. 8th, 1874. sep12-4t

Italian Bees,





For sale in Harbison Hives, in quantities to suit. Also young tested Queens, bred from Imported mothers. Safe arrival and satisfaction guaranteed. Terms low. Address,

A. LOVETT,
sep12-tf Sacramento, Cal.

A. W. THOMPSON,

Attorney at Law,

No. 6 Leidesdorff street, - - San Francisco.

sep12-tf

FARMERS write for your paper.

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gahilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

C. COMSTOCK, Sacramento, Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

WM. QUINN, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petalnma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breader of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.) : Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Mooey & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS. Watsonville, Santa Cruz County. Pure-bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, SEPTEMBER 19, 1874. [Number 12.

W. M. Thorp.

We here present to our readers the portrait and biographical sketch of another representative of the plow, W. M. Thorp, Esq., of the northern portion of the State.

The subject of our sketch was born in Wayne Co., Indiana, October 3d, 1828, and lived in that or adjoining counties until the death of his mother, which occurred in 1837. His father then moved to Cincinnati and lived there one year. He then went to Union Co., Indiana, worked on the farm in summer, and in the winter went to school in the woods. In 1847 he got tired of farming in the woods and moved to Henry Co., Iowa, with his father, which was the first start West for him. He started in the fall of 1849 to go to St. Paul, to work in the pineries of that country. He got on a raft that took him to St. Louis, Mo. Here he headed north again, and landed at Burlington, Iowa, where he worked all winter. In the spring of 1850 the gold fever brought him to this Territory with A. J. Hillery, J. McDonald and —— King. He landed at Riuggold, now El Dorado Co., on the 14th of August, having made the trip across the great plains in just five months. He was now without a cent in his pocket, but got enough work in the mines by the day to earn his grub.

He went from Coloma, just below the old mill, to the Auburn ravine, at the mouth of the north ravine, and staked his first claim in real estate. The size of the claim was 15 x 30 feet. He worked awhile in the bank at small wages. The firm became dissatisfied and dissolved, part going south and part north. With one man he then prospected in what they called the "Green Hole," within 40 yards of their claims, and struck what they thought would pay by pumping. They procured a pump, and on the first day the pay dirt, from 4 P.M. till night, yielded $63, which they thought would do. They worked till rain drove them out.

He was at the meeting that named the town of Ophir, and worked in that district and in Secret Diggings until the spring of 1851. He then took his blankets and went like a summer bird to the mountains, and spent two months there, but found nothing that suited, and on the 12th of June, laid down his pack on a ranch two miles north of the present town of Chico. Here he bought land of Mr. Bidwell to try his luck at farming. In 1856 he went to Ophir to try his luck in quartz mining, and located the "St. Lawrence." He lost about $2,000, which satisfied him with quartz mining, and took to the farm, remaining there ever since.

He was made Worthy Master of Chico Grange, No. 6, at its organization, and was elected again last fall. This spring, on his return from a trip to the East, he was elected agent of the Grange, and resigned the Mastership to attend to the business of the Order. He was appointed District Deputy by Worthy Master Wright, and had his commission extended by Worthy Master Hamilton. He was present at the organization of the State Grange at Napa, July 7th, 1873, and was elected as one of the State Executive Committee.

Mr. Thorp is one of the solid and successful farmers of the State, and is a modest, straightforward citizen.

CONTRA COSTA COUNTY FAIR.—We have received from the officers of the Contra Costa County Agricultural Society a complimentary ticket to their fourteenth annual fair, which will be held at their grounds, near Pacheco, to commence on Monday, Sept. 28th, and continue five days. Our friends, G. P. Loucks and O. F. Alley—president and secretary of the society—will please accept our thanks, with an assurance of our best wishes for the success of their fair, and our hearty desire to be among their visitors.

A POTATO MONSTROSITY.—Mr. W. H. Burke, of Half Moon bay, has sent to our table—our editorial table—a potato, or rather an attached cluster of five potatoes, weighing 3¾ pounds. The variety is not given, but in appearance they resemble the Early Goodrich. The surface is smooth and clean, and perfectly satisfactory to the eye. We shall put them to a severer test.

Egyptian Corn.

Mr. R. J. Trumbull brings to the office of the RURAL PRESS samples of the Egyptian or Mediterranean corn, grown by him at his nursery at San Rafael—not in Egypt. It is an agricultural curiosity. The leaf and stalk of the plant resemble closely those of Indian corn, though the leaves commence lower on the stalks of the Egyptian than on the Indian corn. It has no ears nor tassels; but on the end of each stalk is a bunch of corn, which when ripe would probably yield about a pint of grain. The kernel resembles in shape that of the Indian corn, but is much smaller—not more than a sixth part the size of the common flint corn. The top of the stalk has a unique and rather picturesque look, forming a goose-neck curve, so that the bunch of grain hangs downward.

The seed on the stalks brought to our office was not ripened. The stalks were about seven



W. M. THORP.

feet in hight. The seed was sown early in June, on soil not more than nine inches deep, and the plants have had but little water or cultivation. If it were sown rather close in drills it would undoubtedly afford a large yield of grain, and an immense amount of fodder. The flour or meal made from the grain is said to be of a superior quality. It could not be otherwise than desirable as fodder. The proportion of leaf to stalk is large; the yield is immense; the stalk is not as coarse fibered and woody as the Indian corn, being like the Chinese sugar cane or sorghum, and also resembles that in its tendency to sprout and grow from the stubble, when cut before the seed has matured.

The seed can be obtained in this city. It can be bought for 10 cents per pound, in quantities, and being of a small kernel, the cost of transportation would amonnt to bnt little. The RURAL PRESS is not given to agricultural ballooning, and it is not supposed that we have got hold of a "big thing" in Egyptian corn; but we would like to have some of our friends, in different localities, procnre a pound or two of this seed through the post-office, and give it a trial next season; sowing the seed quite as early in the season as they would plant common corn. They will be sure of a fair return for labor and money invested. It would be well to cut a portion rather early in the season, giving the stubble a chance for a second growth; but part of the patch should be left to ripen the seed. This would pay as chicken feed, if not otherwise. As an experiment it would be interesting, and the religious traditions connected with Egyptian corn would give the matter an additional interest.

THE fall clip of wool is arriving in Merced.

Look Out.

Do the farmers of this State know that a leading grain buyer is loaning the money on wheat this year that in former years at this season he was using in buying wheat? Do they know that when these loans become due, if he does not want their wheat they can have the money for a longer period? Do they know that whenever he wants to buy their wheat, he will demand "your money or your wheat?" Do they know that said buyer discourages farmers from shipping their wheat at this time? Do you think he is looking after his own or the farmers' interests? Do you not think that with freights at £3.10 you had best send enough grain forward to Liverpool on your own account to employ the vessels now here? If vessels in the harbor are denied cargoes at reasonable freights now, will it not deter others from coming here and create a scarcity of tonnage which will work against wheat owners in the future? We would not advise farmers to sell wheat at $1.50, but at moderate freights is it not best to ship? Usually the market price in London is good in January, if at all during the season. Is it not safe, at least, for farmers to ship a part of their crop now? Examine into it and see. Do not in any event place yourselves nnder the thumb of the old wheat monopoly, which has hitherto robbed the producers of this State annually. It will not do any harm for those who have borrowed money on their wheat to look out in season.

RATTLE WEED.—We were requested recently to procure specimens of the rattle weed, (*phuca*). By the kindness of a friend we have been able to procure specimens of this weed in different stages of its growth. They have been placed on exhibition at the Mechanics' Institute fair, among the products of California, at the *Journal of Commerce* stand. The party wishing to procnre specimens of this weed can probably obtain it from the proprietors of the *Journal of Commerce*. Rag weed is supposed to be very injurious to stock. There is a trailing species which is said to be very poisonous. The specimens obtained by us were gathered in the Gabilan mountains, on the edge of San Benito county, near the town of San Juan.

THE grape crop of Pierce county, Washington Territory, is very promising. The bunches are numerous and very large, and the berries are plump and healthy.

A HUNDRED reaping machines have this year been sold in Abilene, Kansas, and the old buffalo trails and wallows are not yet grassed over npon the prairies.

The Crab Apple.

Some of our friends are desirous of popularizing the Siberian crab apple in California. This, it seems to us, is injudicious. The movement has undoubtedly been incited by pardonable Eastern preferences. In many places at the East, where the list of fruits is more contracted than with us, the Siberian crab apple has become quite a favorite within the last few years. The misfortunes that have befallen the plum since the advent of the curculio have added to the interest felt in the crab apple. Fruit growers have sought in the latter a substitute for the former fruit. The plum, even in its best days, was grown at the East principally for preserving. Certain varieties, the "Blue Damson," for instance, were used wholly for this purpose. When this supply was cut off there was a dearth of material for preserving, and various other fruits were partially substituted, among which the Plum tomato was used to some extent. The smaller varieties of pears, and the citron melon were also used. The yellow and red varieties of the Siberian crab apple had recently been introduced as ornamental trees, the fruit being considered entirely useless. In the scarcity of other fruits for preserves, jellies, jams, etc., families began using the crab apple for these purposes, and found it the best substitute for the plum yet discovered. It has no characteristic flavor, but is pleasant to the taste when preserved, and possesses considerable richness. For beauty the preserved crab apple cannot be excelled by any fruit. The miniature apple possesses remarkable uniformity of size and shape, and has a clear, waxen look. It remains whole, even when fully cooked; and with the stem adhering. It is always preserved in this condition. It is one of the most attractive and pleasantly eaten preserves we ever placed upon the table. An additional claim in favor of the crab apple is its cleanness; being free from worms, even in the most wormy fruit regions of the East.

As an ornamental tree in door-yards and lawns, it is highly prized in some of the Eastern States. We have never seen its equal in beauty when in full bloom. The blossoms resemble those of the common apple in form, but are much larger, more brilliantly colored, and cling to the tree twice as long. The red and yellow varieties are distinguishable by the color of the blossoms; and when trees of both colors are tastefully arranged about a residence, they present, while in bloom—the surroundings being in keeping—the most beautiful sight that can be imagined. The fruit is also beautiful in all stages of its growth. The tree is a remarkably uniform and prolific bearer, and the tree retains its fruit late in the season. Even the tree itself is ornamental and is hardy and long lived.

Still we would not advise the increased cultivation of the crab apple in California. It would be of no use except for home consumption, as other and less favored fruit sections can grow it in abundance, and can probably excede us in the beauty both of the fruit and the tree. As an ornamental tree it might be desirable for a variety; as it would add to the beauty of any tastefully laid out place. For this purpose one of each color would be sufficient about any residence. Ornamental gardening in California is evidently defective in regard to variety. It is inclined to give us too much of a good thing. The red and yellow Siberian crab apples would help to relieve this monotony; but in regard to the fruit, it is not worthy of our consideration. There are some few additions that we can advantageously make to our list of fruits, but this is not among them.

POSTER OF THE OREGON STATE FAIR. — A colored poster of the Oregon State Fair has reached us, and is now hanging in our sanctum. The fair of which it gives notice is to be held at Salem, commencing on Monday, October 12th. We have on another occasion given notice to this effect, and have wished them, as we do now, a good time in every respect. The poster alluded to is the work of E. M. Waite, of Salem, Oregon, and is declared by our people to be a capital piece of workmanship.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

The Thomery Culture—Chasselas of Fontainebleau.

EDITORS PRESS:—A correspondent of yours having inquired through the columns of the PRESS about the special culture of the Chasselas grape, known as the Thomery culture, I promised to give you all the information I could get on that subject; therefore, I have the pleasure to day of laying before your readers a synopsis of the said method of cultivating Chasselas.

Thomery.

And not Fontainebleau, is the place where is raised that delicious grape which has been named from the latter town; for Fontainebleau, five miles distant from Thomery, is the shipping place of the Thomery product. Being all surrounded by hills, Thomery is well protected against the northern winds and setting sun; and, thanks to their most intelligent manner of taking care of their vines, the people of that beautiful little village have gained a world-wide and well deserved reputation. What most strikes the stranger roaming about Thomery is the numberless little walls intersecting—not in all directions, but from west to east—the gardens and vineyards which surround the place on all sides. The Thomerites have been so long at it, that it is only little by little that they have brought the culture of the Chasselas to what it has become to-day. However, many expert vinicilturists assert that many of their practices are rather useless, or, if they are of some use at Thomery, they may not be so elsewhere. I, personally, though not being much of a vinicilturist, think there is a great deal of truth in that, and more particularly when it is intended to try this Thomery culture in California. In that view, I will in this article set aside what I think to be special to Thomery, and speak only of the general culture of the Chasselas, as practiced at that place.

The Soil

Best fitted for raising Chasselas must be light, loose, sandy and easy to absorb moisture, keeping and concentrating at the same time the heat from the sun. The soil must be deep, and if not naturally so must be broken up to a depth of two feet. I have done so myself with a part of my vineyard, and am raising this year, without irrigation, a rather large crop of beautiful grapes on four-year-old vines. Among the thirty varieties of grapes which I imported from France in 1871, I have ten varieties of Chasselas, viz.: Thomery, or Fontainebleau, Pondichery, Early Teneriffe, Jalabert, Napoleon, Rose, Royal Red, Scarlet, etc.

As to the temperature and climate, all countries where the grapevine, fig tree, almond tree and peach tree are thriving, are well adapted to the Chasselas culture.

Exposure.

One of the main requisites for raising fine grapes is the exposure, which must be entirely south, with a slight leaning toward the rising sun, so that at 10 o'clock in the morning the sun will strike in full the wall or *espalier*, all along which the vines are planted, without projecting shade on either side. By that disposition of the walls the sun will hardly strike them by two or three o'clock, the time during which, in the hot days of August, the sun dries up the grapes. Next to a southern exposure that of the rising sun is the best; the worst one is that of the west or setting sun.

Planting.

Rooted cuttings are generally used and preferred to any other kind of plants. They are set in the ground three feet apart in the row and one foot from the wall, or two feet, if after the fifth year of planting the body of the vine is entirely buried in the ground, as is done at Thomery, (in French we call this operation *recoucher*, bending down the vine and burying it in the ground, leaving out only one branch of the year's growth.) The walls are built of stone, to a hight of six feet and a half. The vines are allowed to branch out all over said walls in the following way, viz: No. 1, 18 inches from the ground; No. 2, three feet; No. 3, two feet; and No. 4, five feet; commencing again and kept in the same order. Stone walls being, I believe, impracticable in California, either from want of material or their high cost, we would have, I think, to use latticework made very strong. The Thomerites manure their vineyards before the winter with cow manure, fresh or old; if done in the spring, they use well rotted manure.

Pruning.

The only pruning done the first year being above the first bud, the second year every branch must be cut but one, and that one will have to be pruned above the first bud, leaving on only that bud and the collar, a kind of ring or crown formed at the intersection of the old and new wood, and composed of lots of little buds; it is from this collar, in fact, that new branches will start out; and so on to the fourth year. In the fifth year the vines are allowed to spread out on the *espaliers*. One thing they are very particular at Thomery about, is the ripping off every sprout when small, with the exception of the two left for each mother branch.

Disposition of the Walls.

As I understand it, the walls have to be built 28 feet from each other. Starting from the south side of the upper wall, vines are planted along that wall as specified above, to be raised in *en espalier*. Two feet from the first row of vines is left a space three feet wide for a walk, and then a second row of vines is planted, to be cultivated with the two next ones as *souches*, that is as common vines, having their heads from one to two feet from the ground. Two other rows, also three feet apart from each other, are planted, leaving another walk four feet wide on the north side of the second wall, all along which are planted pear trees. The same operation has to be repeated on the other side of this wall, and so on to the last one. As to the length of the wall, it is not specified and need not be.

Packing Chasselas.

They have a special way of packing their grapes at Thomery. They use small baskets which hold about three or four pounds of grapes; the bottom, sides and top of these baskets are filled up and lined with dried ferns, brought to Thomery from a distance of 80 miles. The grapes are laid on that bed of ferns as nicely as possible, being very careful not to touch the grapes with the fingers. The grapes are then covered with a thick layer of ferns, the whole well tied up with willow soaked in water. Packed in that way the grapes arrive beautifully preserved and fresh in Paris, London and other capitals of Europe.

When my vines bear better, or when I will have more bearing ones, I will send to the PRESS folks two or three such baskets of my best Chasselas. In that expectation, I remain yours truly, FELIX GILLET.

Nevada City, September 9th, 1874.

Sacramento Correspondence.

EDITORS PRESS:—It is refreshing to sit beside an old '49-er and listen to his narrative. In a few moments he is fairly under headway. He has only to unscrew the "lock of his jaw" and let it run. Your informant is one of these. He tells of fire and flood. Going into business here when the names "Embarcadero" and "Ragtown" were as familiar as Sacramento is at present—one of the pioneers in business here—burnt out in '52, again in '54—no sighs nor regrets—drowned out by the flood which succeeded the conflagration of '52, the water standing higher than the counter of his store, which caused heavy loss—loading boats with goods and transporting them to a spot now known as "Brighton station"—building a staging in front of his store, and piling his goods thereon for sale. Ladies and gentlemen went shopping in boats, which rejoiced in two coatings of adobe instead of one of paint.

This flood lasted two months. Upon the subsiding of the water and the land beginning to appear, boating was "played out." Then there was inaugurated a semi-defensive system; using the mud-scow with ox team, the oxen wandering along step by step very deep in mire, dragging the scow slowly over the slippery mud. By taking patient observation for a half hour you could ascertain that it *did* move.

But for the present, history avaunt!

The establishment of W. R. Strong in this city is at present, as in past years, doing a rushing business. The railroad charges are enormous. What think you of a $500 charge on a freight train, and $900 by passenger train, on a car-load of the value of $750 to $1,250?

"ONLY ME."

Sacramento, Sept. 10th, 1874.

Disposing of Fruits.

EDITORS PRESS:—The great question with the fruit-growers at present is how to get a reasonable price for their fruit. Under the present system, the fruit-grower ships his fruit to San Francisco, and the commission merchant has everything his own way. He can sell the fruit and report as he pleases; and he generally pleases to appropriate a large portion of the producer's funds. The producer is entirely at the mercy of the commisaion merchant.

Now, I have a plan to propose, by which I think we can do away with these at present necessary evils. My plan is this: Let the Fruit Growers' Association establish a house in San Francisco, for the sale of their fruit, and hire a competent person to run it. To prevent this agent from appropriating money that does not belong to him, I would grade such fruit as apples, pears and peaches; that is, a box of first-grade apples must have less than a certain number of apples in it, so that the apples would have to be of a certain size to fill the box. The next grade would be smaller, and consequently it would require more apples to fill up. Each grade would have a stated price established by the Association. The small fruits would not be graded.

The Association would establish grades and each member would be furnished with a list of these, so that he will know what his fruit will bring as he ships it. Then, in connection with this I would have a drying and canning factory, where all fruit that does not find ready sale can be disposed of. I am satisfied that we can control the prices, if we work in harmony with each other. Yours, FRUIT-GROWER.

Petalnma, Aug. 30th.

Coffee vs. Buckthorn.

On stating the difference, in a recent issue of the RURAL PRESS, between the buckthorn and the coffee tree, I did not anticipate that a necessity would occur for another communication. But several papers have taken up the subject; and in rebuttal of my remarks, the writers have stated that they have roasted buckthorn seeds, made coffee therefrom and drunk it, without any manifest results; *ergo*, it is not a cathartic, and it must be true coffee.

This is a very crude method of unsettling a fixed fact; and the only reason for continuing the argument is to correct the impression which is gone abroad, that a new species of the coffee plant has been discovered in California; and to caution those gentlemen who are so persistent in spreading the idea, lest they might inflict an absolute injury on some farmers, who, relying on their statements, might be induced to spend time and money in cultivating a worthless shrub.

I said that the berries of the *Frangula Californica* were cathartic. They have been used as such in this country for a long time. Another species of the same plant has been used for the same medical purpose for over 200 years. The cathartic principle may be destroyed by heat; heat will also destroy the poisonous property of some plants. Thus the root of the bitter cassava—*Iatropha manihot*—is poisonous in a raw state; and after being exposed to heat, it forms a nutritive farinaceous diet. And the castor bean may be roasted till its ricinine is destroyed, and an inert beverage resembling coffee made from the charred cotyledons; and with wheat, peas and chicory, and a dozen other vegetable products, it is the same; an agreeable and coffee-like beverage may be prepared from them. But does this prove that the castor bean, wheat and chicory are true coffee plants? By no means.

Commencing with Menzies' visit to the Pacific Coast in 1787, nearly 100 professed botanists have come to the western slope to investigate and collect its flora. Yet none have ever reported the coffee plant as being in California. It does not exist here. Menzies found the *Frangula* in Monterey. Hooker described it in his Flor. Bor. Am., v. 1, p. 123, as the *Rhamnus oleifolius*. Nuttall's description, on p. 263 Torrey & Gray, is under the name of *Rhamnus laurifolius*; and at the present time it is known as the *Frangula Californica* of Gray. The scientific history of the plant is so well recognized that the merest tyro in botany knows that it has no affinity to the coffee tree. And so far as any persons may insist on calling the buckthorn a species of wild coffee, the error will rectify itself in course of time. It was once said of an honest Tenton, that he dined off of a wooden ham for six weeks, before he discovered that it was not real hog-meat. Gentlemen, go on and drink of your California coffee.

W. P. GIBBONS.

Letter from Centerville.

EDITORS PRESS:—In my letter of several weeks ago, dated from this place, I made promise of writing concerning the vineyards hereabout. Circumstances, however, interfered with good intentions and the present is the first eligible opportunity that has arisen.

Mr. E. F. Palmer, whose vineyards are beautifully situated at the foot of Mission Peak, is the largest grower in the region, having 8,000 vines, principally of the Muscat, Zinfandel and Burgundy varieties. Mr. Palmer has also a few acres of the Grenache grape, a native of Roussillon, France. M. Le Franc, of New Almaden, is the only other vineyardist in the State who has the good fortune to possess this fine vine. From the crop of this year, now being gathered, Mr. Palmer will make some 40,000 gallons of wine, and when all his vines are in full bearing his product will reach 75,000 gallons. He has cellars with a capacity of 60,000 gallons and in the spring will add another large one. E. L. Beard, the neighbor of Mr. Palmer, has some 70,000 vines, mainly of the Reisling variety. In this connection some horticultural experiments made by Mr. Beard will be of interest. He has satisfactorily proved that olive trees with open culture and without irrigation will flourish in this region. He has 1,000 of them on his land, all bearing well and in fine healthy condition. A capital quality of oil is made from the fruit. Five hundred orange trees in full bearing add beauty to the place and bring profit to the owner.

The Catholic church has about 40,000 vines and the other little vineyards in the vicinity a combined total of about 20,000. Governor Stanford at Warm Springs has 60,000.

It is the opinion here that the warm sunny slopes of the hills, at present cultivated for wheat, will before many years be devoted to the growing of tropical and semi-tropical fruits, for which their climate and soil are admirably fitted. Frost, in the rainy season, quite frequently nips vegetation slightly in the valley but on the hillsides never.

Every experiment that has been made in this direction has proved successful. Oranges, lemons, olives, figs, etc., all grow and do well, as is evidenced by the specimens in the private garden of Mr. Palmer.

The harvest here has been good and the farmers are consequently in good spirits.

Anon. McE.

Centerville, Sept. 10th, 1874.

How to Get Rid of the Pods.

EDITORS PRESS:—One of the greatest nuisances now over-running the oat country in this State, is a weed bearing a yellow flower, and at harvest time presenting to the sickle of the reaper a cluster of pods about the size of peas, and are cut and bound up in the sheaf. These pods, when they go into the sack from the threshing machine, damage the sale of the oats greatly, besides the sack room they occupy. If a machine could be had that would keep out these pods, the saving of sacks and increased price of the oats would equal the cost of threshing. It has long been the great desideratum of threshers and farmers to get a machine that would keep out these pods, but until this season without success, so far as I have learned. The great trouble has been to get a shoe that would work a sieve with a mesh smaller than the pods without clogging, and admit of fast threshing. I have been threshing many years at Half Moon bay and San Gregorio, and never succeeded in getting rid of the pods till this season, and am pleased to recommend a shoe that fills the bill exactly; Brown's patent shoe of Pescadero. It is an end shake, consisting of an upper and lower sieve hinged together with a wide space of two inches between. Cams in the center raise and lower the sieve; at the same time it has the end motion. Further description is superfluous. I have used it all season on the San Joaquin in foul grain, where everything went on the sieves; and as a rapid, handsome cleaner it had no equal. I am now using it on the Coast threshing oats among the pod weed with satisfaction. It never clogs, and under fast threshing cleans the oats of all pods, thistles, joints and all rubbish that fills the grain fields in the moist portions of the State. I understand that the neighborhoods of Bodega, Tomales, Two Rock and Bloomfield are greatly troubled with the pod weed. If the threshers in that section will adopt these shoes, they will have no further trouble from the pests and prove a great thing for the farmers. They can be put in any machine, and are warranted to do the work as represented. I have no pecuniary interest in the patent and my only object in this letter is to call to it the attention of all threshers who thresh amid foul grain, and all oat raisers that wish to be rid of the pods, and that the inventor may reap the reward due one who has put in our hands the means to do our work better and faster.

Several machines can be seen in this section at work. Any communication addressed to the inventor, N. M. Brown, Pescadero, will meet with prompt attention and a shoe put in at short notice. G. W. T. CARTER.

San Gregorio, Aug. 26th, 1874.

The Alfalfa Parasite a California Product.

EDITORS PRESS:—I can inform you and your correspondents that the "Parasite in Alfalfa" is found here in Yolo county in such abundance that it is a difficulty to walk over it in some places. It only appears after an extremely wet season, and where the ground kept wet the longest. It also comes after harvest in the stubbles, and takes its grip on some kind of weeds which also only grow after a wet winter. I have been acquainted with it in the southern part of Germany, where I have only seen it in alfalfa and flax, but very seldom in the latter. In the alfalfa it does not seem that it comes in the seed, for I have known it to appear in fields that had been sown eight or ten years previous. Neither does it seem to come from the seed here. The first time I noticed it was some ten years ago near the banks of the Sacramento river, where there was no alfalfa within miles of it, and where it has not grown since, even after a moderately wet winter. As far as I know there was no method for its destruction.

G. SCHMUSE.

North Putah, Yolo county.

Dodder Probably Native.

EDITORS PRESS:—In your paper of Sept 5th, Mr. Elliott gives some interesting facts in regard to the parasite "dodder," which has been reported as attacking alfalfa. He also inclines to the belief that the pest was introduced in Chili seed.

This may be true in the case spoken of, but we need not go abroad for dodder. I saw specimens of it on Andrus Island a few weeks since, growing on the coarse weeds near the banks of the Mokelumne river, on land that had never been cultivated.

On the Atlantic slope there are nine species of dodder recorded; perhaps we have as many. The plants are so small, appearing like golden threads wound round their victims, that they are not often noticed by any except botanists, unless they become so numerous as to inflict serious damage on growing crops.

As to whether the species growing on the alfalfa is identical with that which I saw, comparison alone would establish. If the alfalfa-grower will send a specimen of his to the office of the PRESS, I will try to secure some of the other to place beside it. C. H. DWINELLE.

San Francisco, Sept. 9th, 1874.

A Farmer at the Fair.

"Time and tide wait for no man," and in no place does that seem more true than in the Pavilion. Grandfather hurried me in Monday evening as soon as we got supper, so that we might get a look at things before the crowd came in for the evening. I expected to find but few there, after such a crush as there was on Saturday evening; and Woodward's gardens on Sunday gathered the stray quarters to such a great number, that it would seem as though the sight-seekers must be satiated, and the coin supply of others exhausted. For half an hour we had it comparatively quiet and plenty of room to perambulate; but soon the tide of humanity seemed to turn from the heart of the city, and set toward the Pavilion. The people came pouring through the door and spread through the various avenues among the exhibits, just as the tide rushes up Petaluma slough, and spreads through the various little channels and over the mud-flats surrounded by the higher ground. And this tide of human beings was almost as resistless as that of water, and apparently almost as thoughtless. Very few stopped to make a critical examination of any article, but passed slowly along like a vast procession, glancing right and left as an article of merit or curiosity met the eye. Indeed, when once the rooms are fairly filled, as they are every evening, it is almost impossible to do aught else than go with the current. Does one but stop an instant to make a more careful examination of some object of interest, or to take one's fill of the sight of some thing of beauty, he is immediately made aware of the fact that he is only one of many by a sudden bump from the next one behind, or an impatient elbowing from the crowd as they divide to pass on either side. Surely, many go there from want of anything else to do, or to see who else is there.

Well, grandfather is getting tired of the noise and bustle of the city and the Fair, and longs for the warm weather and quiet stillness of the inland valleys. He wants to get home, where he can relish a watermelon and bunch of grapes at noon. Too cold here, he says, for such things; but he will stay a few days longer to complete his observations on manufactures, now and past. There are many objects of interest that would bear full and extended descriptions; yet they must be seen to be appreciated.

One of the most interesting manufacturing operations conducted in the Pavilion is that near the northwest stairway for making rope or cord. That this fine piece of mechanism was thoroughly appreciated was sufficiently evidenced by the crowd which surrounded the operator, and patiently waited for him to adjust the spools preparatory to their dancing a quadrille at their work.

"'Kiah," my name is Zedekiah, "dy'e mind how your mother used to make you turn the handles to help make rops? The two boards with them little cranks to 'em didn't look much like that bobbery there." I remembered it very well. It was a board, fitted with three cranks, to each one of which a strand was fastened, all three being carried to one crank in another board. When the three cranks had been turned sufficiently to get a good twist on the strands, the one crank was turned to twist the main rope. I have seen the same laborious process carried on in Nevada county, manufacturing raw-hide rope for hoistiug purposes. But the raw-hide rope has been superseded by Hallidie's wire rope, and the old crank process has passed away, as the hands of iron take the place of those of flesh, and do the bidding of master man.

And right next to it comes the latest invention in the dairy business. A man with voluble tongue explained how cheaply, speedily and cleanly milk could be forced through tubes, the same as water, from the dairies to the city. My grandsire listened attentively, and then said to him, "I wouldn't like to have my milk mixed with my neighbor's, for he might put water in his'n." But seriously, will not this very process sometime be put in successful operation in our large cities? It is generally objected that the pipes would become fouled and rancid; but is probable that if the tubes are of glass, and the milk forced into them in such a manner as to prevent the entrance of air, the milk might remain in them any length of time without injury, for it would be hermetically sealed.

Is it probable that one in ten has any idea to what use the large tubes near your printing stand are used for? Grandfather thought they were the guns of the *Comanche*. I saw upon one of them the words "Little Giant," and as their exhibitor turned them from side to side, to show the ease with which the seemingly unwieldy monsters could be handled, my early mining experience flashed upon me, and I remembered wrestling with the pipes in the old pipe-clay diggings of Nevada. And I remember seeing two and three men with might and main struggling to hold the nozzle steady while others took the kinks out of the hose. Fatal accidents have occurred from the "bucking" of the old-fashioned fixings formerly used. This huge, jointed, iron monster seems educated for the work and turns up and down, right and left, as readily as a watch-key, and does away with resistance offered by the rigidity of large hose strained to its utmost with a heavy head of water.

And grandfather found an opportunity to shake hands with the wooden pumps, almost shedding tears as he watched the water roll from the capacious spouts. It brought him back to the old, old time, when iron pumps were unknown, and if water was to be had from the well, it must be drawn with the "old oaken bucket," or a pump made by boring a log out. And he spoke of the time when he bored out the "pump-logs" with a pod-auger, to bring water from the spring on the hill. Lead pipe was then hardly known, and iron pipe unheard of except as cast of large size. But those pumps with the upright handles seemed to me to be the ones best adapted to the farmer's use, for two children of quite small size would think it but fun to work them. Well, let us close here, and with an imaginary shake of the hand say good-night to each other and the Pavilion. VISITOR.

Artificial Duck Ponds.

EDITORS PRESS:—My stay here was brief, allowing but a glance at the first artificial "duck pond" I have seen in my rambles in this latitude. Said pond contained about 175 ducks, in variety, each endeavoring to outdo his fellow in duck-gymnastics. A detachment of the goose family marched past in their usual excellent style. Many of them would weigh 12 to 15 lbs. avoirdupois; they were what were called five-month-old goslings. Where do they get their geese? BUFFON, JR.

Brighton, August 28th, 1874.

Home Industries at the Institute Fair.

Silk Manufactures.

This department affords but few articles of general interest. The only specimen of machinery for producing spun or woven goods is a single loom exhibited by A. Viannay, of No. 12½ Stockton street, who has there commenced in a small way the manufacture of silk dress goods. He shows one of his looms in operation near and just to the left of the main fountain. He also exhibits several pieces of dress goods woven by himself. They are very superior in quality, and deservedly worthy of attention. Mr. Viannay was formerly a silk weaver in France, and obtains his spun silk from the city of Lyons. He warrants his manufactures not to cut or retain dust. They are made by the same process as the silk manufactured by the Bonnet Silk Factory of Lyons.

The California Silk Manufacturing Company, whose salesroom is at 566 Market street, make a fine exhibition of the products of their manufacture. We notice embroidery silk, buttonhole twist, machine silk dyed and ready for spooling, the same with gum extracted and ready for dying, and the same again exhibited on 100-yard spools. They also exhibit hair silk, and tram for weavers' and fringe makers' use. This exhibition shows that all the above spun and twisted silk goods can be made here of as good quality as any which can be imported. Owing to the failure to produce the raw silk here, as above noted, this company obtains all its raw material from abroad—China, we believe.

The exhibit of cocoons, etc., which has presented such a marked feature at most of our former exhibitions, is now conspicuous only by its entire absence; thus we have absolutely nothing in the way of cocoons or the California product from the same, to show as the result of the many and costly efforts heretofore made to introduce culture of silk from the cocoons into this State. California is, beyond question, most admirably adapted for silk culture—so admitted universally by the best practical experts from abroad, who have studied our climate with reference to the matter. The finest cocoons exhibited at the Paris Exposition in 1867 were those from California. Notwithstanding the failure hitherto to make silk culture a permanent and growing business on this coast, we fully believe that the time will soon come when both the production of the raw material and the woven fabric will form an important article of California products. Its growth has no doubt been rather checked than otherwise by State aid, which led a few people into a disastrous speculative fever in the *morus multicaulis*, and the production of cocoons for the mere advantage of State premiums without any intention of building up the enterprise into a legitimate business. The reaction has fallen heavily upon the whole business, covering it temporarily with odium and discouragement; but as it has now come into the hands of a few earnest, plodding men, well acquainted with its details, it is confidently expected it will gradually come up from its season of folly and delusion. Honor and encouragement should be given to the few men who are now engaged in giving the business a fair, honest trial.

Silk manufacturing at the East, in all its forms—as sewing silks, ribbons, dress goods, fringes, etc., has already secured a firm footing, and has proven a most promising and lucrative business. New England, New York, New Jersey and the city of Philadelphia have a large amount of capital thus invested. May we not hope that the day is not far distant when the slopes and plains that skirt the western base of the Sierras will become as famous for their beautiful manufactures of silk, as the gorges of these slopes have long been for precious metals, and the valleys and plains for the golden grain that has fed and nourished the nations of Europe?

POULTRY YARD.

Physiology of Eggs.

Every fowl has two small organs near the extremity of the body called the ovaria. It is filled with elastic tissue, and feels under the finger like sponge. The eggs are started here, and those which will mature a year or two or three years hence, are in embryo. One is forced up, is seized by the stroma, which is seventeen inches long, and passed rapidly through. When the egg leaves the ovary it consists of yolk only, but in its passage through that short canal the yolk is surrounded by enough albumen to perfect the chick. The white of the egg has in it all that nature requires for making bones, muscles, blood-vessels, connecting tissue, skin and feathers. Just before the egg leaves the body, this canal has the power of secreting lime for the shell. This shows how valuable the egg is as a nutriment and also what demands are made for rich food by a hen that lays an egg daily. Besides what she requires for her sustenance, she is called upon to secrete the material for the body of an entire chick, and also retains for the little creature sufficient to last many hours after it leaves the shell. It shows also that a hen can not make albumen so rapidly except out of albuminous food, such as wheat, meat and small animals. It is not true that there is a certain number of eggs, and that this number exhausted, no more can be expected; but it is true that the secretions lessen as old age comes on, and latterly the hen fails to have sufficient force to carry forward the process. The practical bearing of this is that we must see that the fowl is always well kept. The way to have good laying pullets is to quicken the circulation and strengthen the system by liberal nutriment. The yolk is food for the first three or four days. Careful house-wives make a mistake by attemping to feed them before the expiration of this time. Let the mother bird have charge and success will be certain, for she knows better than any man can what the chick requires.—*Poultry Review.*

HELPING TO HATCH.—"Can you render the chick advantageous assistance during its hatching?" Yes, most assuredly. The eggs of some varieties, particularly the Asiatic, are sometimes exceedingly thick-shelled, the shell "pips"—and here the little bird breathes his last if help is not given; the fine membrane becomes glued to him, and contracts, and it, with his downy covering, becomes, as it were, a coat of mail, to crush out its life. Notice, and if the hatching is slow, have an eye to your nest until the business is through with; for sometimes it appears as if epidemic. Many chicks go by the board in this way; help should be rendered; so take a small-sized bodkin, and carefully thrusting its point a short distance under the membrane and shell, gently tear the first, and crack the latter as you proceed around the circumference of the egg. If the shell is very dry, drop a few drops of tepid water at the point of pressure. Having taken off the top of the shell, drop about ten drops of warm water around the body of the chick, and put the egg, as it now stands, under the hen, the open side uppermost; behind or under the fluff is the best situation. This done, the chick is nine times out of ten safe, and will hatch vigorously. I have had wonderful experience in this line.—*Poultry Bulletin.*

HYBRID BIRDS.—In your issue of May 28th I observed a difference of opinion respecting the production of this "mongrel" species. Mr. Hewett states: "All attempts to breed these birds with the Golden Pheasant cock and the common fowl have signally proved a failure." Here I differ, for I myself have bred them from such cross. From 1870 up to a very recent date I had a large number of almost every variety of Pheasants. In 1871, I had presented to me a most singular specimen of "fowls" which the captain of the ship who presented them to me called "Ajables." They resemble most closely the barndoor fowl, but somewhat smaller, were adorned with a goodly-sized topping narrow tail, head somewhat erect, close feathered, long limbs, and partly booted. Two of these I turned down with a Golden Pheasant cock, which, shortly after becoming associated with him, commenced laying, and continued so doing until late in the season of 1871. In February, 1872, thinking to try an experimental production with this cross, I put a sitting hen on eight or ten of their eggs, which produced five singular-looking birds. When they came to maturity they were the most unique "hyorids" I ever saw, and several of them are still in this country.—*Journal of Horticulture.*

REWARD.—The Sportsmen's Protection Club of San Joaquin valley offer a reward of $25 in addition to one-half of the fine imposed by law, to any person who will give information which will convict violators of the game laws within 25 miles of Stockton. Any person violating the game law is guilty of a misdemeanor, and is punishable by a fine of $100 for each offense, or imprisonment, or both fine and imprisonment. The law prohibits the killing of game between the 15th of March and the 15th of September, of each year —*Stockton Independent.*

FINE MACHINE OIL.—To prepare an excellent machine oil, mix 60 parts of oleine with 40 of olive oil; or 50 of oleine, 40 of clear paraffine oil and 10 of olive oil.

SHEEP AND WOOL.

Fat Sheep tor Heavy Fleece.

There is much said about ewes being too fat to breed well. In my experience of twenty years, I have never seen anything that led me to think so, providing the flesh was put on with good pasture during the summer, and a few roots, with good hay, in winter, The fatter sheep become under these circumstances the more valuable I should consider them. There is a time of the year when it pays better to feed a small allowance of grain daily than in the fall, after the feed gets frozen, and it is not necessary to bring the flock to the barn.

It is an old saying that "a sheep well Novembered is half wintered." Keep the ewes fat, and the lambs will be fat and the fleeces heavy. I do not say whether it is better to have the lambs come early or late, but I do say it is best to have them fat; then, whether early or late, they are salable. All ewes, that with good care will not raise a lamb and shear four pounds washed wool, should be sold. I have them in my flock that will shear nine pounds and raise a pair of twins, and it costs no more to keep one than a sheep that shears only three pounds. I think no one will hear the man who keeps his flock in this way complaining because his sheep are "run out" and do not pay, and the like.

Ticks must be kept out of the flock; they are the worst enemy of the sheep. If they are not killed they will destroy the sheep. For killing them I have never tried anything better than strong tobacco juice. Give the lambs a dip before they are turned to grass, and again a few days after shearing, as the ticks leave the old sheep then and go on to the lambs. This will kill most of them. If any remain until winter, take some tobacco juice, made warm, and pour it along the back, and let it soak into the wool, and most of them will be destroyed. If these directions are followed, no one need apprehend any serious difficulty with ticks; but at best there will always be some. —*Cor. Country Gentleman.*

A Plea for Sheep.

Lately, visiting some of the sheep farms of Lincolnshire, I noticed that while the Midland farmer talked to his horse and even petted his oxen, he treated his sheep as an animal peculiarly devoid of intelligence. Now, I noticed among my agricultural friends this general disregard for the intelligence or feeling of sheep, though to me there is as much sad, pitiful intelligence in the eye of a sheep as there is in the "patient melancholy" face of a cow. While the farmer has brought sheep to the perfection of size and shape and profit, that sort of mutual regard which animated sheep, shepherds and shepherdesses in the olden days seems to have died out. St. John says, "To him the porter openeth; and the sheep hear his voice; and he calleth his own sheep by name, and leadeth them out. And when he putteth forth his own sheep, he goeth before them, and the sheep follow him, for they know his voice." On these words Dr. Hammond observes that the shepherds of Judea knew every sheep separately, and that "shepherds of that country had a distinct name for every sheep, which each sheep knew and answered by obediently coming or following to that call." Moreover, they trained up the ram to collect the flock, a far better device than that of a sheep-dog. Homer endorses this in his simile of Ulysses drawing up his men to a ram ordering the flock. On the authority of Philo Judæus, a philosophic Jew, born and bred in Egypt, in his first chapter concerning the Creation says: "Woolly lambs laden with thick fleeces in spring season, being ordered by their shepherd, stand without moving, and, silently stooping a little, put themselves into his hand to have their wool shorn; being accustomed, as cities are, to pay their yearly tribute to man, their king by nature."—*Gentlemen's Magazine.*

The Perfect Sheep-Dog.

The English *Fanciers' Journal* gives the following description of the Scotch collie. To win the first prize at a first-class English dog-show, a dog would have to fill all these conditions:

The head has a great resemblance to a wolf's—being rather conical, and going off gradually sharp to the nose, with a long jaw—only longer, and with a more foxy and intelligent look, and wider and longer ears, which are a little feathered and pendant; eyes have a sort of flashing and "miss nothing" look, always on the alert; jaw long; nose sharp; neck long and well furnished with apron and ruffle; shoulders fine and deep; chest well let down; legs straight and full of muscle, with cat-like feet. A good broad back and thick over the loins, with well-bent hocks; stifles well-developed; tail feathered, not carried over the back; coat long and straight, wiry to the touch, with a pily coat underneath the "overcoat." Color various, but that most in vogue, black-and-tan, the tan to be pale, not rich. This is the present fashionable show-dog.

GRUB OR FOOT-ROT IN SHEEP.—To treat this malady, take a box about sixteen feet long and three feet wide; put in dry fresh slacked lime, and run the sheep through it every other day for two weeks, or until a cure is effected. It is a never-failing cure.—*Exchange.*

Patrons of Husbandry.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well as Treasurer's reports.

J. M. Hamilton.

State Grange Agency.

Patrons will please take notice that Bro. I. G. Gardner, State Grange Agent, the Farmers' Mutual Fire Insurance Company and the State Grange Secretary, Bro. W. H. Baxter, have removed to No. 6 Leidesdorff street, south side California street, next to Merchants' Exchange—rear of Grangers' Bank of California (415 California street). sep5-tf

Emphatic Endorsement.

Resolutions Adopted by Capay (Yolo County) Grange.

The following resolutions were adopted by acclamation by Capay Grange, at the dedication of its new hall, September 10th, 1874. They were prepared by a member of that Grange, and were most enthusiastically endorsed, not only by their own members but by members of many neighboring Granges:

Resolved, That we recognize in the members of the Executive Committee of the State Grange, past and present, men whose ripe experience, prudence and business forecast commend them to our confidence, and whose labors in our behalf entitle them to support.

Resolved, That foremost among the many acts of that Committee, redounding to their credit and our welfare, is that of the selection of our commercial agent at the city of San Francisco; that the wisdom of that selection has been conclusively demonstrated already, and that each week is bringing new proof of the soundness of their judgment as exercised in that matter.

Resolved, That the attempts made by a few speculators and grain market manipulators, to weaken the confidence of Grangers in their commercial agent, by the publication in their so-styled *Commercial Review*, of cowardly innuendoes, hypothetical (and we might add hypocritical) cases of possible losses, are simply so many shallow inventions of the enemy, designed to embarrass the farmer and frustrate one of the great purposes of our organization, namely, the shipping direct of our own grain to a foreign market, thereby bringing producer and consumer into closer connection, securing for ourselves the market value of our products, and furnishing the hungry thousands with cheap bread.

Resolved, That comprehending, as we do, the position which the house of E. E. Morgans' Sons occupies in the commercial world, and knowing, as we do, the character of A. F. Walcott, the resident partner in San Francisco, for probity, energy and fidelity, we unhesitatingly recommend our brother Grangers throughout the State to stand by that house to the last, both as a measure of safety to ourselves and an act of justice to our agent, who has thus far borne the brunt of the battle waged against us by our enemies.

Resolved, That in the persistent efforts now being made by grain speculators, who have grown rich upon our toil, to discourage the shipment of our grain through our own agent, we see a large-sized cat in a very small heap of meal.

Resolved, That the Grangers of Yolo county want none of that meal.

R. R. Darby, Master.

P. M. Savage, Secretary.

The above resolutions were endorsed by acclamation by the Santa Clara County Council, at its meeting, Monday, 14th inst.

County Councils.—Alameda County Council met Monday the 14th inst. The following notes we get from Bro. Baxter, no report yet having reached us from the secretary. Bro. Baxter and Bro. Walcott visited the Council; found about 40 brothers present; and glad to see that several sisters took interest enough in business to be present. Bro Walcott explained the shipping interest to the satisfaction of all, and they all with one accord gave the most unqualified support and endorsement to the firm of which he is agent, and passed the resolutions of Stockton and Livermore Granges on this matter. The meeting was a decided success, enthusiastic and harmonious throughout. Report of Santa Clara County Council next week.

Snelling Grange, No. 105, has adopted the resolutions passed by Santa Barbara Grange concerning the removal of Professor Carr.

Dedication of a Grange Hall.

On Thursday, the 10th inst., a handsome hall, two stories high, which has just been finished by Capay Grange, Yolo county, some 18 miles west of Woodland, was dedicated with appropriate ceremonies and festivities.

The address of dedication was delivered by State Lecturer Wright, who was present by invitation.

At 2 P. M. the upper room of the capacious and neatly finished hall was well-filled by members of the many neighboring Granges, with their families and friends. The ceremony was opened with a suitable prayer by the Chaplain of the Grange, when the following address was delivered, an appropriate Grange song being sung before and after its delivery:

Address.

Fellow Citizens and Friends: The dedication of a building devoted to benevolence and fraternity is always an occasion of deep interest to any community.

But the occasion which calls us together today, the dedication of this neat and substantial hall by a Grange of the Patrons of Husbandry, is one of peculiar interest, on account of its novelty, and because of the glorious and world-sustaining principles to which it is devoted.

Two years ago to-day, was it among the wildest dreams of any listener in this happy gathering, that ever in your fertile and attractive valley, or ever anywhere throughout our State and country, such halls as these would arise under the sturdy hands of our farmers, and be dedicated, so long as they exist, to such pure and noble purposes as those of the Patrons of Husbandry? But to-day, in witnessing the substantial success of our Order, shown in so many ways, and especially in the erection of such buildings as this, of which you, my fellow-Patrons of Capay Grange, may be justly proud, we see the realization of such a dream, and are vividly reminded of the rapid strides of the Grange movement towards a reliable self-protection and independence of our farming interests, not only in California, but throughout the Union.

These thoughts force upon our minds the solid and satisfactory work accomplished by the Grange in our State within the last 14 months. Before the organization of our State Grange, on the 15th of July, 1873, we had no halls, we had no warehouses, we had no banks, we had no insurance company; we had little or no influence; we had no voice in fixing the value of our products, or the price of our supplies; we had no co-operative associations, no agencies of any kind.

Improvements by the Grange.

To-day we have all these under the control of men of our own choosing, and formed especially to protect our interests against selfish and unjust monopoly, and wild speculation.

Before that time, farmers and farmers' families in California scarcely knew each other, even in their own neighborhoods, and cared but little for each others' welfare.

Now we are generally becoming acquainted with each other and each others' wrongs and wants; are closely bound by a common tie to labor in harmony for our mutual protection and interest, without injuring the true interests of any of our people.

Two years ago we could not charter our own ships; we paid $25 and $26 per ton for ocean freights, $2 to $2.50 to store each ton for the season, from 18 to 20 cents for our sacks, 18 to 24 per cent. per annum for money borrowed, and had most of all the profits of our crops consumed by the exorbitant prices we were compelled to pay for farming machinery, groceries and other supplies. Let me beg you to remember that already, under the workings of our Order, all these things are greatly changed.

How great the contrast made in two short years!

Contrast of '74 With '72.

Now we get ships at $17@$20 per long ton, sacks for less than 15 cents, storage from $1 to $1.25 per ton for the season, money all the way from 5 to 15 per cent. per annum, and the prices of everything we buy are reduced. It is a very striking fact also to be observed, and which some are too likely to forget, that although the price of wheat is now so low in Europe, we can get in San Francisco to-day almost as much as we could at this time in 1872, when wheat was some 60 cents per 100 higher in Liverpool than it is to-day.

Let me ask you why is this? What is the cause of all these changes for the better? It is from the organization of our farmers in the Grange. Nothing more, nothing less. Think of all these things, and never again ask doubtingly, or sneeringly, what has the Grange accomplished.

These being the facts in the case, and our members knowing it, is it any wonder that Grangers are standing by the principles and the agencies that under the favor of Providence have brought these things to pass? Is it any wonder that now, since a perfectly safe opportunity is offered to ship our wheat directly to Europe, our members have already loaded ten ships on their own account and are rapidly loading others?

Is it an achievement of no importance that, by means of the Grange, we are now loading ships at Vallejo, Antioch and Collinsville, and that freights on your own railroad are reduced 50 cents per ton?

For all these things we are thankful. We know we owe them to the Grange, and we propose to labor as long as we live to complete this good work, so nobly begun.

Explains the Declaration of Purposes.

Then about an hour's time was occupied by the lecturer in giving as full an explanation of the objects and principles of the Grange as are allowable before a public audience. These explanations were based upon the "Declaration of Purposes" of the National Grange.

The address was then concluded in the following words of

Dedication.

And now, my fellow Patrons of Capay Grange, in the name of the National Grange, in the name of the California State Grange, in the name and by request of your own Grange, which is but a part of this great brotherhood throughout the Union, I dedicate this hall to the interests of the Patrons of Husbandry, to the cause of justice, truth and harmony; to the faith, the hope, the charity and fidelity which should ever characterize our members. I congratulate you on its successful completion. Long may it stand as a monument of your zeal and prosperity, your devotion to our cause. Long may you live to labor in it for the good of our Order. We aim to make this Order perpetual, like its noble progenitors Masonry and Odd Fellowship.

But the time must come, and that at no distant day, when all of us now present shall be resting from our labors in the quiet cities of the dead, at peace with all the world. The turmoil, the cares, the anxieties of this life shall be ended for us. Believe me, when that time shall come, our children and our children's children will labor to perfect the work which we have but just begun.

Heaven bless your efforts here, and the efforts of our brotherhood everywhere, and give us the will, strength and harmony to leave our children a legacy more valuable than the silver and gold of our mountains, and that legacy is the independence of the farmers of California, the independence of the farmers of America.

Closing Exercises and Resolutions.

After the address, a regular Grange meeting was held, the fourth degree was conferred upon the regular class, the unwritten work was rendered, and business enterprises explained.

Stirring resolutions prepared by a member of Capay Grange were then adopted by acclamation by the members of numerous Granges present. A copy of these resolutions will be found elsewhere. In the evening there was a dance for the especial enjoyment of the young people, the music being furnished by an excellent band from Woodland, and at 11 o'clock a most sumptuous supper was served by the ladies of the Grange. These festivities were enjoyed with the greatest zest by hundreds of the good people from the surrounding country.

It was indeed a true harvest feast, and will long be remembered as a complete success, and as one of the happiest Grange gatherings that has ever occurred in our State.

The Grange in Danger.

To the thoughtful and earnest Patrons, the present is a most critical period in the history of the Grange movement. On every side we see the greatest efforts being made to draw the Order into political movements. First come ambitious individuals, either within or without the Grange, who wish to secure the support of the Grangers.

The partizan press also is eager in its professions and but too ready to give advice to the farmers; and most crafty of all, the party leaders and organs of our worst enemies are doing their best to draw the Order into the political whirlpool, where they know its utter ruin would speedily take place. We earnestly entreat all true Patrons to destroy the political fox whenever he shows himself within the Grange. No matter how good a cause may appear in itself, if it is political, it has no place in the proceedings of Patrons of Husbandry. The members of the Grange were brought together for noble purposes, and with a distinct pledge that no political subject should ever be even mentioned in their meetings. If this pledge is violated, the honest ones will withdraw, as they have a perfect right to do.

Die Allgemeine Deutsche Unuersteutzungs Gesellschaft.

The German General Benevolent Society was organized January 7, 1854, with 105 members; now, 1874, its number of members is 1,932 city members and 250 in the interior.

The Society has a hospital, built of brick, two stories high, with a basement, situated on Brannan street, near Third, city of San Francisco. The main building is 120 feet front and 250 feet deep. The wards are nice little rooms, about 50 in number; order, neatness and the most scrupulous cleanliness pervading the whole. The lot upon which the hospital stands is 137½ feet by 275 feet, surrounded by a high fence, and cultivated in a fine garden and ornamented grounds. The register shows the names of 750 patients entered during the past year. The hospital is visited by Dr. F. von Lohr, Dr. J. Regensburger, Dr. A. Wilhelm, Dr. F. M. Smith (oculist), Dr. Charles Betzel (house physician), Dr. Walter Dannenbeurg (apothecary), Mr. J. M. Volmer (superintendent). Adape.

The co-operative Grangers' store, at Los Angeles, made cash sales amounting to $6,000 last month.

Panama Grange, Kern Island.

Editors Rural Press and Brother Patrons:—And that includes the sisters, for no brother is more than half a brother without a sister to sympathize with, love and aid him to live a nobler, more beautiful, true, progressive life; advancing in our Order, not only to the highest degree marked in the manual, but the whole manhood advancing to higher ideas of truth, justice and harmony, by and through the aid of the social influence of these frequent meetings to do good, and the harvest feasts which are only typical of the feast of reason and flow of soul, which should be ours, then, more especially to enjoy.

I am here reminded to give you some account of the last harvest feast of Panama Grange, at the house and under the shade trees, on the farm of J. M. Lundy. About noon, when most of the members, with invited guests from other Granges, were scattered around in groups conversing, some preparing and placing upon the long table things for the physical man, the word went round that we were wanted in the house, where W. M. Rohh called us to order, and dispensing with other business, except reading of the minutes, proceeded to confer the 4th degree upon A. Marshall, who we hope will marshal all the forces at his command to work for the good of our Order. An invitation was then extended to visitors from other Granges to make such remarks as seemed to them appropriate. After a half hour or more thus spent, on motion a recess was taken, until called together at the table, where over 60 were seated and supplied with all that was necessary to dispose of a hearty meal. Active workers handed us plates with chicken, turkey, roast pig, etc., as fast as desired, while others were always ready with tea and coffee. Before us were nicely cooked vegetables in profusion; blackberries and cream, pies, custards, melons and cakes, beyond the capacity of hundreds to dispose of; all of which was improved by the added charm of numerous bouquets of various colored flowers, so that one might well say: From whence all this? From where all these one hundred healthy-looking brothers and sisters? From Kern Island. A place that many people in Tulare and other counties will tell you is the most sickly place in the world.

So much has this evil report been spread of this fine country, that many strangers are afraid even to look upon it, lest they die. Why all this evil report? 1. People living at Bakersfield, the principal town situated rather low, among the willows with dwellings built close to the damp soil and drinking ditch or surface well water, are, as they naturally should be, somewhat liable to chills and fever; but that is no good reason for trying to blacken the fair face of all this island south and 20 miles across. 2. Probably one of the most active causes for such wide-spread terror of this place is that in earlier times stock-men who wanted the island for cattle range, took this means, sustained by the cases in Bakersfield, to prevent emigrants from settling here; but yet, one after another, they crowded in to see for themselves; and though laboring for successive years, under difficulties, having all their crops destroyed by wild stock and no reliable supply of water for irrigation, still they have hopefully, nobly struggled on—have stemmed the tide of the rapidly flowing river, which draws its supply from an unfailing source among the snows of the Sierras; have dug great ditches; made use of old channels; labored in the heat of the sun, deep in water, till at last the day dawneth, and though not prepared to reap much this season, yet their feasts are beyond anything of the kind I have seen.

This is only a faint prophecy of the grand future of this island and people. It will not be two years before the world will know of this place under a far different character; railroad men and other monopolists realize the fact, and are doing their best to get control of as much of the land and water as possible.

I came near wandering so far from the table as to forget to mention that a neat address was prepared for the occasion by brother Armsby, appointed by W. L. Hayworth to fill his place, as brother H. did not expect to be present. In this, however, we were agreeably disappointed, as we also had some interesting remarks from him.

We are very busy now, planting potatoes for a late crop. Have some items in store; will collect more, letting you hear from us occasionally. Emigrants desiring information, please enclose stamped envelope directed to themselves, with paper; then can take pencil and answer at odd moments what would otherwise fail to be attended to. Yours,

I. B. Rumford.

About Alhambra Grange.

Editors Press:—On the 12th inst. the alert G. K. announced the signal of a stranger at the gate, and in response I hastened to ascertain who it was that desired admission to our Order. I found upon investigation that the Alhambra Grange, of Martinez, with a charter list of 24,

"Loyal and to the manor born."

were seeking admittance. I opened wide the gates, bidding them welcome, and assigned them work and a place in our great fraternity.

R. G. Dean, Deputy Contra Costa Co.

[List of officers published in another column to-day.—Eds. Press.

Organization of Washington Grange, San Joaquin County.

EDITORS PRESS:—On Thursday last, the 27th inst., in company with Bro. Wm. G. Phelps, of Stockton Grange, I started from home with the purpose of organizing a Grange in Elliott township. We started early and bowled along at a lively pace. Our course was about due north over an excellent road, and the fine improvements and well cultivated farms betokened a degree of prosperity seldom seen in older countries. Most of the grain is threshed, and the large stacks of wheat in the sack remaining in the field, bear testimony to the productiveness of the soil and excellent tillago. Wherever we enquired we were informed that summer-fallow land had yielded from eight to 15 bushels more to the acre than any other method of cultivation; and we observed that a portion of nearly every farm was plowed last spring and left fallow. We crossed the Mormon slough and Calaveras river, which is nearly dry at this time. From the Calaveras to the Mokelumne, the face of the country is different from what we had previously passed over, being more rolling and of a gravelly nature. As we neared the Mokelumne the country became heavily timbered, and where it was cleared and cultivated showed evidence of wonderful fertility. We reached Lockeford at 9½ o'clock A. M.; it is a lovely little town on the south bank of the Mokelumne, embosomed in beautiful live oaks, containing about 150 inhabitants, a hotel, two stores, a church, blacksmith shop and wheelwright. The Odd Fellows and Patrons of Husbandry have a splendid hall here. After shaking hands with many friends we continued on our journey. One mile east of Lockeford we stopped at the residence of Bro. Holman, the Worthy Master of Lockeford Grange. Bro. Holman is the owner of a very fine place, situated on the bank of the Mokelumne, part bottom-land and part upland. On the bottom-land he raises hops, corn, potatoes and all kinds of vegetables. Hops are raised very extensively on the Mokelumne this year, and of very fine quality.

We had been promised the assistance of Bro. Holman, in the work that we had before us, and were very much disappointed on being informed that it would be impossible for him to accompany us. Bidding adieu to Bro. Holman, we continued on our journey, having been told at Lockeford, that the place of our destination —the Washington school-house—was only six miles distant; we jogged busily along, enjoying the beautiful scenery. The country was rolling and well timbered; beautiful little valleys, nestling in among the hills; cosy cottages with rosy-cheeked children; well-filled barns and fat horses, cattle and sheep, gave evidence of the prosperity of the inhabitants, the fruitfulness of the soil and the healthfulness of the climate. About two miles from Lockeford we inquired the distance to the school-house. Imagine our consternation on being informed that it was eight miles! Well, maybe we didn't sing —well, we did. We sung all the songs in the Grange book, and when we had finished that, and our temper had found its equilibrium, we asked Bro. Phelps, as a favor, to sing "John Brown's body lies mouldering in the ground," and at the same time to drive a little faster. After he had finished, I followed with "Marching through Georgia," before the conclusion of which we reached the school-house, and, finding no one present, proceeded to the residence of Dr. Stamps, which we found after much difficulty, from whence, after enjoying a good dinner, we repaired in company with the Doctor to the school-house. Although the time of meeting had been appointed for one o'clock, it was fully three before all arrived, about which time we commenced work, and, assisted by Brother Phelps and Brother McDowell, of Lockeford Grange, I organized Washington Grange with 24 charter members, which would have been swelled to the maximum number but for the reason that many were unavoidably detained from the meeting by pressing home duties. On our return, we spent the night at Lockeford, attending the meeting of the Lockeford Grange, which met that evening. This Grange is in a flourishing condition, has a very fine hall, well fitted up, and is composed of the best farmers in that section. Taking an early start the next morning, we soon arrived at the residence of Brother Morse, on the Cherokee lane. Brother M. has a beautiful place, and some very fine stock (horses); he has recently sold to a gentleman in San Francisco one animal for $1,600, and a span of horses for $700. He has at home a very fine two-year-old colt, sired by General McClellan; also a yearling, by the same horse, both promising colts, and which, if properly cared for and handled, will astonish the natives, some day. Brother Morse is the owner of a fine Black Hawk stallion, which was away at the time; but from the looks of his colts, of which we saw a number, he must be a good horse. Brother M. is considered one of the best judges of horseflesh in this part of the country. We passed a half hour very pleasantly with Brother and Sister Morse, who are evidently taking solid comfort here with an interesting family growing up around them. They are both members of Lodi Grange, and Sister M. is Ceres of the same. We at last very reluctantly took leave of our friends and wended our way towards home, where we arrived in good time.

The following are the officers elected and installed in Washington Grange, at the Washington school house, Elliott township, San Joaquin Co., Aug. 27th, 1874: W. B. Stamper, M.; S. W. Sollars, O.; D. R. McIntire, L.; S. O. Sollars, S; A. A. Vansandt, A. S.; Ozias Peter, C.; Wm. McIntire, T.; M. L. Cook, Sec'y.; C. H. Little, G.K.; Mrs. A. E. Blyther, Ceres; Miss E. L. Harris, Pomona; Miss R Sollars, Flora; Mrs. E. Leeman, L.A.S. Post-office address, Camanche, Calaveras Co.

Bro. Stampers was the moving spirit in the work of starting this Grange, and he can well be proud of his work; as this is a nucleus around which will be formed one of the strongest and best Granges in the county, and has commenced with excellent material.

Yours fraternally, ANDREW WOLF,
Deputy for San Joaquin Co.

The Grange Fleet of California.

THE GRANGE FLEET.—The order of loading Morgan's Sons' vessels has been altered somewhat and they will be dispatched in the following order: The "Annie Reed" and the "Imperial" will be loaded at Vallejo, the latter vessel to be put to sea as soon as the first named has completed cargo. At Oakland the "City of Berlin" will be loaded by the Modesto Grange, to be followed by the "Triumphant," which will be loaded by the Livermore and Merced Granges. At San Francisco the "Seaton" and "Poonah" will be loaded by the Stockton Grange. Other vessels will be put on as fast as needed. —*California Granger.*

How do you like the sound of that, Patrons of the Atlantic States? Is there any music or significance to you in the phrase "Grange fleet?" Think of it. Lay down your paper and go back in memory, travel through the long years of the past, when one after another of the rights of labor have been yielded up at the demands of capital; review the almost completed process by which an aristocracy, exacting and merciless, has been built up, based upon the spoils extorted from honest labor; note in the progress of this work how surely (though slowly, it is true) the husbandman has descended from the highest plane of trust and respectability in our nation till now he is pointed to by the would-be nabob he has set up as a mudsill and ignoramus; note in your reflections the many and varied combinations of capital that within the last thirty years have been formed to gather into their coffers the wages of labor, and complete the work of the laborer's humiliation. In the days of our Fathers, the great law of demand and supply was thought to regulate the markets of the world, but in these days of gold corners, stock exchanges and wheat rings, soulless speculation rules the hour, and a system of gambling as unscrupulous as it is wicked has seized upon our commerce, while rectitude and manhood have become but too transient visitors at our trade centers. In consequence of this, the products of our fields have been subject to the manipulations of rings, schooled in the tactics of chicanery, who by tricks and persuasion have impressed the producer that without their assistance he would be unable to reach the consumer in a neighboring State of our country, much less to find the markets of the old world. So long, indeed, have we listened to the story of our incompetency in business matters, that we had almost admitted the inferiority of our class in every regard. In the light of all this, what do you think of a Grange fleet on the Pacific Ocean? Do you think that our brothers of California have gone crazy? Ah, my brothers, that is not what's the matter; a change is coming. Theirs the great wheat-producing State. Their product of this cereal will this year probably exceed in value $40,000,000. The enormous products of this husbandry in the years passed had, under the old order of things, built up the most powerful monopoly on the continent. Friedlander had grown to be a millionaire in shipping the farmers' wheat to Europe. His ill-gotten wealth was used to impoverish the hands that had built him up. Hedged about and ground down by a moneyed aristocracy, whose greed for gain was whetted by their successful plunderings from labor, the farmers of that State were driven by necessity to organize and co-operate. Some 13 months since, at their call, it was our good fortune to raise the standard of our reform on that coast, instituting the State Grange of California.

Gathered about us in the city of Napa on that, the proudest day of our life, were less than two score of the sons of toil, with their worthy matrons. A nobler band or truer hearts never met. In that consecrated circle, on the 15th day of July, 1873, these heroes and heroines vowed at the altar of this new Order, to rescue the fair land of their choice from the hand of the despoiler, and to inaugurate a better day for labor and humanity. God bless that noble group of men and women! In the keeping of that vow they point to-day with pride to the Grange fleet, laden with the golden grains, not from the mines of their stately mountains, but from the wheat fields of their fertile plains below.

No, my brothers, they are not mad, but they are deadly in earnest. Through all these months they have nursed the vows of that consecration hour, and they have gone about the work, turning not aside to do homage at anybody's partisan political temple, cheerfully furnishing the means to carry out their plans, the price of their emancipation. They have found no time and have had no heart to "fall out by the way," but, standing shoulder to shoulder and striking in concert, they have become an irresistible power on that Coast, and, by faithful and harmonious labor, they are enabled to gather in a harvest of success and profit, truly astonishing to their slower going brothers this side the mountains. Though organizing late in the season and in the face of a strong opposition, they were enabled to save to themselves on their wheat crop last year no less than $2,000,000. This year they confidently calculate that by shipping their own grain to foreign ports, they will be enabled to save (make) for themselves fully $6,000,000. Drowsy, doubting Patrons of Iowa who have been complaining that the Grange has benefitted you but little, and have written to us to know what the Order has done, we point you, (and with pride that raises us on tiptoe) to the Grange fleet of California, the sails of which now whiten the Pacific ocean. These Patrons, but little more than a year old and with a membership not exceeding 16,000, have by their indomitable energy and devotion solved the problem of co-operation in trade, both retail and wholesale; have applied the same principle to the protection of fire insurance on a large scale; have established a Grange bank with a capital of $5,000,000, greatly reducing the rate of interest, which had been ruinous in their State; have kindled the fires of social and moral reform in more than two hundred neighborhoods, and have spread the harvest feast in every valley in their fair State; infusing in all a stronger aspiration for a higher plane of thought and action, strengthening the bonds of friendship and leading the way to a higher life. The Iowa State Grange is more than three and a half years old, with a membership approximating 100,000; and what has the Order done here? It has done much indeed, but nothing compared to what it should have accomplished. Had our membership all meant business, and had they worked as earnestly since their organization as have the California Patrons, wonders would have been accomplished in the way of reform, and the farmers of our State would have been well out of the woods, and general prosperity would be the lot of our people. Why are we behind in this race of progress? The reasons are obvious, or, at least some of them are: 1. We have too many members of a certain class; too many were admitted who thought they saw in this growing movement a stepping stone to office, and who would not hesitate to use the Order to restore to power a defunct partisan organization, or to perpetuate the power of a living one; too many were attracted to the Grange wholly by considerations of a mercenary character, expecting that through it they would be enabled somehow to get back on the morrow five dollars for the one they invested yesterday. Disappointed in their expectations of a large return for their small investment without effort on their part, they have lost their interest in the Grange and style it a failure.

Another class—and I would that their numbers were less—believe that the Grange is a pretty good thing, and will yet benefit them and the country at large; but they expect others to do the work, and pay the money necessary to hasten the good time coming. Many of them are habitual grumblers, distrusting everybody; and with their ears open to everybody who is disposed to traduce the character of Grange officers. The reason greater than all others, the one more general in its application, and the one that has operated perhaps more than all other causes combined to keep us back from the early attainment of our ends, is found in the almost universal want of faith; faith in ourselves and faith in each other; faith is the first round in our beautiful ladder of ascension, and without it success must delay. We do not work as though we were in earnest, but as though we did not believe in ourselves. Come now, ye doubting Thomases, and unbelieving Philips, get up and shake yourselves, throw your fears to the winds and take hold of the work as sensible men and good Patrons should. Wist ye not that while you have sat napping, doubting and grumbling, our brothers West have been up and bestirring themselves; and, as some of the fruits of their fidelity and industry, the Grange fleet, laden with the product of their own fields, is doubling Cape Horn, and will soon deliver cargo at the doors of hungry consumers in the old world. Yes, my brothers, the Patrons of California are the first to break through the fetters of a monopolized commerce; and, passing the billowy distance of 13,000 miles from San Francisco to Liverpool, pocket the margin themselves, that has in the past made large revenue to speculators. In the face of this achievement the farmers of the Western Atlantic States, within 4,000 miles of the wharves of Liverpool, submit with little resistance to the exactions of a long line of transfer men. Come, dreamy, tardy Patrons of Iowa, if we have the pluck to do but little for ourselves, let us rejoice that in the year of our Lord, 1874, our brothers of California are demonstrating that farmers have courage and brains enough to enter the markets of Europe with cargoes of their own products, shipped on their own account. A Grange fleet! What will the aristocracy of Europe think? And who will now say that the millennium is not at hand?—*Patrons' Helper.*

THE HALL AT YOUNTVILLE.—We are glad to hear that the new Grangers' hall at Yountville is making fine progress. The building is of brick, 30x55, two stories high, and will have a hall overhead, with store below. Its contractor is a Vallejo party, at $4,100, brick to be paid for besides.

APPROPRIATE ORNAMENTS.—In Eden Grange hall, Hayward's, are two handsome frames containing the charter and a lithographic view of a Grange in session, made by matrons of the Grange. These frames are tastily ornamented with specimens of wheat, corn, nuts, seeds, burrs, etc.

GRANGER HALL.—Little Lake Grangers are building a hall at Willittsville.

Correspondence.

EDITORS PRESS:—Did you ever attend the dedication of a Grange hall? If so you know something of my experience on Thursday, the 10th inst. Capay Valley, No. 90, is a good live Grange. They have incorporated with a capital of $5,000. Bro. J. R. Barret is president of the corporation. Bros. J. W. Aldrich Ed. E. Perkins, J. T. Lewis, Jno. M. Rhodes, Jno. P. Gooduow, G. W. Lambert and R. R. Darby, directors.

They have erected a splendid hall, 30 by 60 feet, and two stories high; it is a frame with rustic finishing, nicely painted, and will compare favorably with any hall in the State. The lower story is intended for a store, and is already rented. The upper story is for the Grange; it is elegantly finished, and reflects good taste on the part of the Grange.

The hall was dedicated on the 10th. Bro. Wright was there and in his happiest mood. He gave a public lecture in the afternoon and had a large audieuce. All were pleased, and I am much mistaken if Capay Valley does not add many to its already large membership. After the lecture Bro. Wright exemplified the secret work of the Order. Members were present from Woodland, Buckeye, Cache Creek and Hungry Hollow Granges.

In the evening a dedication ball was given, which was a grand success both financially and as a pleasant party entertainment. The music was of the first order, and all vied with each each other to render the occasion enjoyable. Mr. Editor, are you a bachelor? If so, it would not have been safe for you to have been there, I know from sad experience. The lovely matrons were—well, who could help loving them. Not Brother Wright, I think; but, as I said, who could help it. Even Master Darby and Overseer Rhodes—men with gray locks and nearing the sixties — seemed to be boys again; and Brother Hurlburt, W. M. of my own Grange, Cache Creek, does not yet realize that he is anything but a boy.

I will not attempt to describe the effect of the lovely sisters upon the younger Husbandmen; but Cupid was all aronnd, and many were the wounds inflicted.

At 11 o'clock supper was served to over 300 hungry dancers, and after all were done eating there seemed to be enough for as many more. After supper the lower room was cleared out, and dancing commenced down stairs, and was kept up till daylight, when the crowd of dancers dispersed, well pleased with the hospitality of Capay Valley Grange. Taken altogether it is an event long to be remembered by the Grangers of Yolo. What Grange will be the next to build and dodicate a hall? Cache Creek? Fraternally, L. D. S.

Woodland, Sept. 14th, 1874.

New Grange.

ALHAMBRA GRANGE—Organized Sept. 12, 1874, by R. G. Dean, at Martinez, Contra Costa county, with 24 charter members. John Strentzel, M.; Henry Raap, O.; B. R. Holliday, L.; Wm. A. Frazor, Sec'y; James McHarry, Jr., T.; James McHarry, Sr., C.; Elam Barber, S.; James Stewart, G. K.; L. M. Smith, A. S.; Mrs. Lena Raap, Pomona; Mrs. E. J. Boss, Ceres.; Miss L. W. Strentzel, Flora; Miss Mary Holliday, L. A. S.

THE *California Granger* has just entered upon its second volume. The *Granger* has done good work, and is an earnest advocate in the cause of reform. The subscription price has been advanced to $2 a year.

A THOUSAND Granges, with 60,000 members, are the figures of the Patrons of Husbandry in Ohio.

RICE of the present seasons's crop in Louisiana has already appeared in the New Orleans market, being three weeks earlier than last season. The quality is better than that of any previous crop, and the quantity raised, notwithstanding the inundations in the spring which destroyed much of the planting, is larger than ever before. The quality of Louisiana rice has improved of late until now it sells in the market at the same prices as the Carolina product.

IOWA has an excellent prospective corn crop, but only three-fourths as many hogs as last year. Illinois will have one-third less corn than last year, and half as many hogs. In Wisconsin, Kansas and Nebraska, there will be a great falling off in both corn and hogs.

REPORTS of the corn crop throughout Azusa, El Monte, Nietos, Santa Ana, Westminister and elsewhere in Los Angeles county, are very favorable. A hundred bushels to the acre, it is thought, will be the yield, and certainly not less than seventy-five.

TEN tons of seed wheat were shipped from Portland last week, per order of the Russian Consul, at San Francisco, intended for transmission to Siberia, where it will be used for seed.

THE Alameda county fair is indefinitely postponed. The *Tribune* says, when it does take place, it will, perhaps, take place in a church with a grab bag attachment.

FRUIT hangs upon the trees in such abundance in the gardens of the houses at Nevada City that but little is for sale at the fruit stands.



Musa Pedestris.

No winged feet has she with which to climb
The white, far battlements of things sublime;
She only walks the ways
Trodden by working days.

Hers are no dainty fingers, soft and long,
Handmaids of art and ministers of song,
But worn with daily toil
And hardened by the soil.

She knows the story of a life which strives
For broken portions dropped by ampler lives,
Of harsh, degrading care,
Whose praise is only prayer.

Can such as she be mirthful in her mood
Or hope to be in all things understood—
Her heaven a patch of sky
Between walls bare and high?

The weariness and weakness hedge her in,
And city streets oppress her with their din;
Her heart is faint and sad
When other hearts are glad.

Her birds are caged, her voices of the night
Falser, perchance, for artificial light;
She treads no sweet soft grass
Nor hears the rabbit pass.

Then blame her not if she may never teach
In common methods of accustomed speech;
If there are notes of hers
Other than nature stirs.

Think only of the crying of a soul
Out of the depth where many billows roll,
And reach a helping hand
If thou dost understand.

—*S. W. Duffield.*

September.

A whispering silence broods o'er all around,
As in cathedral when the praise and prayer
Are lingering pulses on the waves of sound,
And naught disturbs but muffled heart-throbs there.
And stealing out from dusky, darkling wood,
Comes forth a matron shod in mossy shoon.
From off her brows she lays the binding snoon—
When lo! her chestnut locks float on the breeze
Like silken algæ on cerulean seas.
The flowers have hung their heads; but all gay things
That buzzing flit on busy, guazy wings,
To chant her beauties gratefully remember,
And hail our princess, timid, grave September.

—*Sallie A. Brock, in the Galaxy.*

A Negro Preacher's Idea.—Dar was de Fadder Jupiter. Now Jupiter, he used to get a bible in one han' an' a pra'r-book in de odder, an' a hymn-book under his arm, and den he'd start ont to see de widders an' de fadderless; one day I met old Fadder Jupiter, an' I say to him, "Fadder Jupiter, how many poun's of meat have ye prayed? How many poun's of augar have ye exhorted? How many cups of coffee have ye sung to dem poor widders and fadderless?" An' he says, "not one." An' den I say, "'Pears like, Fadder Jupiter, ye'll sing here an' pray dar an' ye'll pray every widder to death, and sing every fadderless chile to de grave, an' call in help to bury em'." An' den I tole him dat when he sung he mus' call a bar'l o' flour long meter, an' fur short meter tske a keg o' lard, an' fur partikler meter nice ham an' coffee, an' den he mus' take de Quaker pra'r-book, a two-wheeled cart, an' fill up de ole pra'r-book wid coal, an' when de cole wedder come he mua' drive de ole pra'r-book down to some widder aister's an' say, "Sister, I'se come to pray aix bushels ot coal wid ye; an' den open de cellah-doah, dump de ole pra'r-book an' pray de cellah full of coal."

Always Beautiful.—At a festival party of old and young, the question was asked, which seaaon of life is most happy? After being freely discussed by the guests, it was referred to the host, upon whom was the burden of four-score years. He asked if they had noticed a grove of trees before the dwelling, and said, "When the spring comes and in the soft air the buds are breaking on the trees, and they are covered with blossoms, I think, How beautiful is spring! And when the summer comes, and covers the trees with its heavy foliage, and singing birds are all among the branches, I think, How beautiful is summer! When autumn loads them with golden fruit, and their leaves bear the gorgeous tint of frost, I think, How beautiful is autumn! And when it is here winter, and there is neither foliage nor fruit, then I look up, and through the leafless branches, as I could never until now, I see the stars shine through."

Be Natural.—Whatever you are from nature, keep to it; never desert your own line of talent. If Providence only intended you to write posies for rings, or mottoes for twelfth cakes, keep to posies and mottoes; a good motto for a twelfth cake is more respectable than a villainous epic poem in twelve books. Be what nature intended you for, and you will succeed; be anything else, and you will be ten thousand times worse than nothing.—*Sydney Smith.*

The utmost we can hope for in this world is contentment; if we aim to anything higher, we shall meet with nothing but grief and disappointment. A man should direct all his studies and endeavors to making himself easy now and happy hereafter.

The Yellow Domino.

In the latter part of the reign of Louis XV of France, the masquerade was an entertainment in high estimation, and was often given at an immense cost, on court days and such occasions of rejoicing. As persons of all ranks might gain admission to these spectacles, provided they could afford the purchase of a ticket, very strange rencontres frequently took place at them, and exhibitions almost as curious, in the way of disguise or assumption of character. But perhaps the most whimsical among the genuine surprises recorded at any of these spectacles was that which occurred in Paris on the 15th of October, on the day when the Dauphin (son of Louis) attained the age of one-and-twenty.

At this fete, which was of peculiarly glittering character—so much so that the details of it are given by the historians of the day—the strange demeanor of a man in a yellow domino, early in the evening, excited attention. This mask, who had nothing remarkable as to figure, through tall rather, and of robust proportions, seemed to be gifted with an appetite, not merely past human conception, but passing the fancies of even romance.

> The dragon of old, who churches ate,
> (*He* used to come on a Sunday;)
> Whole congregations were to him
> But a dish of Salmagundi—

He was but a nibbler—a mere fool—to this stranger of a yellow domino. He passed from chamber to chamber—from table to table of refreshments—not tasting but devouring—devastating all before him. At one board he dispatched a fowl, two-thirds of a hare, and half a dozen bottles of champagne; and the very next moment, he was found seated in another apartment performing the same feat, with a stomach better than at first. This strange course went until the company (who at first had been amused by it) become alarmed and tumultuous.

"Is it the same mask, or are there several dresses alike?" demanded an officer of the guard, as the yellow domino rose from a seat opposite to him and quitted the apartment.

"I have seen only one—and by Jove, he is here again!" exclaimed the party to whom the query was addressed.

The domino spoke not a word, but proceeded straight to the vacant seat which he had just left, and again commenced supping, as though he had fasted for half a campaign.

At length the confusion which this proceeding created become universal, and the cause reached the ear of the Dauphin.

"He is the very devil, your highness!" exclaimed an old gentleman, "saving your highness' presence—or wants but a tail to be so!"

"Say, rather, he should be some famished poet, by his appetite," replied the prince, laughing. "But there must be some juggling, he spills all his wine and hides the provisions under his robe."

Even while they were speaking, the yellow domino entered the room in which they were talking, and, as usual, proceeded to the table of refreshments.

"See here, my lord," cried one, "I have seen him do this thrice?" "I have twice!" "I five times!" "I fifteen!"

This was too much. The master of the ceremonies was questioned. He knew nothing; and the yellow domino was interrupted as he was carrying a bumper of claret to his lips.

"The prince's desire is, that Monsieur, who wears the yellow domino, should unmask." The stranger hesitated.

"The command with which His Highness honors Monsieur is perfectly absolute."

Against that which is absolute there is no contending. The yellow man threw off his mask and domino, and proved to be a trooper of the Irish dragoons.

"And in the name of gluttony, my good friend (not to ask how you gained admission), how have you contrived" said the prince, "to sup to-night so many times?"

"Sire, I was but beginning to sup (with reverence be it said) when your royal message interrupted me."

"Beginning!" exclaimed the dauphin, in amazement. Then what is it I have heard and seen? Where are the herds of oxen that have disappeared, and the hampers of Burgundy? I insist upon knowing how this is!"

"It is, sire," returned the soldier, "may it please your grace that the troop to which I belong is to day on guard. We have purchased one ticket among us, and provided the yellow domino, which fits us all. By which means the whole of the front rank, being myself the last man, have supped, if the truth must be told, at discretion, and the leader of the rear rank, saving your highness' command, is now waiting outside the door to take his turn."—*Exchange.*

Never let your children strike each other. The habit of giving blows grows upon a boy; and if personal violence be his only way of showing his anger, the time may come when an unlucky blow will make him a homicide or even a murderer. Many a victim of the gallows has looked back to the time when he might have been taught not to lift his hand against his brother, but was not, and traces the connection between his shameful death and his mother's neglect to inculcate in him one of the chief lessons of Christianity.

"Would a little spirits now and then hurt me much?" asked a patient of his physician. "No," said the doctor, "a little spirits now and then would not hurt you much; but if you don't take any they won't hurt you at all."

Animals Like to be Loved.

If people could only know how delighted the dumb animals are to do anything to please those who love them, their society would be more cultivated, and the indifference to their feelings beyond supplying their wants, now almost universal, would hardly be found above the lowest level of humanity. How common is the remark, "he or she loves to be noticed." They all do, and long to show their attachment to their friends. Do not fear that because you are old, or homely, or ill dressed, they will dislike you. They are above the artificial disguises so necessary in human intercourse, if we would win respect or esteem, and will know you as you are, not as you appear. Sincere themselves, you would in vain affect a liking for them, and "come here, my pretty dog," would make as much impression as "get out!" and be treated with due indifference. They never misunderstand your *sentiments*, so difficult to impress on humans, but to them there is a charm in a soft voice which Byron was not perhaps the first to discover.

Every one must have noticed the impunity with which very young children torture their pets, the cats and kittens, yet these seldom "turn again and rend them;" the sure fate of an adult, who could only *intentionally* thus hurt their feelings. Can we doubt the wondrous intelligence of the mere "brutes made to perish?" See dogs or cats at play, biting and tearing each other, yet only with teeth and claws of cotton, and then witness a real "difficulty." Thomas in the nursery or on the roof! What a change! But it is not only the domesticated animals who recognize our kind feelings, 'tis the same with the lions, tigers, and though last, not least, the elephant in a menagerie. "*Experientia docet.*—*M. B. in Dumb Animals.*

Indirect Influence.

The amount and value of a man's influence, for good or evil, upon the world, will generally depend upon the character of his indirect and unconscious influence. Personal perfection, the Christian refinement of feeling and sentiment, faithfulness to all the duties of the more private relations we sustain, are inexorably demanded by the Almighty, and by the spirit of Christ's gospel, and demanded the more rigorously because the effect of fidelity does not end with ourselves, but goes forth and wins results that are precious in the sight of heaven, and which we may never know. The spirit of a person's life is ever shedding some power, just as a flower is steadily bestowing some fragrance on the air. Do you think that a pure and earnest prayer, in the sacred privacy of home, does not steal through the wall and vivify the atmosphere beyond? Do you doubt that a word of sympathy and a gift of charity, in a desolate chamber, publish a sweet influence upon the frosty air of human selfishness? Such things reveal and confirm character, and make the power of a person's presence who performs them more intense and beneficial. Influence depends less on our activity than on the qualities that lie behind our activity; as the planet attracts not by its motion, but by its weight. If we had lived as we ought to live, a power would go from us that would make every day a lyric sermon, that should be seen and felt by an ever-enlarging audience.—*T. Starr King.*

Why She Planted Roses.—A blacksmith had in his possession, but under mortgage, a house and piece of land. Like many others, he was at one time fond of the social glass, but was happily induced by a friend to join the temperance society. About three months after he observed his wife one morning busily employed planting rose bushes and fruit trees. "Mary," said he, "I have owned this lot for five years, and yet I have never known you before to care to improve it in this manner." "Indeed," replied the smiling wife, "I had no heart to do it until you gave up the drink. I had often thought of it before, but I was persuaded that should I do it, some strangers would pluck the roses and eat the fruit. Now, with God's blessing, this cot will be ours and we and our children may expect to enjoy the produce. We shall pluck the roses and eat the fruit." And they did. Their cottage was known as the prettiest in the neighborhood.

Charity does not remember old grudges—does not reckon up the evils which other men have done—does not keep an account against them, as it were, but willingly forgets such things, and treats them as if they had never been. This is a brief secret of a happy life. Forgive and forget. Let bygones be bygones. What is the use of keeping up an old quarrel? Who is the gainer by it? I suppose that you have been injured; but why should you cherish the remembrances of this? Cherish rather those remembrances which are pleasant. In the notebook which your memory keeps of the actions of others, let that page be a blank. —*The Dean of Chester.*

We should accustom ourselves to self-denial and patient waiting; for the bleasings God reserves for his people are like fruit which will be wholesome when it has time to ripen, but will certainly be noxious if greedily and prematurely gathered.

If there is a past in which men have done ill, let them have hope, for there is a future in which they may dwell.

London Costermongers.

The London costermongers are an institution by and in themselves. They are generally healthy looking men. Their stock of goods is displayed upon an oblong platform mounted on a pair of wheels. This they shove before them conformably to the shifting of the channel of trade. They remain in one spot or move about as is required. Sometimes they are on the move for hours without a pause except to attend to a customer. They do not cry out their wares; they do not come upon the sidewalk. They are to be found in the narrow and crowded thoroughfares as well as in the more retired portions of the city. They fight for right-of-way with the powerful omnibusses and leviathan drays, but I never heard of one of them being run over. And in turn they never run over the drays and omnibusses. They sell everything, but principally fruit and shell-fish. They nearly monopolize both of these markets. This is a good fruit year, I should judge, and that which is sold is similar in kind to ours, being cherries, pears, plums, grapes, apricots, strawberries and red raspberries. I believe they have no blackberries here, but the English eat strawberries just as we eat cherries, and between the acts in a play run out to the first costermonger and buy a paper of them. At the hotels and dining-houses strawberries are served with the stems, and the guest hulls them himself, or can eat them without hulling if he chooses.

But the costermonger who to-day sells fruit may to-morrow sell something else. He watches the market and popular taste, and rarely has the same article on sale several days in succession. To-day he is selling fruit; to-morrow, oysters and snails: the day after, fresh fish; and the fourth day, neckties. It is dreadful to think of; let us pass on.—*Cor. Dan. News.*

The Genius of the Belles of Society.—It is singular with what ease and absoluteness a revolution in fashion is effected; with what military strictness and precision an order which "takes" or which comes from an authoritative source is obeyed. Two years ago the belles of Saratoga were performing all the evolutions of the exaggerated "Grecian bend." Moving about, they looked like a company of giraffes suddenly gone into mourning; they affected curious angularities of the elbow, walked mincingly, and spoke in an affected voice. All that has disappeared as if by magic. The girl of the period now shows a slender back, perfectly straight and innocent of the smallest atom of tonrnure. All the looping up and bunching and patches have gone with the hustles, her dress skirt is often single, her bodice high and plain, and her sash—three yards of comparatively narrow ribbon (bonnet width)—tied at the side in careless loops and long ends. But it is head and face that exhibit the most marvelous change. Where are the multitudinous puffs and braids and curls? It is a small head now, the hair combed tightly up and disposed of in a single braid, which is laid straight and close to the back of the head. The front hair is combed smooth to the side of the face in little wavelets, not in masses, but as if it had been cut short, and when the eyes are turned up, the look of innocence and simplicity combined which this style imparts is extremely captivating. Transformation like this show of genius. It seems too bad that such smart girls should be thrown away upon men, or that their faculties should not be put to some better use.—*Jennie June.*

The Piano.—A celebrated writer on music begs that every girl, whether naturally musical or not should be taught the piano—at least for a time. He thinks that even if she has no musical gifts, the study is valuable as a means of mental training, and the opportunity of gaining a sympathetic companion for life should be afforded to every one. A good play on the piano not infrequently takes the place of a good cry, and a cloud of ill-temper had better break in song than in scolding. But if a person is not really musical, pianoforte instruction after a certain time is only wasted. Beyond becoming intelligently acquainted with the theory of music, there is nothing to be gained by long-continued musical study where there is no real taste for it. Why should not a girl try drawing, painting, or literary composition? Many a one with real literary or artistic taste has achieved excellence in nothing because her energies have been concentrated upon the piano, which she will never play well, or on songs which no one cares to hear her sing.

Home.—Think of what is meant by a happy home. It is the best likeness of heaven—a home where husband and wife, father and mother, brother and sister, child and parents, each in their several ways, help each other forward in their different course, as no other human being can; for none else outside the circle of our own home has the same opportunities, none else has known so well the character of any other, none else has such an interest at stake in the welfare, the fame and the grace and goodness of anyone else, as we have in the welfare of those who are bone of our bone and flesh of our flesh, in whose happiness and glory we ourselves become happy and glorious, in whose misery we become miserable, by whose selfishness, or weakness or worldliness we are decoyed down to earth, by whose purity and nobleness and strength we are raised up to duty, to heaven and to God.

Passionate persons are like men who stand upon their heads; they see everything the wrong way.—*Plato.*

About Dogs.

The Portland (Oregon) *Bulletin* relates the following: "We have just heard a story about an up-town dog, who makes it his every morning duty to go around to the front porch, hunt up the *Bulletin*, and carry it to his master in the sitting-room. A few mornings since he paid his accustomed visit to the front porch, but it so happened that the paper was late, and had not been left, so he returned without it. His master, thinking he had lost it on the way; gave him a scolding, and sent him back after it. After being gone about five minutes he returned with an *Oregonian* in his mouth, having stolen it from a door-step more than a block from home."

One Dog who Barks to Some Advantage.

A few mouths since, in coming down the Ohio river, a gentleman on the steamer informed me that a short time previous he was passing over the Grand Chain, a rocky shallow on the Ohio, near its mouth. He was conversing with the pilot. The night was dark; the shore could not be seen. The boat was moving very slowly—feeling her way. The pilot become restless and uneasy and ceased talking. Suddenly, however, the barking of a dog was heard far away on the shore. "There," said the pilot, brightening up, and quickly giving the wheel two or three turns, "I'm all right. I've steered by the barking of that dog every night I've passed here for five years." The cackling of geese saved Rome; and the barking of a dog told this pilot just where he was and what direction to head his boat to avoid the rocks; and this dog was the only beacon-light or buoy to show the faithful pilot how to direct his course to save his valuable cargo and still more valuable lives. A few weeks after this conversation, the Probasco, one of our finest steamers, struck on these same rocks, sank, and vessel and cargo were lost. —*Chicago Journal.*

A Dog Eleven Months Dying of Grief.

The proprietor of one of the hotels in Richford, Vt., has a dog in his possession who is slowly terminating his days in grief for the loss of his master. The previous proprietor of the hotel owned the dog, which has black-and-tan blood in his veins, for almost eighteen long years, and was very much attached to him. The attachment was reciprocated by the dog, and about a year ago the master was taken ill and died. During his sickness the dog was shut up in a stable for the purpose of keeping him quiet and of weaning him from his master, whose absence he would most likely loudly bewail in the manner peculiar to such animals. And shortly after the funeral the poor brute was liberated. He immediately instituted a search for the grave of his late master, and soon found it, and would not leave it for three weeks. He was subsequently taken home, and for the past eleven months has been well fed and kindly cared for by the present occupants of the hotel, but no amount of kindness and petting will elicit from him any manifestation of joy, and he will, no doubt, soon follow his deceased master.—*Brattleboro (Vt.) Phœnix.*

Notable Women.

Mrs. Stanton is a handsome woman. Miss Authony and Mrs. Livermore are both plain. Maria and Jane Porter were women of high brows and irregular features, as was also Miss Sedgewick. Anna Dickinson has a strong masculine face; Kate Field has a good-looking face, though by no means a pretty one; and Mrs. Stowe is thought to be positively homely. Alice and Phebe Cary were both plain in features, though their sweetness of disposition added greatly to their personal appearance. Margaret Fuller had a splendid head, but her features were irregular, and she was anything but handsome, though sometimes in a glow of conversation she appeared almost radiant. Charlotte Bronte has wondrously beautiful dark brown eyes and perfectly shaped head. She was small to diminutiveness, and was as simple in her manner as a child. Julia Ward Howe is a fine-looking woman, wearing an aspect of grace and refinement, and great force of character in her face and carriage. Laura Holloway resembles Charlotte Bronte both in personal appearance and in the sad experience of her young life. Neither Mary Booth nor Mariau Harlan can lay claim to handsome faces, though they are splendid specimens of cultured women, while Mary Clemmer Ames is just as pleasing in features as her writings are graceful and popular.—*Ex.*

THE French minister at Tangiers was recently obliged to make presents to the women of the Sultan's harem. He was at some loss what to send; jewels? they have enough of them; embroidered silks and muslins? they have more than they want. He determined to send them a mechanical doll. He ordered one from Paris. It is three feet high, and is the very picture of a young girl twelve years old. It is dressed in the most fashionable and expensive manner of Parisian loretes. It moves its eyes, says a few words, plays with a fan and eye-glass, and as it walks launches right and left piquant glances and makes pretty mouths. The women of the harem had no sooner seen it than they shouted and clapped their hands for joy. They never tire of seeing it.

PEOPLE often say of a man that he is a cunning fellow. This can never be true, for if he were, nobody could find it out.

Young Folks' Column.

Mamie's Ring.

Johnny Muggins gave it to me—
Johny's dead, you know;
Got runned over by an engine
'Most a year ago.
'Bout a week afore it happened
Johnny says: "Look here,
Mamie, here's a ring I bought you—
Play it's gold, my dear."

"Wear it on your 'gagement finger,"
Johnny says to me,
Then his face got red and smilin'—
"When we both got big," he whispered
Stoopin' to my ear,
Like as not ther'll be a weddin',
Won't there, Mamie dear?"

Now he's gone I can't help thinkin'
Sometimes in the night
That he ain't so far off nuther,
Though he's out of sight;
And it worries of me dreadful
That this precious thing
Won't stay bright for all my ruhhin'—
Poor dear little ring.

Johnny's hands was most times dirty,
And his clothes was, too;
But his eyes was clear and honest,
Lovin'-like and true
There's so many boys that's wicked,
Why should Johnny die?
Keeps me winkin' desp'rit sometimes,
So as not to cry.

When I heard he'd been run over
I went quick to see;
Got there just in time to hear him:
Askin' after me;
Only just in time to kiss him;
He looked up and smiled,
Then he closed his eyes as peaceful
As a sleepin' child.

'Taint no use—I can't help cryin'
Oh, I loved him so!
Johnny dear—my boy—my darlin'—
Oh, how could he go?
P'raps some time I'll go to heaven;
If I do I'll bring
(So's he'll know his little Mamie)
Johnny's 'gagement ring.

—*Peleg Arkwright.*

Be True to the Little Ones.

Parents sometimes set very bad examples to their little ones in the way of not keeping their promises. Little Sallie asks you to bring her some candy when you come from your walk, and you, to please her, say "Yes." You have shopping to do, or you meet a friend; you pay visits, and the time passes. Before you notice it, you have left the candy store several blocks behind you, or you are on the car on your way home. The thought of Sallie's disappointed little face gives you a momentary pang; but you cousole yourself by saying, "Oh, I'll run out and get her some to-morrow. That will do just as well!"

It will do just as well! Your lightest promise, made to your youngest child, involves your honor quite as much as any promise you make to anybody in business or society. It would be far better to go back a mile, or two miles, even though you should be tired completely by the additional fatigue, than to break the most casual word spoken to a little child, to whom you are the representative in the world, and for whose training you are responsible to God. Be careful how you make promises or threats—but, having made, keep them.

Some people wickedly teach their little ones to tell lies, by imposing upon their infantile ignorance by talk of mythical black men, rats, dark holes, and terrific things generally, that will happen or come to them if they do or do not certain things. This, it seems to us, falls very plainly under what Jesus calls *offending* the little ones, and there can be no censure too severe for anything so cruel, so mean and so false. To sum up the whole matter: If you want your children to be true, be utterly true, as in God's sight, yourselves.—*Christian at Work.*

WHEN a man begins life, heaven is like a picture on the ceiling of a cathedral. He has to bend his neck out of shape to see it, and don't like it after he has seen it. Before long it seems to him like a good place in which to get away from hell, a kind of insurance office. Then it becoms a matter of sentiment. But at last, when the real toil of life comes, and God's love shows itself in his discipline, and the yoke is heavy on his neck, his suffering interprets heaven for him as he never saw it before. What a dry place heaven is to many until a father goes there, and a mother and a sister! Then it becomes popular. To many a man the door of heaven is shut until his little child goes up to open it for him. I have five up there. So we build our own heaven out of our griefs and pleasures, but we know that everything will be far better than we have sketched it.—*Beecher.*

"WHAT are you hallooing about, Bill?" said a mother at the stair-foot, one evening, after her two boys had been put to bed. "Please, mother," said Bill, "Jim wants half the bed." "Well," says she, "let him have it and you take the other half." "Yes, mother," says Bill, "but he will have his half out of the middle, and make me sleep on both sides of him."

A YOUNG blacksmith wrote his advertisement, stating that all orders in his business would be promptly executed; but it came ont, "All others in this business will be promptly executed." On seeing this fearful notice, an old blacksmith threw up his hands and exclaimed: "Has it come to this, after thirty years of honest toil?"

Good Health.

The Transfusion of Blood.

At a meetiug of the New York Medical Association, Dr. Frederic D. Lente read a paper on the "Transfusion of Blood." He said transfusion would be more successful if confined to appropriate cases. So far the operation had not been oversuccessful. Yet, notwithstanding this fact, it should not be abandoned; for, if even one case was successful, it should be regarded as a triumph of science. There were circumstances in which nothing short of transfusion would save a patient.

In the discussion which followed, Professor Fordyce Barker said that if transfusion was a resource which could be made helpful, by which a certain number of lives could be saved which would terminate fatally under any other circumstances, it was very important that the medical man should avail himself of it. Since his former researches upon the subject, he had been able to add to the list of recoveries after transfusion, so that the number now amounted to about one hundred and twenty-five authentic cases. Now the question is, as to the effect of transfusion in assisting recovery—whether the cases would have terminated fatally if this measure had not been resorted to? Those who advocate transfusion were not bound to become partisans for it. While the fact is not ignored that there was efficacy in other measures, yet transfusion might add an additional resource to our list of restorative measures—one which might prove successful when no other would.

The fact of failure in seventy-five per cent. of the cases did not militate against the propriety of using the means in the other twenty-five per cent. The question how transfusion was effective in preserving life, he would leave for physiologists to answer.

Dr. J. C. Dalton discussed the question of the real value of transfusion as a curative agent. In the case of an animal, or patient, exhausted by hemorrhage—so far exhausted that the pulse is imperceptible, intelligence very much diminished, and all the symptoms present of impending death—blood had been transfused, and the patient or animal had recovered. The apparent connection of the recovery with the transfusion was so direct, that he was led without qustion to conclude that transfusion was the cause of saving life. Dr. Dalton did not think it strange that, when patients had lost large quantities of blood, two or three ounces added would be sufficient to save life. There was in the human system from fourteen to eighteen pounds of blood. When one-fourth of the amount had been lost, it seemed almost impossible that life should be saved by the injection of so small a quantity. It did not strike Mr. Dalton in that way. In explanation of his reason, he likened the human system to a machine, in which latter there was a balance-wheel, the object of which was to carry the piston over the "dead point;" otherwise, if there be considerable resistance, the engine would stop. The injection of a very small quantity of blood after hemorrhage might be somewhat analogous to that.

TREATMENT OF CHRONIC DYSENTERY BY MILK-DIET.—The advantages of a milk-diet in diseases which leave anæmia and general debility in their course, have been often extolled by various authors, more especially by MM. Tochólies and Leclerc. Dr. Clavel, in his turn, in his inaugural dissertation, reports favorably concerning this treatment in chronic dysentery. He had observed this in warm climates, but believes that the same effects may be attained in colder regions. While the milk, by its nutritive properties, effectually combats the anæmia and general debility, it also favors the cicatrization of the intestinal lesions. Ass's milk, which is lighter and contains less butter than cow's milk, agrees better than any other, especially with those patients who also have an hepatic lesion, as in this latter case the bile, which plays so important a part in the emulsion of the fatty matters, is secreted and discharged in less abundance into the intestine. The milk can be administered pure or with the addition of a small quantity of lime-water. Treatment is commenced by giving one pint in 24 hours, which is increased in a few days to two or three pints.—*Revue Therapeutique.*

RESPIRATION.—In our atmosphere the oxygen is diluted with very nearly four times its amount of nitrogen, and all the air-breathing animals, including man, have become adapted to these conditions. If the amount of oxygen became less, a corresponding change would occur in the respiratory system, as is illustrated in the high lands of South America, where, by reason of the rarefied atmosphere, the amount of oxygen inhaled at each respiration is less than near the ocean level; and as a consequence, the human lungs are more developed there, and the inhabitants are remarkable for their largely developed chests, allowing them to make up by quantity for the quality of the inspired air. The reverse is also the case; it has been found that the effect of the compressed air (on those workmen whose constitutions allow them to withstand the pressure and labor for some length of time in the caissons for the foundations of the Mississippi bridge, at St. Louis, Mo., and the East river bridge, New York) was to narrow the volume of the chest, while deep respirations of the highly compressed air were painful.—*Sci. Am.*

Washing the Inside of the Body.

The following ideas of Dr. Jackson are good in a measure, but it should not be forgotten that extreme dosing with water is a decidedly weakening process. The principle is about the same as that involved in the Turkish bath—a little of it goes a great ways:

There is no cavity in the body which water is not fitted for, if you can get it in properly. Why, one of the very best things you can do is to wash your blood; and the great folly we commit in going through our lives from childhood to grave simply is that we do not wash our blood as we ought Infusions of coffee, tea, chocolate or cocoa, or cider or beer do not wash the blood, because with the fluid so taken in, something is taken in also which befouls and defiles the blood. Just let a man say to himself, it is Saturday night, I have worked hard all the week, and Sunday shall be a day of rest to me. I am now going to give my whole system, between this and Monday morning, a good thorough washing. So he begins to drink and drink, and drinks but little at a time; yet between Saturday night and Monday morning a healthy man can drink, without producing any distnrbance, a gallon of water. Now, let this come into and go through his circulation, through lungs and skin, and kidneys and bowels, the waste materials are carried out, and when Monday morning comes, if he jumps out of bed and gives his external skin a good washing, the water that he washes in will be foul. Or, if he prefers to test that question even more thoroughly, all he has to do is to take a clean sheet, and wetting it in good, soft, pure water, be wrapped up in it, and lie forty-five or sixty minutes, and then have the sheet washed in a tub of water, and it will color the water so that it will look dirty. The man has been washed inside; his blood has been washed. When you have washed his blood, tissues, bones, nerve, muscle, sinew, membrane and brain, and everything in him, he can defy all pestilence for that week. The washing of a person's inside is as necessary as the washing of a person's outside, and the washing of a person is twice as necessary as the washing of a person's clothes, and yet there are those who are very particular to have their clothes washed with great care who are not at all particular to wash themselves.

SYMMETRY.—The following proportions are those usually given in works on statuary and painting, and are generally known, but will bear repetition: The whole human figure should be six times the length of the feet. Whether the form be slender or plump, the rule holds good; and deviation from it is a departure from the highest beauty of proportions. The Greeks made all their statues according to this rule. The face, from the highest point of forehead where the hair begins, to the chin is one-tenth of the whole stature. The hand, from the wrist to the little finger is the same. From the top of the chest to the highest part of the forehead is the seventh. If the face, from the roots of the hair to the chin, be divided into three equal parts, the first division determines the place where the eyebrows meet, and the second the place of the nostrils. Hight from the feet to top of the head is the distance from the extremities of the fingers when the arms are extended.

NEW AND CONVENIENT METHOD OF CAUTERIZING. The eschar produced by nitrate of silver is often too superficial, even though the applications are frequently repeated. Del Greco recommends the use of a small cylinder or pencil of polished zinc. After applying the nitrate of silver the zinc is to be passed several times over the surface already whitened by the canstic. The parts immediately assume a blackened hue, and the canterizing action is seen to gradually become deeper. The eschar is detached in from 12 to 24 hours. The degree of destruction produced depends upon the thoroughness of the applications and the nature of the tissues to which they are applied.

LIFE.—We live literally by dying, and perpetually change every atom one by one. Life consists in perishing and renewing, and we are sustained by giving and taking. Every meal is a rescue from death, an instrument by which we stave off the inroads and waste which heat, cold, atmospheric effects and exercise make on our organic life. Dr. Board puts it thus: The golden decade is from 30 to 40; the silver decade, 40 to 50; the brazen, 20 to 30; the iron, 50 to 60; and from 60 to 70 we learn whether the iron is forged or only cast. According to the doctor's estimate, we are at our best from 38 to 46, when enthusiasm, judgment and experience are balanced. After that date enthusiasm declines, judgment grows timid, and though experience enlarges, there comes a time when it ceases to have any educating power.

SWALLOWING A TOOL CHEST.—It is reported that in the different prisons of Paris there are five or six deaths every year from the effect of swallowing what is known as an "escape-box." This remarkable box is made for the especial accommodation of prisoners. It is of polished steel, about three inches long, and contains turnscrews, hammers, silk thread and other implements necessary for escape. The box appears to be easily swallowed, but sometimes fails to reappear as intended, and the death of the victim is the result. But when it does pass the bowels, the lucky prisoner is prepared to cut the thickest iron bars and set himself at liberty.

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PRINCIPAL EDITOR.....W. B. EWER, A. M.

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SAN FRANCISCO:

Saturday, September 19, 1874.

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Dried Fruits.

E. D. Waters has placed on exhibition in the horticultural department a fine display of dried and hermetically sealed fruits, preserved at his works, situated two miles from Stockton. There are twelve samples of dried and candied fruits, dried upon a kiln constructed by Messrs. Waters & Swan. These samples will compare favorably with any we have ever seen, the pears and apples being especially good. The candied fruits are of superior quality. Mr. Waters is the first to place candied fruits on the market. There are several varieties of preserved fruit, hermetically sealed in glass jars. They have been put up with great care. Mr. Waters also exhibits seven varieties of jellies—apple, apricot, blackberry, plum, currant, crab-apple and grape. The capacity of the kiln upon which the fruit was prepared is about 100 pounds in twenty-four hours. Cost of kiln, $100.

THE ITALIAN CHESTNUT.—A correspondent desires information in regard to the cultivation of the Italian chestnut. Will some of our friends who are familiar with the nature and requirements of this product please contribute something on the subject, stating the distance apart to plant, the average yield per tree, the mode of gathering the nuts, their adaptability to this climate, etc.?

ON FILE.—"Seedlings, etc.," G. A.; "Inquiry," G. S.; "Letter to Boys," J. E. J.; "Physician Wanted," Sarah.

THE vine-growers around Monterey Bay anticipate a remarkably productive grape crop.

The Dairy Exhibit at the Mechanics' Institute Fair.

J. H. Hegler, agent for the dairy produce department of the California State Grange, has done the dairying interests of California—his consignors especially—good service in making an ample exhibit of their butter and cheese at the great Industrial Fair. It would have been well for other dairymen if they had come and done likewise. We do not propose to discuss here the question of premiums or no premiums; but we would suggest that if producers are justified in refusing to exhibit at Fairs where no premiums are awarded, on the ground that they cannot afford to meet the costs incurred without some chance for direct pecuniary remuneration, then such exhibitors as the State Grange agent, who come forward and exhibit in the face of this discouragement, deserve special credit. This reward of merit should be assigned to all the exhibitors at the Pavilion. We mention it more especially in this case, because the above mentioned establishment is the only dairy exhibitor at the Fair.

There is about one ton of cheese on exhibition; the whole amount offered thus far being from the

Petaluma Cheese Factory,

The proprietors of which are Payne, Killam & Co. This factory is not on the co-operative plan, and is not connected with the order of Patrons of Husbandry, any further than by consigning their cheese to the agency of the order in San Francisco. The present season is the first in which the Petaluma factory has operated. It is entirely on the Eastern principle, and is the first of the kind in the State. The factory is using the milk of 500 cows, making about 900 pounds of cheese per day. They make their cheese of different sizes, varying in weight from 8 to 80 pounds.

One of their largest sized cheeses was given away to the visitors at the Pavilion on August 29th. One of the proprietors of the factory, Mr. Payne, who has charge of the exhibit, was on duty, cheese-knife in hand, dispensing "dabs" of cheese to the pleased and "appreciative audience." The scene about the dairy stand on this occasion presented one of the liveliest and most satisfactory episodes that has been witnessed at the Pavilion. The hands that were eagerly reached forth to receive a morsel of cheese were truly of "all sorts and sizes," varying from the paw of the little hoodlum cub, to the jeweled fingers of the best dressed ladies on exhibition. Like all others who were hungering and thirsting for the good things of California, we took our a lotted portion from the sharp point of the cheese-knife, and, though comparatively fresh from the Mohawk valley, which is admitted to be second to no dairy district in the world, we coincide with the opinion of the audience assembled on this occasion, namely, that the cheese then and there dispensed was equal to the "good" grade of Herkimer county cheese, and only needed age to place it on an equality with the "best." It was not deficient in character; in regard to moisture it was all right; the flavor was good, with no gaseous suggestiveness about it; and the color was attractive. It lacked, however, somewhat in compactness of grain, and also in that "salvy" quality so agreeable to the tongue of the cheese critic. We are, however, willing to guarantee that the cheese tested, on the occasion alluded to, would give a satisfactory showing in this respect on being kept the proper length of time.

Mr. Payne informs us that the cheese thus cast upon the waters has brought him a good return after a few days, in the form of orders. He has recently received orders for four times the amount of cheese exhibited by him. He announces his intention of giving the visitors at the Pavilion an opportunity to prospect another of his eighty pounders. We would take this occasion to suggest that the California Cracker Co. have a fine display of their wares at the Pavilion in close proximity to the dairy department, and that it might possibly redound to *their* advantage to cast a barrel of crackers on the waves of public opinion at the Fair. It is to be hoped that we will not be suspected of having an ax, or any teeth, to grind in this connection. It is really from a business and social standpoint that we view the subject. Who goes in for a grand cracker and cheese festival at the Pavilion? It would give Mr. Payne the greatest of pleasure to "come down" on such a festive occasion.

The Petaluma factory use an Eastern made vat; and we would here suggest that this is an article that should, by all means, be made at home. It is extremely cumbersome, and expensive in transportation. There is no vat at the East that is acknowledged as *the* vat. New principles are being evolved, and improvements are being made continually, and there is no more reason why the dairy world should submit to one particular cheese-vat, than that the farming community should depend entirely on one churn or on one plow. Let us have some California cheese-vats, saving the cost of transportation, and allowing our own inventors and mechanics the credit and profits growing out of their construction. Our Petaluma friends use the heavy, banded tin cheese-hoop, and in making their cheese they use the San Francisco Union Box Factory cheese-box, which gives good satisfaction. Mr. Hegler also exhibits in this department

Four Boxes of Butter

From the dairies of S. C. Percival, Albert Fox E. Herald and H. Guldager, all of Tomales Bay. There are four brands of this butter. They are merely samples of the consignments that Mr. Hegler is continually receiving as agent for the Grange dairy produce department. These boxes of butter have the warning cards "hands off" placed upon them; but there is nothing said about pocket-knives, and visitors, can, and do, sample them without laying hands upon the invitiug, muslin-clad rolls. We confess having been among the tasters of this butter, and of having had our confidence in California butter confirmed thereby. The boxes containing the butter were made by Swan & Co., of the Union Box Factory, and are declared to be superior to anything of the kind ever seen in our markets.

Mr. H. informs us that the business of his agency is steadily increasing, and is now having as much dairy produce consigned to it as any house in the city of San Francisco. There are now on the shelves of Mr. Hegler's establishment four large cheeses from the Oakland factory; J. C. Risk, owner.

Dispute About the Wheat Estimate.

Alexander Delmar has published in the *Inter-Ocean* another letter on the wheat subject, criticising recently published predictions on the same subject by Kain, Jackson and James Sanderson, British writers. Mr. Jackson estimates that the world, outside of Great Britain, will have 88,000,000 bushels of wheat to sell, while the latter will have to buy only 64,000,000 to 72,000,000 bushels. He predicts a serious decline in the price of wheat, and reckons the amount that will be saved to Great Britain by this decline at $65,000,000. These estimates and conclusions Mr. Delmar criticises as follows:

First.—As to his estimate of the British crops, which he puts at 112,000,000 to 120,000,000 bushels, he gives no quantitative basis of acreage nor of average yield, as Sanderson and I have done, but quotes vague and fragmentary opinions from various local newspapers in England, and comes to a bold but insufficiently supported conclusion of his own in a lump sum of bushels having a range from minimum to maximum of no less than 8,000,000.

Second.—He bases the consumption of the United Kingdom during the ensuing harvest year, 1874-5, upon the population of 32,000,000; whereas, according to British official tables it will be nearly 32,500,000 in the midsummer of 1874. It will be considerably more during the year to come.

Third.—His estimate of the wheat crops, consumption and surplus of the rest of the world is based upon no evidence which he adduces or refers to, or that is known to exist. He simply asserts that, 'judging from accepted present estimates, the United States, Russia, Hungary, Germany, France and Turkey will have an aggregate surplus of 88,000,000 bushels of wheat."

Mr. Delmar also objects to accepting Jackson's estimate of the wheat crop of the United States as correct when we do not know what it is ourselves, much less what the surplus will be, and thinks that he has forgotten the famine in Turkey, which, according to the *Times* of Aug. 11th, was still raging, when he talks of the exportable wheat surplus of that country. Delmar says that, assuming the crop of breadstuffs in the United States this year to be large, and leaving the conclusion open to be defined by the movement of grain crops of Continental Europe, and estimating the current British wheat crop at 92,600,000 bushels, the demand for British consumption at 186,000 000 bushels, and the probable imports to the United Kingdom at 92,400,000 bushels, the conclusion is that the United Kingdom would import grain from the United States during the ensuing harvest year to the amount of 50,000,000 bushels.

THE SEASON OF FAIRS.—The fairs of the Napa and Solano Agricultural Society, the Bay District Fair Ground Association, the Stanislaus Agricultural Society, the Northern District and the Sonoma and the Marine Districts have already been held. They have afforded a goodly amount of wholesome gratification and substantial benefit. The great industrial exhibition at the pavilion in San Francisco is still in progress, to continue, probably, two weeks longer. The fair of the State Agricultural Society, at Sacramento, commences on Monday next. We shall publish the awards of premiums at all these fairs as we get them.

EXTRAORDINARY YIELD OF WHEAT.—The world is challenged to beat the growth of wheat mentioned in the subjoined statement made to us by Mr. Shaw, of Berkeley, owner of a ranch on Sherman Island. The land was leased the past year to his son (Mr. Lucien Shaw) and partner. From a measured piece of land of 11 acres 59,325 pounds of unsurpassed clean Australian white wheat, within a fraction of 90 bushels to the acre were sacked. The quantity of seed used on this particular piece of land was 60 pounds to the acre. Thus one pound produced 90 pounds.

A FARMERS' Building Association has been incorporated at Yountville. Capital stock, $5,000, in shares of $50 each.

THE new beet factory at Soquel has been completed.

The Solano and Napa County Fair.

EDS. PRESS:—Last Tuesday afternoon at half-past three I took passage on the "Parthenia," a newly built boat, and one that is thought to be the fastest on the course, and so it probably is in fair weather and smooth water. But on this occasion we had a rather rough passage, so that the "New World," although starting from San Francisco half an hour later, reached the wharf at Vallejo before we did. It was about six o'clock when we arrived, and when we touched the wharf there was not a solitary carriage or omnibus from any of the hotels in waiting for us, showing quite a contrast to the annoying bustle and life of most of our large cities. That same evening, and the next morning, I took a good look at the Pavilion, where a great number of articles were gathered together in tasteful array, well classified and suitably distributed throughout the hall (which is the old skating-rink).

The first thing that attracted attention inside was the names of the States, which were hanging high around the walls, each one over the STARS AND STRIPES, together with several other United States flags, showing a patriotic spirit in the arrangement. This was, doubtless, due to the worthy superintendent, Mr. George A. Poor. Beneath those emblems of our Union were paintings and pictures in great variety, the contributions of private citizens for the adornment of the Fair, all admirably arranged, and many of them of great beauty and merit, the naming of which in detail would occupy too much space for me to give or for you to publish.

Immediately in front of the entrance door were located nearly all of the popular sewing machines, such as the Howe, Wheeler & Wilson, Singer, Home and Florence. Each was attended by an expert, who exhibited to all the well-known excellences of his own favorite machine. A little to the left after entering were seen all sorts of canned fruits, and other articles in the grocery line, displayed by Mr. E. T. Starr. Four fine carriages and two elegant wagons, with splendid harnesses, were drawn up in order, one after the other, near the center of the hall, the workmanship of O. L. Henderson, of Vallejo. By the wall, on the left, were two long paper boats, or canoes, very neatly constructed, belonging to the Allert boat club of Vallejo. In one corner were many splendid specimens of patent-socket brooms, the work of Robinson, Fowler & Anderson of Vallejo. There was also a fine lot of boots and shoes, belonging to the Vallejo Manufacturing Company. Near by was choice furniture, two bedroom sets and a spring mattress, by G. P. Praisted, of Vallejo, who also exhibited Tilton's washing machine, and a new smoothing and fluting-iron of great utility. But we must not omit the exquisite specimens of penmanship of W. H. Tripp, who claims to have the only institute of penmanship (exclusively) on this coast. Nor must we omit Hodgkinson's fine buckskin gloves: nor Dannenbaum's nice embroidery; nor Miss Jennie Thompson's worsted embroidery; nor Miss Codie's needle work; and other specimens, the handiwork of Mrs. Farmer and Mrs. McLees.

There were also some half-dozen exhibitors of fruit, each of them having an extensive variety, and many choice specimens of grapes, pears, apples, figs, plums, etc., and some of them small berries, as well as dried fruits, almonds, etc., also preserves and jellies. Several large tables were covered with these specimens, and they presented a most attractive and luscious aspect. The names of the exhibitors were W. P. Durbin, Robert Brownlee, M. R. Miller, Ed. Frisbie and James M. Thompson. But while we cannot speak too highly of the skill, taste, neatness and variety displayed in the exhibition of the above named articles (the most of which were from Solano county alone), we must, at the same time, regret the slim attendance, both by day and night, during the first two days of the Fair. Nor was the attendance on the third day as numerous as it ought to have been. We can only hope that the last day will make amends for the neglect of previous days. The above is a succinct outline of what was to be seen in the Pavilion.

But out on the race-grounds there were not a few superior cattle and small animals, as well as horses, to be seen, some of them of great merit. It is a pity that the locality should be so far away from the Pavilion as well as from easy access to everybody—being three miles distant from Vallejo, and necessitating a carriage or horseback ride to and fro every day, or else the sacrificing one part of the Fair for the other. Great numbers who would have gone were thus kept away altogether,. Then, too, the different sorts of games and gambling to win the money of the unwary, or of strangers and the young, formed an unpleasant feature of the Fair.

The exhibitors of choice varieties of sheep, were R. A. Brantan, J. B. Hoyt, J. M. Thompson and Ed. Frisbie. The exhibitors of swine, were R. S. Thompson, A. T. Hatch and Cannon & Staples. Many varieties of poultry were shown by Ed. Frisbie, as also of ducks and pigeons. Mr. Frisbie and M. J. Durbin had also white and colored rabbits. Durham bulls, cows and calves were exhibited by L. B. Abernathie, Ed. Frisbie, G. Bragbetta, and Cannon & Staples. There were many fine horses and some exciting races of which we make no mention, being present but a short time and thinking the other part of the Fair of much greater importance.

W. W. T.

Vallejo, Cal., Sept. 10th, 1874

A Farmer at the Institute Fair.

EDITORS PRESS:—I am pleased to receive your kind invitation to continue my remarks upon the Fair and its attending experiences. Grandfather says he is "right down glad to see one o' my boys in print, and am sartain sure to call on them printer men afore I leave this ere place." But I don't dare to trust the good old man far off in the busy parts of the city, as he is getting rather slow in his motions, and is withal a little green in city ways, notwithstanding his ripe old age. As we started out to the Pavilion last week, in one of Woodward's one-horse cars, he had a solitary five-cent piece, and must needs pay his own fare just to get rid of it. He has been afraid of losing it for some days, and has taken it out of his pocket every night, to see if it was there. A friend told him he must not put it in the box, but must get a piece of paper from the driver. Following directions, he astonished himself by ringing the bell; astonished the driver by presenting the five-cent piece; and the driver astonished everybody by opening the door and scolding him for not putting the money in the box, and proceeded to put it there himself. I made a memorandum of the occurrence for the benefit of the railroad companies generally. It reads thus: Uncivil car-drivers are honest in proportion to the squares of their gruffness." The same driver threatened to stop all night on the track to make a couple of delinquents pay up their fare for riding to the Fair, where we now bring up.

We made our way to where the FAIR DAILY was being printed, for paterfamilias desired to see his progeny in print, "and I heern the editor's picter was going to be in it pretty soon," said he. As he watched the "fly" so swiftly laying down the manifold thoughts of the editor and his correspondents; as he saw the cards and advertisements of the enterprising business men of the city duplicated so rapidly; and as he peered across at the apparently still more rapid motions of the folder, he changed his tobacco silently from one side of his mouth to the other, and studied. I soon found out what he was speculating upon. Suddenly turning to me, he said, "That picter in our old book of old Ben Franklin's press was just like a cider press. Didn't they have these kind then?" And I explained to him as well as I could the various improvements in the printing line from the first presses that obtained their power from a simple screw worked by a lever, up to the present style of cylinder presses, as exemplified by that now in use in the Pavilion. Could a more striking example of the world's progress be placed before the eyes of the people than by putting the two presses at work side by side—Franklin's old press and your cylinder press? And the old man wanted to have his name printed by the little job press, but he was afraid the boy would spell Jethro with an i, and that would have spoiled his whole visit.

We tried to get a closer inspection of some of the machinery, but the crowd of women around those in operation was so great that we were forced to move off and take a turn in the galleries. We listened to the "music" beaten out of the pianos, and grandfather spoke my mind when he observed, "I wish they would quit that thumping and play a tune. Them fellers are jest like Zed Sawyer when he tries to play the fiddle; he's all the time a tuning it, and never gets to the tune."

The sewing machines particularly attracted his attention, and he looked from one to the other and tried to understand the difference. Patiently listening to the explanations given of the good qualities of each, he remarked, "I can't see much difference in any on 'em, and they all tell me just the same; 'pears to me one man could tend 'em all just as well as not. Ef your grandmother had had one of them, she needn't to have got so near blind sewing o' nights to make Jed's clothes to go to college in."

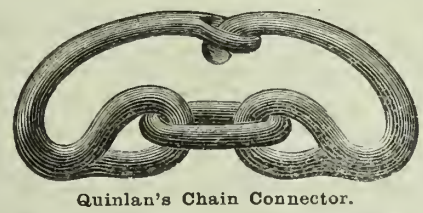
As we passed the beautiful display of furs, I saw the fire flash in his eye, and his cane raise to his head, and was just barely in time to stop him from knocking the shape out of a skunk-skin muff. In his younger days one of these sweet-scented deceivers had got the best of him, and the sight of his ancient enemy in any guise arouses all his evil passions.

He was lost in wonder as we passed along the beautiful array of fancy work and pictures, but complained that no name appeared upon so many of the productions of genius (or patience) there displayed. Whether the picture represented a town in Spain, a hamlet in Mexico, or an ancient Pueblo in California, was a secret only known to the educated few. If only one can know the name of the person or event sought to be represented, they can invest it with their own ideas of the surroundings proper to the time and place, and study it much more satisfactorily to themselves, though not always with so much credit to the painter. My grandsire particularly found fault with the picture of an eagle, represented to have just arrived at its nest with a lamb and a hare, and no eaglets there. "They don't do that," said he, "they don't carry game to the nest only when they have young ones." Make a note of this, Mr. Hill, and let the birds hatch out a brood for your next exhibit. He was specially delighted at the specimen of pen drawing by F. Seregni. It represents a landscape scene, with quite a body of water, and the artist's name, in huge block letters, lying in the foregrounnd as though for stepping stones across the outlet of the lake. "There, there! see that mouse that has crawled upon that block," said the old man excitedly. And if there had been a cat in the house I verily believe he would have gone for it—the cat. I cannot talk to you learnedly of the many beautiful scenes there represented, but was especially struck with that which I supposs represented a night combat in the time of Cromwell. The vigor, grouping, fidelity to nature in posture of the whole piece, is a study for a day.

And what an extraordinary work of patience and research is that representing the chronological history of man. I thought my grandsire would certainly have his bed and board brought up in the gallery, while he followed the line of descent from Adam, expecting to find the family name of Blankinses somewhere recorded upon it. But the band struck up "Home, Sweet Home," and we quietly submitted ourselves to the tender mercies of another honest "one-horse" driver, and bade you and the Fair good-night. VISITOR.

Tripartite Chain Connector.

The accompanying cut represents a tripartite tie link for chains, recently patented through the MINING AND SCIENTIFIC PRESS Patent Agency, by William Quinlan, of Mayfield, Santa Clara county, California. The link is so constructed that it can be used for connecting any two links of a chain in almost an instant, so as to unite two or more chains into one continuous chain, or repair a broken one. The construction of the link is easily seen by referring to the cut. The flattened, arrow-shaped bead of one of the U-shaped links fits into an oval, elliptical or other shaped ring, through which it is passed in the manner of an interlocking buckle, in order to connect the ends together. This makes a perfectly regular or even exterior on which there are no projecting points to catch or drag, the ends being turned to the inside of the link.



Quinlan's Chain Connector.

Thus the link can be made of any desired size, so as to correspond with the links of a chain of any size. These chain connectors will be a great convenience to teamsters and drivers, as they can mend a chain in a moment in the dark, so as to render it equally as serviceable as before it was broken. The link also serves as a coupling in many places, thus placing in the hands of lumbermen, teamsters, millers, carmen and others, a really serviceable, useful and convenient implement. To connect the links of a chain, or two separate chains together, the arrow-shaped bead is disengaged from the ring so as to open the link and allow the arms of the U-shaped rods or bars to swing apart. The end links of the chains are then hooked into the U-shaped rods, and the ends of the rods are buckled or linked together, so that the tie link will form one of the links of the chain, and unite the ordinary closed links, thus repairing or connecting the chains or pieces of chain. It will be noticed that by bending the ends of the long arm of the U-shaped rods inward toward the link in the middle, a partition is formed which prevents the links from changing ends or getting entangled, while it permits the link to pass through any opening, or over a pulley, through or over which the ordinary chain links will pass. This link can be used for many other purposes, such as a tug attachment to single-trees, clips and for other similar fastenings.

THE sugar crop in Louisiana is but about one-fifth what it was before the war. But the rice crop has been increased from 10,000 to 100,000 barrels. One man can attend to 12 acres of rice, yielding $1,220, and only seven of sugar, yielding $930 as the average. Hence less of the one and more of the other is now grown.

THE sum of $700,000 is expended annually in the city of Minneapolis, Minn., for flour barrels. One mill firm alone pays about $125,000 annually for cooperage.

Mending Cracked Bells.

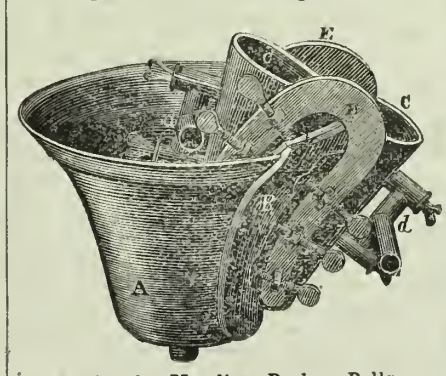
Daniel L. Riggs, of Salem, Oregon, has recently invented a process for mending cracked or broken bells, which is rather ingenious. The fracture in the bell is mended in such a manner that the brass is homogenons throughout, and the tone of the bell is preserved. Metals have heretofore been soldered or turned together in mending bells, but these means have failed to make the brass homogenons, and the tone of the bell is destroyed.

The arrangement by which the bell may be mended may be seen by referring to the engraving.

A is the cracked bell, to the outside of which the inventor molds from plumbago and fire-clay, or any suitable substance, a furnace, *C*, which passes around each side of the bell, and has a chamber, the center of which is contiguous to the crack. Inside of the bell is constructed a combined furnace and mold, *C* and *B*, which has a diaphragm passing across the bell, and making the furnace-chamber. Commencing at the top of the crack and extending to its bottom is made a mold, *B*, in the curved side of the furnace, the opposite side of the mold being formed by the convex side of furnace, *C*, which bears against the outside of the bell. *E* are clamps which fasten the two parts of the mold to the cracked bell.

The operation is as follows: The furnace-chambers, *C*, *C*, being supplied with fuel and ignited, a blast is thrown on them until the edges of the crack are fused and united, the deficient metal being supplied by other metal already melted and prepared, poured into the mold, *B*.

This method is simple, while at the same time it is ingenious. By this process the old cracked Liberty bell, on Independence Hall, Philadelphia, can be made as good as new, so that it may be made to ring again in 1876, as it did in 1776, with a clear, resonant peal



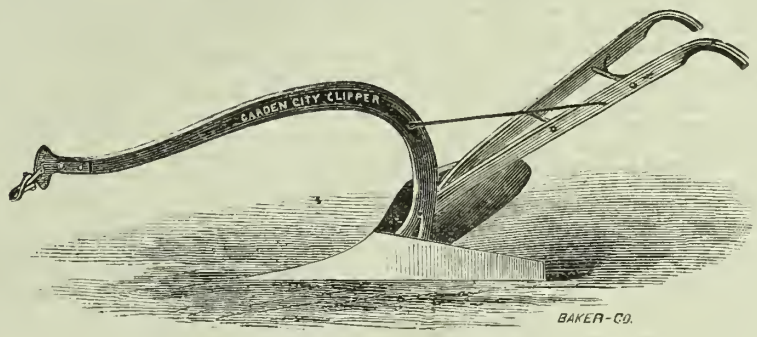
Device for Mending Broken Bells.

Garden City Clipper Plow.

Among the first-class plows exhibited at the Mechanics' Institute Fair is the "Garden City Clipper Plow," a cut of which we herewith present to the readers of the PRESS. This implement is exhibited by Linforth, Kellogg & Company, and has been greatly admired by the visitors at the Pavilion for its mechanism and for the material used in its construction, and its reputation proves that its working merits are equal to its appearance.

One of the claims for this plow is that the landsides as well as the mould boards and shares are all cast steel. The beam is of iron, and for this as well as for other parts the best material is used. Another of its advantages is that it does not clog in long stubble or trashy ground.

Parties desiring a right or left hand Clipper plow can procure what they want by so stating in their orders.



GARDEN CITY CLIPPER PLOW.

EASTERN MONTANA DISTRICT FAIR.—The Annual fair of the Eastern Montana Agricultural association, will be held at Gallatin City, commencing on Monday, September 28th, and continuing six days. The directors of the Association are exerting themselves for the success of the fair; the premium list is liberal in its various departments, and the indications are that this will be one of the best fairs ever held by the association.

SAN LORENZO GROVE.—This is a delightful place for a picnic, close by the station on the C. P. R. R., at San Lorenzo, not far from Hayward's.

The Vallejo Fair—Award of Premiums.

The premiums awarded at the Napa and Solano Fair concluded at Vallejo, Sept. 11th, are as follows:

Stock.

Class No. 1 — Thoroughbreds — Premiums offered, $5,117; no exhibits. Class No. 2—Horses of all Work—Premiums offered, $88. Best stallion and four colts, Peacock, owned by L. D. Burgess of Vacaville, $15; best sucking colt, May, owned by George F. Berry of Suisun, $3; best stallion, Granger, owned by A. Safley of Calistoga, $8; best mare, Mad Sallie, owned by Henry Groot of Suisun, $10. Class No. 3—Graded Horses—Premiums offered, $65. Best stallion, Peacock, owned by L. D. Burgess of Suisun, $10; best mare and colt, Nellie, owned by L. D. Burgess, $8; best mare, four-year-old and over, Baltimore Belle, owned by John Nelson of Vallejo, $8. Class No. 4—Draft Horses—Premiums offered, $47. Best Stallion, Lakeville Scotchman, owned by Thomas Allison of Rio Vista, $8; best mare, Maggie, owned by John Wilson of Vallejo, $6. Class No. 5.—Roadsters—Premiums offered, $47. Best stallion, April Fool, owned by Edward Frisbie of Vallejo, $8; best mare, Kitty Clyde, owned by John Wilson, $6; best golding, Rob Roy, owned by M. I. Duroin of Napa, $8. Class No. 6—Carriage and Saddle Horses—Premiums offered, $52. Best double team, Granger and John, owned by J. B. Hunter, of Vallejo, $8; best saddle mare, Jennie Ashland, owned by L. Durbin, $5.

Class No. 7—Thoroughbred cattle—Best Durham cow, Alice, owned by L. B. Abernathie, $10; best heifer, Beauty, owned by Cannon & Staples of Suisun, $8; best bull calf, Mark Twain, owned by L. B. Abernatbie, $6; best Durham bull, Gold Dust, owned by J. M. Thomson of Suscol, $10; best four-year-old bull, Idaho, owned by L. B. Abernathie, $8. Class 8—Graded stock—Premiums offered, $45. Best Durham bull, one-year-old, Ranger, owned by Cannon & Staples of Suisun, $4; best Durham heifer, one-year-old, Bessie, owned by E. Frisbie of Vallejo, $4; best Durham calf, Josie, same owner, $3; best two-year-old Durbam beifer, Kate, same owner, $5.

Class 9—Sheep — E. Frisbie, Napa, best Leicester buck, $8, and best three lambs, $6. R. A. Branton, Dixon, French Merinos, best buck, $8; best two ewes, $3; second best two ewes, $5; best three lambs, $6. J. C. Hoyt, Suisun, Spanish Merinos, best buck, $8; best two ewes, $8; best three lambs, $6.

Class 11—Swine—A. T. Hatch, Suisun, best Poland China boar, $8; best boar six months and over, $4; R. S. Thompson, Napa, best Berkshire boar, $6; best Berkshire sow, $6; best sow, Nellie, two years and over, $6. Cannon & Staples, Suisun, best pen of pigs, four months old, Poland China, $5.

Grain, Vegetables, etc.

Exhibit of grain in sheaf, James M. Thompson; potatoes, R. E. F. Moore; beans, Edward Frisbie; peas and beans, R. E. F. Moore; sugar beets, James M. Thompson; mangel wurtzel beets, E. Frisbie; blood beets and carrots, R. E. F. Moore; corn on stalk, Peter Long; cabbages, R. E. F. Moore; display of vegetables, E. Frisbie.

Class Two—Fruit—Largest and best display of fruits, M. R. Miller; display of apples and pears, James M. Thompson; single variety pears, M. R. Miller; collection plums, R. E. F. Moore; display quinces, John Deming; largest collection grapes, M. R. Miller; collection figs, E. R. Thurber; collection almonds, J. M. Thompson.

Class Three—Dried Fruits and Preserves—Exhibit dried fruits, Mrs. E. Frisbie; dried pears, Mrs. J. M. Thompson; dried apples and peaches, Mrs. E. Frisbie; dried plums and apricots, Mrs. R. E. F. Mooro; dried quinces, cherries, canned fruits and preserves, Mrs. E. Frisbie; canned vegetables and honey in comb, Mrs. R. E. F. Moore; jellies, Mrs. J. J. Bergin.

Class Four—Butter and Cheese—Fresh and packed butter, G. Braghtta.

Class Five—Wine, Cider and Ales—Best ale, porter and cider, F. Micbaells; soda water, James McGarvery.

Class Six—Domestic Manufactures—Furniture and upholstery, G. P. Plaisted; gloves, Robert Hodgkinson; boots and shoes, Vallejo Boot and Shoe Company; brooms, Robinson, Fowler & Co.; wasbing machines, J. Biggs; ship model, Walter McLeod.

Class Seven—Carriages, Buggies and Wagons—Carriages, wagons and buggies, O. L. Henderson. Special mention is made of a patent neck-yoke, invented by Geo. C. McMullin, of Suisun Valley.

Class Eigbt—Saddlery and Harness—Exhibit of carriage barness, O. L. Henderson; saddle, G. B. Rickhart.

Class Nine—Agricultural Implements—Harrow, O. L. Henderson.

Class Ten — Collection of Oil Paintings — Rush Lattin; specimen California landscape, A. Gorham; collection of photographs, J. G. Smith; pencil drawing, Miss Maggie Brownlee; penmanship, W. H. Tripp; waxwork, Miss Ettie Thompson; sewing-machine work, Howe machine; sewing machine for all purposes, Wheeler & Wilson; specimen portrait painting, Rush Lattin.

Class Eleven—Embroidery, Needle Work, etc.; premiums offered, $70.—Worsted picture, Mrs. E. J. Moseby; worsted embroidery, Mrs. James M. Thompson; raised work, Mrs. E. J. Moseby; tufted work, silk embroidery, Mrs. E. H. Sawyer; silk embroidery, Mrs. E. H. Sawyer; cotton embroidery, Mrs. E. H. Sawyer; transferred work, crochet work, Mrs. E. H. Sawyer; tatting, Mrs. E. H. Sawyer; knitted lace, Mrs. A. B. McCarty; hem stitching, Mrs. E. H. Sawyer; knitted stockings, Mrs. A. B. McCarty; darning, Mrs. A. B. McCarty; rag rug, Miss Bella Cordia; lady's dress, Mrs. A. B. McCarty; child's dress, Mrs S. M. Massey; quilting and patchwork quilt, Mrs. Peter Long, Suisun valley; display of millinery goods, Mrs. S. M. Massey; gent's shirts, Mrs. R. E. F. Moore; wasbing, Mrs. E. H. Sawyer; child's sewing, wasbing and ironing, Miss Jennie Frisbie; patchwork quilt, by a miss under 16 years, Miss Grace Hilborn; largest variety of needle work, Mrs. A. B. McCarty; Spanish needle work, Mrs. Nelson Vanderlip.

Class Twelve—Bread, Crackers and Confectionery—Home made bread, Mrs. R. E. F. Moore; bread made by a miss under 16 years of age, Miss J Frisbie; exhibit cakes, Mrs. J. North; cake, by a miss under 16 years, Miss Mary Moore; tarts, Mrs. R. E. F. Moore and Miss Mary Moore; confectionery, G. A. Blank.

Class Thirteen—Plants, Bouquets, Wreaths, etc.—Exhibit gladiolas, Mrs. James M. Thompson; pot plants and collection of ornamental shrubbery, Mrs. A. B. McCarty.

Class Fourteen—Children's Department—Exhibit silk embroidery, Miss Jackson; exhibit needle work, Miss Jennie Frisbie; patchwork, Miss Grace Hilborn.

SHORT-HORN CATTLE BREEDERS.—A meeting of the State Association of Short-horn Cattle Dealers was held in the Grand Hotel, Sept. 9th, with J. D. Carr in the chair. It was stated that the Directors of the State Agricultural Society were too lax in relation to the rules for the pedigree of cattle and payment of entry fees. Messrs. Carey and Swascy defended the action of the Agricultural Society. After some discussion it was decided to send to the State Fair all the thoroughbred cattle now on exhibition at the Bay District Agricultural Fair. It was also decided that the first sale of thoroughbred cattle, under the auspices of the Society, be held at San José on October 7th and 8th. The Association adjourned to meet in Sacramento on September 24th.

Miscellaneous.

Cloud Bursts.

Editors Press:—The recent disastrous local floods that have partially destroyed the towns of Eureka and Austin, Nevada, and have done a vast amount of damage to property in other portions of the State, have probably directed public attention to the somewhat singular natural phenomena popularly known as cloud bursts, water spouts, etc. The idea seems to be generally prevalent that the phenomena are nothing more than very violent thunder showers, and such indeed they truly are. But the causes that precipitate such immense falls of water over extremely limited areas are very closely allied to those which form water spouts on the ocean, or other extended bodies of water, *i. e*, air thoroughly saturated with moisture, meeting with cooler counter currents, and moving in circles of small radius. Water spouts are caused by currents of air moving in opposite directions, meeting and sucking up or raising the water in the vortex. They usually form a double cone; the upper one, with apex downward, consists of a very dense cloud. The lower one, with its apex turned upward, consists of a column of water sometimes several hundred feet in hight. They occur most frequently in regions subject to alternate storms and calms, and owe their origin to miniature circular storms or whirlwinds.

But to return to our Nevada water spouts, for such they really are, or would be, did a body of water exist for the formation of the inferior cones. We find in the Nevada basin all the conditions most favorable for their formation. During the summer and autumn months, miniature sand spouts can be seen almost any day on any of the sand or alkali plains so common in the interior basin. Sometimes several of them will be in sight at the same time, all moving in different directions, sometimes in right lines, more frequently in circles. The same causes operating in the upper currents of air form the so-called cloud bursts or water spouts.

About the middle of July, or perhaps in some seasons as late as the first of August, the rainy season sets in in Arizona and Northern Mexico, and the warm southern current of air, only partially deprived of its vapor, following the course of the valleys, is carried to the north far into the "Great Basin." In its whole course it passes almost altogether over bare alkali plains and valleys destitute of verdure and intensely heated; consequently, its temperature is constantly increased, and its capacity for moisture in a corresponding degree, until it becomes thoroughly saturated, when, meeting with the cooler currents from the north, it is suddenly condensed and precipitated in violent showers of rain and hail, often accompanied by wonderful electrical displays. Such storms are of almost daily occurrence during July and August. In early morning the sky is very clear—not a cloud from zenith to horizon; about 10 o'clock light, fleecy clouds begin to gather over the mountain ranges, and so quick is the condensation of vapor, that in less than 30 minutes the whole heavens will be covered with dark masses of thunder clouds (cumuli).

Most of these storms, however, pass off without doing any damage, but occasionally the conditions are favorable for the formation of cloud-bursts or water-spouts. The southern currents of moisture-laden air meet with cooler counter currents and the storm, instead of passing quietly on its course, is deflected into a circle sometimes less than a mile in diameter, where it appears to remain stationary, sometimes for hours, apparently collecting and condensing all the vapor in the air for miles around, and in some cases actually pouring it through the vortex of the aerial maelstrom in a solid column to the earth below. Most usually, however, the discharge takes place in the form of hail stones, or rather lumps of ice sometimes more than an inch in diameter, intermingled with rain drops of wonderful size.

The sudden condensation of such immense quantities of vapor develops an unusual amount of electricity, and as a consequence all such storms are accompanied with violent electrical disturbances; vivid flashes of lightning quickly followed by loud peals of thunder succeed each other with great rapidity; at the same time innumerable electrical sparks shoot from cloud to cloud in quick succession, attended with a sharp crackling noise, plainly audible to a close observer. The rapidity of the fall of water is something remarkable; even the slopes of steep mountains appear covered with a sheet of moving water, sometimes more than an inch in depth, which, gathering in the bottom of some narrow cañon, moves forward with irresistible force, presenting a solid front 5, 10 or even 15 feet in hight, tearing up and sweeping before it giant trees, massive boulders, in fact, anything and everything that happens to be in its course. But such storms are not confined to the mountains alone; they occur quite as frequently in the valleys, but the conditions of level land protect property from the disastrous effects of a moving flood.

The writer was an eye-witness to a storm of the kind which took place on the 4th of August, 1873, in the valley near the south end of Pancake mountain. For at least four hours the storm seemed to center around one spot, from all points of the compass. The principal fall of water, or rather ice, covered a circular area not more than a mile in diameter, and must have been extraordinary, as the ground remained as white as in mid-winter for at least sixty hours, under a burning August sun. During the past summer one of these storms took place in the vicinity of Currant creek, where, from the testimony of reliable eye-witnesses, the fall of water must have approximated one-half inch per minute. Indeed, so great was it that the ground, a gentle declivity, was covered to a depth of 10 inches in less than thirty minutes. Another most prolific cause of these storms is a lack of verdure in the valleys, and of forests on the mountains. A. J. B.

Hamilton, Nevada, Sept. 10th.

Paper Bags.—Not many years ago these articles, so necessary in every description of retail business, were generally made by the consumer, and were but rarely purchased. Now the reverse is the case. They are but seldom made by the person using them; and, in consequence, a great trade is done in them, many persons being wholly employed in the business. Many patents have been taken out to produce them by machinery. They are thus made not only of the ordinary old-fashioned shape, but also with square bottoms, with rounded bottoms, with gusset sides. They are also made in endless tubes, and cut off in lengths. Perhaps the latest invention is a mechanical device for making paper bags in one piece from a roll of paper. The paper is folded in the direction of its length from the two sides, so that the edges overlap each other about an inch in the center, the edges being pasted together. The paper is drawn through a folding-machine, with the seam on the upper side, centrally, by a pair of rollers, which feed it along to the devices for forming the bottom of the bag. The feed-rollers then stop until the bottom is formed and the bag cut off the required length, when they again feed it forward, pushing out of the machine the bag already formed; and so on, making a bag at every revolution of the machine.—*Technologist.*

Rain Gauge.—The success of Professor G. W. Hough, of the Dudley Observatory, in constructing self-recording barometers and thermometers, lends additional interest to his announcement of the successful construction of an automatic evaporometer and rain-gauge. The apparatus consists of a vessel two feet square and one foot deep, suspended on levers, and held in equilibrium by a small spring, the amount of change in the weight of the mass either from rainfall or evaporation being indicated on the scales of a delicate balance. In order to secure the mechanical record of the hourly variations in the weight of the vessels and of its contents, the professor causes the lever to vibrate between two platinum points, so placed that whenever a change in the weight of the vessel by a given amount (say ten grains) takes place, a magnetic circuit will be established, passing through an electro magnet. A micrometer screw will then be operated by means of clockwork, thereby tracing a curve on a revolving drum, precisely as in the case of the self-recording barometer and thermometer. —*College Courant.*

Wooden Pneumatic Dispatch Tube.—The former dispatch tube which was laid between the Capitol and the government printing office, in Washington, proved a failure. It was a cylinder of wood, bound together by iron bands, and covered with tar. It was placed so deep that the superincumbent earth crushed the tube. A new tube is now being laid which, on the outside, is a rectangle twenty inches wide and twenty-three inches high. On the inside, the corners being cut off, the cross section is octagonal. The inside hight is nineteen inches. To make this tube air-tight, it is first covered with tar. The carrier, which is to move through the tube, is made of zones of wood riveted together. There is an exhaust engine at one end of the tube. The carrier has traveled one thousand feet in one and a-half minutes. The average grade as far as the construction has proceeded is about six feet in one hundred.

Rubber Horse Shoe.—The invention of a rubber shoe for horses promises much. The new form of shoe is designed as a substitute for the iron shoe, and as a means of preventing the many maladies to which horses' feet are subject. The inventor claims that horses suffering with cracked or contracted hoof, and similar painful hurts, are quickly cured by the substitution of the rubber covering for the unyielding metal shoe. The elasticity of the former allows the hoof to remain in its natural shape while protected from abrasion against pavements by the heavy rubber sole beneath. As compared with iron shoes, the cost of the rubber ones is about one-third more, and their weight is some 40 per cent. less. Sixteen sizes are manufactured, so that accurate fits may be obtained. With reference to wear the durability, owing to the fine quality of rubber used, is very great.

Chloroform vs. Petroleum.—The addition of one part of chloroform to five of petroleum renders the latter incapable of combustion until the former has evaporated. In an experiment, a litre of burning petroleum spread out over a surface of ten square centimetres was extinguished by throwing upon it fifty cubic centimetres of chloroform.

Curd soap is made by using tallow for the grease and soda for the alkali

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Value of Iron Waste.—A very important, but until quite recently neglected, constituent of the waste-heap, ie the old iron, battered saucepans, old pails, rusty hoops, horse shoes, and nails from the road. All soldered articles have the solder extracted from them, as it is more valuable than the iron, and the cheaper metal is then melted. The horse-shoe nails are not mixed with the common cast-iron, as they are much sought after by gun makers, for the purpose of making stub-twist barrels. Scraps of iron, if ie found, may be made very useful in securing the copper in the streams washing veins of copper pyrites. Pieces of battered iron are placed in tanks, into which these are collected; the copper, under these circumstances, incrusts the iron, and in process of time entirely dissolves it, so that a mass of copper takes the place of the iron, and the residuum, in the shape of a colored deposit, is at times taken out, dried and smelted. Thus, from the merest and apparently worthless waste, a large value is realized. — *Railway Register.*

M. Werdermann's Process for Resharpening Files.—Well-worn files are first carefully cleaned with hot water and soda; they are then placed in connection with the positive pole of a battery, in a bath composed of 40 parts of sulphuric acid and 1,000 parts of water. The negative is formed of a copper spiral surrounding the files, but not touching them; the coil terminates in a wire which rises towards the surface. This arrangement is the result of practical experience. When the files have been in the bath 10 minutes they are taken out, washed and dried, when the whole of the hollows will be found to have been attacked in a very sensible manner; but should the effect not be sufficient, they are replaced in the bath for the same period as before. Sometimes two operations are necessary, but seldom more. The files, thus treated, are to all appearances like new ones, and are said to be good for 60 hours' work. M. Werdermann employs 12 medium Bunsen elements for his batteries.

Leaf and Flower Impressions.—Oil a piece of white paper on one side; hold the side that is oiled over a lamp or pine knot smoke till quite black; place the leaf on the black surface, as the veins and fibers of the leaves show plainer on the under part; now press it on all parts of the leaf with the fingers; then take up the leaf and put the black oiled sides on the page of a book (made for leaf impressions) with an extra piece of nice paper on the top to prevent smutting the opposite page; press it a few moments; they remove the green leaf, and the impression will be left on the page as beautiful as an engraving. Flowers of single corolla can be pressed in like manner. Many of the geranium leaves make beautiful impressions. The impression book can be made still more interesting by giving botanical classifications of each leaf and flower.

Indelible inks intended to be used with types or stencil plates, are generally made without nitrate of silver. The presence of a silver salt in a marking ink would necessitate the use of silver or silver-plated types and plates. The two following are recommended; 1. Sulphate of iron, 1 drachm; vermilion, 4 drachms; boiled linseed oil, 8 drachms. Triturate together until the mixture is perfectly smooth. 2. Sulphate of manganese, 2 parts; lampblack, 1 part; sugar, 4 parts, with water sufficient. The manganese, lampblack and sugar are first rubbed together into a fine powder and enough water is added to form a thin paste. When this ink is used, it should be allowed to dry on the cloth and then be well rinsed in water.—*Druggists' Circular.*

Cleansing Bottles with Fragments of Iron. Attention has been repeatedly called to the danger of cleaning bottles with shot, as is commonly done, many cases of lead poisoning having been caused by a stray shot left after the process. M. Fordus, in the *Comptes Rendus*, advocates the use of clippings of iron wire instead of the shot. They are easily got, and clean the bottles quicker and better than lead does. The iron is attacked by oxygen, but the oxide does not cling to the glass and is easily removed by rinsing. In cases where even the minute trace of iron left behind would be objectionable, clippings of tin may be used.

Disinfectant and Mouth-Wash.—A very weak solution of permanganate of potash will destroy instantly any taint from diseased teeth or imperfectly-cleaned plates, and should always be used to rinse the spittoon in hot weather every time it is made use of. It is cheap, satisfactory, almost tasteless, not poisonous, and quite free from smell. It may be satisfactory to some to know that this will remove the taint of smoking from the breath, if need as a mouth-wash.—*Hints for the Laboratory.*

Sheet Metal Boxes.—The features of novelty of a recent invention consist in making certain parts of thin sheet metal boxes, namely the hinge and the spring catch: First, by bending the edge of the back of the box and cover over a piece of wire so as to form a hinge, and, secondly, in bending over the front edge of the lid or cover and also bending the top edge of the front part of the box, so that when the lid is forced down it forms a secure spring fastening.

A New Fabric.—Cotton and wool are first carded separately on separate carding engines, and then mixed by pressing them together through a third carding engine, and the sliver obtained is subsequently formed into yarn.

Testing Milk.

Since it has become customary for milk dealers to endeavor to palm off on their customers a minimum quantity of real milk, mixed with a maximum quantity of water, under the name of milk, it is sometimes interesting to compare different samples of such milk for the purpose of determining the amount of water added. English chemists have devoted considerable attention to this subject, because there a law exists punishing adulteration in food and medicine, and we shall frequently have occasion to refer to their observations. The specific gravity of milk, as indicated by hydrometers made for the purpose, does not serve to detect carefully-conducted watering. The average density of good pure milk is about 1.032. Since milk fat is lighter than water, the more cream the milk contains the lower its specific gravity, while skimmed milk has a higher specific gravity than unskimmed milk. Hence it is possible to preserve the normal density in watered milk by first removing a portion or all of the cream, and then adding just enough water to bring it back to its original density. To ascertain the amount of water added, it is necessary to determine by analysis the quantity of fat present in the milk. John Horsley, F. C. S., accomplishes this in the following manner: A glass tube, 11 inches long and three-fourths of an inch in diameter, is graduated from ten inches down, one-fifth of its length, into ten per cent., or hundredths. A tablespoonful, 15 c. c. or 250 grains, of milk is first poured into the glass tube,; a similar bulk of ether is next poured in, and the tube closed with a thumb or cork, and agitated for four or five minutes. An equal measure of alcohol is next added and the whole well shaken for at least five minutes more, when, on placing it in an upright position on a stand, the oily or fatty matter will rise to the surface and can be easily read off. Each line will correspond to 4.15 grains of solid butter, as proved by experiment. Milk which has 10 per cent. of cream will show two lines of butter oil, or 8.3 grains, for 250 grains of milk. If desired, the butter may be drawn off and weighed in a small platinum capsule.

Mr. Wanklyn prefers to evaporate 5 c. c. of the milk to dryness in a weighed platinum dish over a water bath. The operation requires at least three hours. The residue equals the total milk solids, and averages, with a sample of good country milk, 12.45 per cent. This residue is treated with ether and heated to boiling, and the solution poured through a small filter the operation of boiling and pouring off the etherial solution being repeated three times. The solution of fat is placed in a larger weighed dish, and the ether gently evaporated by placing it in warm water. When, toward the close, it becomes turbid, the dish is placed on a water bath and heated to 100° C. for a short time, until it is dry, when it is weighed. The weight of the fat, subtracted from that of the total milk solids, gives the amount of milk solids not fat, a very important datum, as it is the most constant quantity in milk analysis, and gives, by a very simple calculation, the extent of watering to which the milk has been subjected.

The determination of casein is usually unnecessary, but may be made to prove that the milk was adulterated with skim instead of water. The portion insoluble in ether is extracted with strong alcohol, then with boiling water, dried up in a water bath, weighed, ignited, the ash weighed and its weight subtracted from the previous weight of casein and ash. The result is crude casein, including, of course, the albumen. The use of skimmed milk is shown by the presence of more casein than the natural quantity, and less butter or fat.

The determination of the total ash is made by simply evaporating 5 c. c. of milk to dryness and igniting over a spirit lamp or Bunsen burner. If less ash is found than usual, chalk or or other mineral adulterant has been employed. —*Journal of Applied Chemistry.*

Corn Husk Frames. — An agricultural exchange has the following: Corn husk frames may be made very prettily and simply by taking pasteboard or thick paper to sew the husks on. Then select your husks; take fine white ones, but not the finest. Take a husk and cut into strips three-quarters of an inch wide and three inches long. Then double it together in a bow as in tape trimming. Put two rows of these around the inside of the frame. Next cut a piece the length of the bows and the width of the husks and bend the two ends together. Now take your needle and slit it very fine through the center, and then sew the two ends that you hold in your hand on the frame overlapping the row of bows; then take some more pieces of slitted work, and turn and go lengthwise of the frame—not crosswise as before. That forms the outer edge of the frame. Take a thin piece of board and make a frame. Place your glass between your paper frame and your board frame, and tack or paste your paper frame down smoothly. You will thus have a nice rustic frame. Beautiful little card baskets and lamp mats may be made in nearly the same manner.

Cleansing Bronze.—A dilute solution of caustic alkalies removes overlying dirt, and allows the green patina to become visible. Where the metal was not originally oxidized the alkali simply cleanses it, and does not promote any formation of green rust.

The incompatability of iron and quinine in wines, on account of their precipitating one another, is shown by a German chemist.

The Apiary.

Co-relation of Bees and Flowers.

The bees, Mr. Darwin says, have solved a difficult problem. They have made their cells of a proper shape to hold the greatest possible amount of honey, with the least possible consumption of precious wax in their construction. No human workman is skillful enough to do what a crowd of bees can do, working in a dark hive—make cells of wax of the true form.

The number of bumble bees in the country will depend upon the number of cats. How can that be? Because the number of bees is dependent upon the number of field mice, which eat the bees. Hence the more cats, the fewer mice, and the fewer mice, the more bees.

If the whole genus of bumble bees became extinct, or very rare, the heart's-ease and red clover would become rare or would disappear. How is that? Because bees promote the growth of those flowers. The visits of bees are necessary to the fertilization of some kinds of clover, and almost indispensable to the fertilization of the heart's-ease. Bumble bees alone visit red clover, as other bees can not reach the nectar.

In a word—no bees, no seed; no seed, no increase of the flowers. The more visits from bees, the more seeds from the flower; the more seeds from the flower, the more flowers from the seeds.

Nearly all our orchidaceous plants absolutely require the visits of insects to remove their pollen-masses, and thus to fertilize them.

Twenty heads of unprotected Dutch clover yielded 2,900 seeds. The same number protected from bees produced not one seed; 100 heads of unprotected red clover yielded 27,000, and the same number protected from bees not a seed.

A Poet on Bees.

The following quotation from the poems of the late Thomas Aird. editor of the Dumfries *Herald*, will show that the accomplished author was also a good apiarian:

But let us see our bees,
Before we turn into our ivied porch.
The little honey-folk, how wise are they!
Their policy, their industry, their work;
The help they take from man, and what they give
Of fragrant nectar, sea-green, clear, and sweet,
Invest them almost with the dignity
Of human neighborhood, without the intrusion.
Coming and going, what a hum and stir!
The dewy morn they love, the sunny day,
Softened with showery drops, liquoring the flowers,
In every vein and eye. But when the heavens
Grow cloudy, and the quick engendered blasts
Darken and whiten as they skiff along
The mountain tops, till all the nearer air,
Seized with the gloom, is turbid, dense, and cold,
Back from their far-off foraging, the bees,
In myriads, saddened into small black motes,
Strike through the troubled air, sharp past your head,
And almost hitting you, their lines of flight
Conveying, thickening as they draw near home;
So much they fear the storms, so much they love
The safety of their straw-built citadels.

Remember.—There are a great many more pounds of honey wasted than are gathered. This being the fact, we can with safety increase our present stock of bees from the two million bee hives now in use to perhaps five, not including the vast area embraced by the Territories. The demand for a good quality of box honey can safely be depended upon, at fair and remunerative prices. And when honey producing has become a thing of certainty instead of luck, as some would have it, we shall expect to see it supplied in all the stores as generally as other sweets. We are not painting a fancy sketch, but what we believe to be a fact.—*Moon's Bee World.*

Cold and Disease.—Russian winters are long and severe—much more so than we ever experienced in this country, but writers assure us that bees there are not injured by the cold, In the language of one—"they come forth, like the vegetable world, at once in full vigor." This is attributed to the *constancy* of the cold, by which they are kept in a dormant state all the time. Sudden and extreme changes are injurious. How does this tally with the doctrine that *cold* killed the bees during the last two winters ?—*Canada Farmer.*

Wildman says a person who has familiarized himself to bees can by means of the passion of fear impressed upon them, and by that dexterity in the management of them which can only be acquired by practice, manage bees as he pleases.

Italian bees are said to guard their hives against the moth-miller much better than the common black bees, and for this reason their combs are seldom injured by the moth.

Machine Wanted.—A correspondent of the N. Y. *Tribune* says: Farmers generally require a machine, I think, such as I have never seen or heard of, but of which I have especially felt the need, as it will save labor and utilize forage. It is this: Say a machine that will pulverize, or crush, or grind, with once handling, our corn crop, that will reduce the entire growth, cob, shuck and stalk, as fine as ordinary meal. After the corn is cut and put in stooks (twelve hills square is the habit generally prevailing in the West); then as soon as the stooks are dry enough, feed them entire into the machine, which might be similar to a grain thresher, and propelled by steam or horse-power. My object is to place the corn-stalks as well as the corn in condition for the cattle to properly masticate, digest and assimilate.

A Farmer's Wife at the Fair.

As my neighboring farmer has finished gathering his crops, gotten through threshing, grain all sacked and stored, hay baled and enough of it sold to pay his expenses, while he enjoys his *otium cum dignitate* looking about the city and observing the fine things on exhibition at the Mechanics' Fair, and has even sharpened his pen, and rubbed up his literary and academical hair and gone into corresponding for the *Mechanics' Fair Daily*, I trust a few lines from a farmer's wife may not seem a work of supererogation. And while he has "done" washing machines, and the wringers, the new style brooms, and the double-back-action churns, which I must admit are *so nice* that the butter will almost make itself. Still, I have all those minor beauties and conveniences for home consumption and inspection, for I too am in town for pleasure, and am intending to get my five dollars' worth out of the Fair, for five dollars would seem a large price to give for a ticket until after going through the immense building, and finding that a whole week of close observation would fail to even glance at the incomparable display; so I am seriously thinking of handing another V to the handsome doorkeeper, as I feel that five dollars is not a fair equivalent for all the pleasure I am enjoying. And the pleasant memories I shall bear away into my country home will lighten and cheer the days of coming toil, as the revolving seasons bring plowing and sowing, reaping and mowing; and last, and most fearful of all, the threshers, who, like the "Assyrians of old, come down like the thief on the fold," and all is hurry and tumult, steam puffing, machine rattling, and a myriad of hungry men to feed and dispatch on their threshing tour to the next ranch, where my sister woman is waiting to endure the same turmoil. In all this noise and flourish of trumpets, we look with admiring eyes to the wondrous labor-saving machines, and bless the skilled mechanic, as human muscle and time are economized and our husbands and sons can gain time for social amenities and the cultivation of æsthetic tastes. Music is *now* heard in our homes; the easel and the palette, as well as the piano, may now be found in our cozy parlors. These comforts, with many others, I, as a farmer's wife, trace directly to the scientific education of our mechanics. Long may they wave. So, Mr. Editor, you will see me every day inspecting and observing the beauty of articles of utility and ornament, and listening with rapt attention to the grand music as it is wafted down from the orchestra, over the heads of so many unappreciating people.

But I must hasten to the *chef-d'œuvre*, the Art Gallery. Well, I have climbed the stairs with the help of my cane, and after fixing my glasses at a proper focus, I conclude it is too much for me, to even walk through the long vista, where such gems of art invite me to inspect and admire. So I will give you an account of my artistic journey at another time, and just let my eyes rest a moment on the elegant furniture, and choose which will be most useful to buy when our Hannah Jane is married and we give her her setting out.

Mrs. E. Bence, C.

P. S. You will know me by my cane and reticule, which I still carry on my arm so as to have it handy for my spectacles and snuff-box; also by my taking a seat near the middle fountain when I can find a vacant chair. I waited at least a half-hour with my hand on the back of a chair, hoping the young America who was sitting would rise and I would take it, but he "tuk root" I am positive, and as he couldn't see the old lady was tired he was not to blame. Mrs. E. B., C.

—*Mechanics' Fair Daily.*

New Alloys.—A patent has been recently obtained in France for obtaining alloys of iron with manganese, titanium, tungsten, silicium, etc. According to the *Revue Industrielle*, scrap iron and iron turnings and filings, or iron sponge coarsely pulverized, are mixed with minerals containing the manganese, tungsten, titanium or silicium, also pulverized, in suitable proportions, and moistened uniformly and completely with an ammouiacal or an acid solution, after which the mass is compressed in molds. Great evolution of heat takes place, and in a few hours a hard, compact mass results, which is broken into fragments with a sledge. These fragments do not disaggregate at the temperature of melting iron. They are used in a peculiarly constructed high furnace, and when reduced yield excellent alloys. The ferro-manganese contains at pleasure from 20 to 75 per cent. manganese, and in the same way ferro-silicium containing 22 per cent. of silicium has been obtained. Alloys of titanium and tungsten, or of all combined, are readily procurable. The temperature required is very high.

Cleaning Grain.—English exchanges describe a machine which has for its object the cleaning of wheat and other grain, by passing it between two discs, one rotary the other stationary, on the adjacent sides of which are set wedged-shaped projections on knives having roughened sides; when the disc is made to rotate the wheat grain is agitated and cleaned by contact with the roughened sides of the wedge-shaped projections.

The Floor of the Ocean.

The voyage of the "Challenger" promises to accomplish even more than was at first anticipated in throwing light upon certain disputed questions in regard to the physics and natural history of the globe. The subject of ocean circulation is now becoming comprehensible, and some of the most important geological problems seem to be receiving their solution. One of these is adverted to by Mr. Alexander S. Wilson, in a paper published in *The Chemical News* upon some of the chemical aspects of physical geography, based upon one of Professor Thompson's letters from the "Challenger," referring to the fact that in sailing from Teneriffe to St. Thomas the soundings indicated that the bottom of the Atlantic rises into a ridge about 300 miles west from Teneriffe, and that from this where the depth was 1,500 fathoms, the bottom sloped gently down, until at 750 mils west of Teneriffe it sunk to a depth of 2,950 fathoms, this continuing constant until within 300 miles of Sombrero.

A remarkable relationship was found to exist between the depth and the character of the dredgings. At 1,500 fathoms the dredge brought up globizerina ooze, multitudes of minute shells, and fragments of coral, the whole composed mainly of carbonate of lime. As the depth increased the proportion of these shells diminished, until in the deep water they disappeared, and there was nothing brought up but the fine red mud which did not effervesce with acids. This, consisting of iron and alumina, was met with everywhere over the plain, and could not be, therefore, as at one time supposed, the mud brought out by great currents, such as those of the Amazon and Orinoco; but must have been produced on the spot.

A specially noteworthy circumstance was the absence of shells, found elsewhere in so great numbers. In explanation of this phenomenon, Mr. Wilson refers to the concurrent fact that the water from these great depths is very rich in carbonic acid, the air from a depth of 1,476 fathoms containing 40 per cent. of carbonic acid, the percentage probably increasing rapidly with the descent. Water thus saturated with carbonic acid will readily dissolve carbonate of lime; and Prof. Thomson therefore concludes that the uniform deposit of red clay is simply the insoluble parts of myriads of shells, the residue, in fact, of a chalk formation now dissolved. The animals living on this area are universally destitute of a shell covering, this either being siliceous or membraneous. Thus, while the shallower regions of the deep sea-bed are covered by a layer of grayish-white ooze, prolific in organisms, whose shell will one day form chalk, this in the deep submarine is dissolved, leaving behind only the red mud. A geological formation would consequently consist of chalk or limestone of some sort at the higher levels, gradually losing its calcareous character as it passe lower down, first into a calcifererous slate, and finally into a slate containing no lime whatever. *New York Tribune.*

Street Watering.—An estimate founded on private inquiry, tells us that the cost for labor in watering the streets of London averages about £135,000 per annum, the cost of water being additional. It is contended that the whole of this watering can be accomplished in a far more effectual and advantageous manner, by a system of permanently laid pipes, for an expenditure of less than £3,000 per annum in labor; while the interest upon the plans necessary for the purpose would not exceed £20,000, making the total yearly cost of watering (exclusive of the water itself) only £23,000, instead of £135,000.—*Builder.*

Stopping Runaway Horses.—A novel apparatus for this purpose is arranged by attaching to the cross strap of the bridle of a carriage or saddle horse a light tube, inside of which is a small roller; attached to this roller is a curtain of macintosh or other light and flexible material wide enough to reach across the animal's eyes, and long enough to cover the nostrils. This curtain is held in its place by springs, and is lowered when released from springs by a counterpoise or cord. It is returned to its place by another spring attached to the roller.

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ANNUAL MEETING.

The annual meeting of the stockholders of the Grangers' Bank of California, for the election of Directors, will be held at the office of the Bank on Tuesday, the 13th day of October next, at 1 o'clock P. M.

C. J. CRESSEY, Vice-President.
415 California street,
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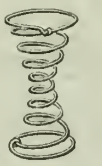
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Agricultural Notes.

California.

ALAMEDA.

Sunol.—Cor. *Enterprise*, Sept. 12: The heavy thunder storms of last week caused all the threshing machines in the valley to lay off. We had quite a heavy rain fall on Thursday. Our warehouses are nearly filled to the roof with the golden grain, and until a change in the market we anticipate no shipments from them. These pretended friends to the farmer are urging every inducement to get hold of our wheat, but our farmers are not so green as they think.

From Pleasanton.—There has been considerable land rented during the past two weeks. The demand is strong and rents are on the rise. There have been large quantities of hay shipped during the past week. But farmers are still holding their grain for higher prices—but little has been sold. Grain is coming in with a rush and all the warehouses are filling up fast. Tthere will be 25 per cent. more grain stored here this season than ever before.

AMADOR.

Frost.—*Dispatch*, Sept. 12: The weather has been remarkably cool here for the last week or two, and frost has been seen on two or three occasions early in the morning.

BUTTE.

Walsh Ranch.—*Record*, Sept. 12: John Fennell, the lessee of the Walsh ranch, entered into possession of the same on the 1st. inst. Fennell stated that he will cultivate some 10,000 acres of land in addition to that heretofore seeded on this extensive ranch.

New grain warehouses are going up in every direction, and wheat is to be locked up until the price goes up.

COLUSA.

Cotton.—A seed was accidentally dropped sometime this spring on the Ketcherside ranch, and on the spot was found the other day a flourishing cotton plant having some 10 or 12 good-sized bolls upon it. This proves the superiority of our soil, when cotton will sprout up spontaneously without cultivation.

At the warehouse they are receiving daily an average of 155 tons and have now close on to 6,000 tons in the warehouses. The carpenters will soon bid the premises adieu, as three more days' work will finish it.

CONTRA COSTA.

Warehousing.—*Gazette*, Sept. 12: Although our farmers are driving, as usual at this season, to get their grains to the shipping landings, none of any consequence has been sold, but nearly all is going into the warehouses for storage. Bray's old warehouse at this place is already filled, and the new building is fast filling up with the prospect of having all it will hold. There will in all probability be not less than 5,000 tons stored at this point, and nearly or quite twice as much, altogether, at the Pacheco and Seal Bluff warehouses, besides what the Sycamore, Tassajara and upper San Ramon districts of the county will send to Pleasanton and Haywood; which, at a rough guess, will not amount to less than 6,000 to 7,000 tons more.

Cabbages.—Mr. Antonio Bertola, on the San Miguel rancho, has 1,000 head growing, of which one now before us is a fair sample. And, that readers may judge of the crop, they are informed that the sample is a solid head of 20 pounds' weight.

EL DORADO.

Immense Alfalfa.—*Republican*, Sept. 10: Mr. A. J. Kennedy exhibited to us the other day a couple of stalks of alfalfa, taken from a field of his in Kelsey township, that were over seven feet in length. Mr. K. purchased a few pounds of seed last spring to test it on his ground, and is more than satisfied with the result. He has cut two crops and will soon cut the third.

Tall Corn.—Geo. Burnham has a field of corn in Upper Town, which looks as though it had tried to grow out of the county; much of it is 16 to 17 feet high, and it would bother a six footer to pull some of their ears.

FRESNO.

A Fiber-bearing Plant—*Expositor*, Sept. 9: There is a plant which grows abundantly on the plains of this county which, it appears to us, will one day or other become valuable for its fiber. It is indigenous to this locality, growing on the driest and sandiest lands the most luxuriantly. It does not begin its growth until other wild vegetation has dried up, when it comes and grows thriftily, generally growing about a foot in hight, but getting much larger on cultivated lands. It dies when rainy weather sets in. Our attention was first attracted to it when riding over the plains in the spring of the year, when the fiber from the plant can be seen in big rolls, where it has blown together, having been beaten off by the rains of winter. The leaves are of a grayish color, and the plant is covered over with a prickly furze. The fiber is coarse but very strong, and would do for manufacturing cloths similar to those now made from jute, such as bagging and the like. We are of opinion that cultivation would improve the plant very much, and its capabilities of withstanding drouth will, no doubt, one day render it a valuable accession to the fiber-bearing plants of the world, and become a valuable product of the country.

Dr. Brandt has cotton plants on his farm which are over six feet in hight. He estimates that he will gather over 100,000 pounds of lint cotton from his field.

Wool in large quantities is now coming into town. An immense quantity of it is piled up along the railroad track on the railroad reservation.

KERN.

Busy.—*Pajaronian*, Sept. 10: The streets of Watsonville now present a busy scene. Teams loaded with grain, wood, hay, lumber, hay presses, etc., are going and coming all the day long, and clouds of dust can be seen on the outskirts showing that near the ocean and foothills travel is lively. There is but little grain being sold now compared with last year, as the farmers hereabouts say they are determined to put into their own pockets the profits that have formerly found their way to the strong boxes, of the middlemen.

MENDOCINO.

First Frost.—*Democrat*, Sept. 12: In places in and around town, the boards and ground were white with frost, early on Friday morning. This and other signs betoken early rains, but prognosticating weather in California is all guess work. At Little Lake we hear the frost was heavy enough to destroy potato vines.

Hops.—*Independent Dispatch*, Sept. 12: The hop-raisers of this valley and Sanel are now gathering their crops and consider themselves among the lucky ones. The yield of this will be 25 per cent. more than last year, while the quality is at least 10 per cent. above an average. Added to these encouraging features, it is believed that ruling prices will be from 10 to 15 per cent. above those of last year.

MERCED.

Wool.—*Argus*, Sept. 12: We observed a few wagon loads of wool arriving in town this week of the fall clip. The product of wool in this valley is extensive, and prices continue remunerative to producers. Notwithstanding the increase of farming operations in the valley the product of wool continues to increase rapidly, and the quality is improved from year to year by breeding up the flocks and giving the sheep better care. The mountain range seems ample for the immense flocks driven there for summer pasturage, and the stubble fields afford good feed from the middle of September until the rainy season commences and the young grass is sufficiently advanced for winter feed.

Seeding.—Many of the farmers have got their crops hauled in, and are now engaged with all their force of men and teams in seeding their summer-fallow fields and in harrowing in their volunteer lands for the next year's crop. Should the winter prove favorable for farming operations, the acreage of this portion of the valley cultivated in wheat will be from 25 to 50 per cent. greater than this season. Farmers are hopeful, as usual, and we hope that their fondest expectations—heavy crops and remunerative prices—may be realized.

NAPA.

The Wheat Crop.—*Register*, Sept 12: There are now stored in the Banner warehouse of Ellis & Keyes 2,000 tons, and in Sheehy's warehouse 1 300 tons of wheat. Prices are quite unsatisfactory. The very best article commands here $1.40 per cental, and looks likely to be lower instead of higher. We saw an offer from a San Francisco house, made this morning, to take 600 tons of "good shipping," at $1.45, with free storage until June next. This was the best offer that could be obtained.

NEVADA.

Hay.—*Transcript*, Sept. 13: Hay is coming to this market at a lively rate. The prices rules from $25 to $30 per ton.

PLUMAS.

Hay and Wool.—*National*, Sept. 12: Four six-horse teams left Mountain Meadows the other day for Chico, loaded with wood. Big Meadows farmers are anticipating another hard winter, and are putting up large quantities of hay. Timothy hay is selling in this valley for $15 per ton.

SACRAMENTO.

Hops.—*Telegraph*, Sept. 12: The hop crop is now being gathered on the Crite's ranch, in the upper portion of Brighton township, in this county. The yield is an excellent one, and hops now command a high price, as they in fact do every year. The yield will be about five tons on this ranch. The first of the crop was shipped from Routier's station, on last Wednesday. Why our farmers do not raise hops more generally is a mystery. It is hard to get them out of the old barley and wheat track, though it is well known that hops will pay ten times better than wheat on the same amount of land

SAN DIEGO.

Corn.—*World*, Sept. 12: Mr. Walker, of Otay, brought into our office last Saturday several ears of corn grown upon his ranch, some of which weighed nearly three-fourths of a pound, and containing something more than a thousand grains upon one ear. This corn, it must be remembered, was grown upon what is called dry land, or up land, was planted subsequent to the rains of last spring and received no care of irrigation whatever.

A Texas agricultural society, with a capital of $100,000, has just been formed at New Haven, to own plantations in Texas, and supply northern markets with produce.

A tract of three acres at Bodega bay produced in one season 60 tons of cabbage, which brought in San Francisco $4,000 gold.

A whole block has been purchased in Salem, on which to erect an Alden fruit drying establishment.

Awards of Premiums at the Bay District Fair Grounds Association Fair.

Thoroughbred stallion, 4 years old and over, to Geo. Treat, of S. F., for Thad Stevens, $75.

Thoroughbred stallion, 3 years old, John Hall, of Alvarado, for Tom, $50.

Thoroughbred stallion, 2 years old, R. T. O'Hanlon, of S. F., for Turf Gallery, $40.

Thoroughbred horse colt, under 1 year, John Hall, of Alvarado, for Basswood, $20.

Thoroughbred mare, 4 years old and over, with colt, to John Hall, of Alvarado, for Moss Rose, $30.

Thoroughbred mare, 4 years old and over, without colt, to John Hall, of Alvarado, for Peggy Ringgold, silver cup.

Thoroughbred mare, 3 years old, to John Hall, of Alvarado, for Bell Morey, $40.

Thoroughbred mare, 2 years old, to John Hall, of Alvarado, for Lady Washington, $30.

Thoroughbred mare, 1 year old, to John Hall, of Alvarado (no name), $20.

Thoroughbred dam, with not less than 4 colts, to John Hall, of Alvarado, for Moss Rose and colts, $1 0.

Stallion, other than thoroughbred, with not less than 10 of his colts, to Claus Spreckles, of S. F., for Speculation, $100.

Dam, other than thoroughbred, with not less than 3 of her colts, to William Hamilton, of San Jose, for Winona, $50.

Graded stallion, 4 years old and over, to David Berry, of Oakland, for Henry Williamson, $50.

Graded stallion, 2 years old, to James Rickards, of S. F., for Charles Dickens, $30.

Graded stallion, 1 year old, to L. Atkinson, of S. F., for Captain Kohl, $20.

Graded mare, 4 years old and over, to Wm. Hamilton, of San Jose, for Santa Clara, $40.

Graded mare, 4 years old and over, with colt, to M. L. Brittan, of Redwood City, for Ida Martin.

Graded mare, 3 years old, to John Martin, of S. F., for bay filly, by Speculation, $30.

Graded mare, 2 years old, to Wm. Hamilton, of San Jose, for Fanchon, $20.

Graded mare, 1 year old, to Wm. Hamilton, of San Jose, for Kate, $15.

Stallion of all work, 3 years old, to Wm. Hamilton, of San Jose, for Justice, $40.

Stallion of all work, 2 years old, to Wm. Hamilton, of San Jose, for Tom Scott, $30.

Stallion of all work, 1 year old, to Chas. A. Sessions, of S. F., for Coalbucker, $20.

Mare, 3 years old, to R. Ashburner, of Baden Station, for Blossom, $20.

Mare, 1 year old, to Wm. Hamilton, of San Jose, for Emma, $15.

Draught stallion, 4 years old and over, to M. L. Brittan, of Redwood City, for Lord Poole, $50.

Draught stallion, 3 years old, to McCarthy & Lapham, of S. F., for Judge Templeton.

Draught mare, 4 years old and over, with colt, to M. L. Brittan, of Redwood City, for Dolly, $40.

Four years old and over to M. L. Brittan, of Redwood City, for Gipsy, $35.

Yearling horse colt, to Wm. Hamilton, of San Jose, for Black Allen, $30.

Yearling mare colt, to Wm. Hamilton, of San Jose, for Susie, $20.

Sucking horse colt, to Jesse D. Carr, of Gabilan, for Echo, $20.

Sucking mare colt, to Wm. Hamilton, of San Jose, for Young Winona, $15.

Not fewer than 6 colts, owned by one person, to Wm. Hamilton, of San Jose, for 9 colts, $50.

Sweepstakes.

Stallion—First to George Treat, of S. F., for Thad. Stevens, silver pitcher, $100. Second to J. D. Carr, of Gabilan, for Carr's Membrino, $50.

Mare—To John Hall, of Alvarado, for Peggy Ringgold, silver pitcher, $75.

Durham Cattle.

Bull, 1 years old and over—First to Jeff Bridgford, of Paris, Missouri, for Muscovite, $75. Second to S. B. Emerson, of Mountain View, for Sheriff, $30.

Bull, 3 years old—To C. Younger, of Santa Clara, for Tempest, $30. Second to J. Judson, of Bloomfield, for Grand Turk of Sonoma, $15.

Bull, 2 years old—First to J. D. Carr and Chapman, of Gabilan, for Governor Booth, $20. Second to M. Wick, of Oroville, for Orlando, $10.

Bull, 1 year old—First to Carr and Chapman, for Sixth Lord of Oxford, $15. Second to Jeff Bridgford, of Paris, Missouri, for Cornell.

Bull Calf—First to C. Younger, of Santa Clara, for Red Thorndale, $10. Second to M. Wick, of Oroville, for Prince Albert, $5.

Cow, 4 years old and over—Carr and Chapman, for Lady Solway, $75. Second to Jeff Bridgford, for Jennie McClean, $20.

Cow, 3 years old—First to C. Younger, for Jennie, $30. Second to Carr and Chapman, for Hope XXII., $15.

Cow, 2 years old—First to Carr and Chapman, for Pet of Geneva, $20. Second to Jeff Bridgford, for Cora Lee, $10.

Cow, one year old—First to C Younger, for Forest Rose, $15. Second to Jeff Bridgford, for Lady Meldon, $10.

Heifer calf—First to C. Younger, for Hester Ryan, $10. Second to same for Rosa Neil, $5.

Herd of thoroughbred cattle 2 years old and over—First to Jeff Bridgford for Muscovite and 4 cows, silver pitcher, $150. Second to Carr and Chapman for Governor Booth and 4 cows.

Herd of 1 bull and 4 cows under 2 years old, owned by one person—First to C. Younger for Arthur Lemon and 4 cows, silver pitcher, $150. Second to Jeff Bridgford for Cornell and 4 cows, pitcher, $75.

Graded cow 4 years old and over—To Albert Whipple of S. F. for Mary Ann, $30.

Graded cow 3 years old—To Charles Clark of Milpitas for Mollie, $20.

Graded cow 2 years old—To R. Ashburner of Borden Station for Dahlia, $15.

Graded cow one year old—To S. B. Emerson of Mountain View for Fairy Queen, $10.

Graded heifer—To Charles Clark of Milpitas for Mollie, first, $10.

Devon bull 3 years old—To Mrs. Fleming of Napa for Earl of Leicester, $30.

Devon bull calf—To Seneca Daniels of Lakeville for Tilton.

Devon cow 4 years old and over—To Seneca Daniels for Fashion, $75.

Devon cow 1 year old—To Mrs. Fleming of Napa for Queenie, $15.

Alderneys and Jerseys.

Bull 4 years old—To J. B. Haggin, of S. F., for Dashwood, $75.

Bull 2 years old—To A. Milliard, of San Rafael, for Keystone, $20.

Bull 1 year old—To J. B. Haggin, for Bill Dashwood, $15.

Cow 3 years old—To J. B. Haggin, for Nelly Bly, $30.

Cow 2 years old—First to A. Milliard, for Cora, $75. Second to same for Flora Dell, $30.

Cow 1 year old—To same for Bloomer third, $75.

Heifer calf—To same for Romana second, $10.

Holstein Cattle.

S. B. Emerson, of Mountain View, for bull Opidus, $75.

Cattle Sweepstakes.

Bull of any age or breed—First, Jeff Bridgford, for Muscovite, silver pitcher, $150. Second, S. B. Emerson, for Sheriff, pitcher, $75.

Cow of any age or breed—To first, Carr and Chapman, for Lady Solway, silver pitcher, $125. Second, C. Younger, for Valley Maid, pitcher, $75.

Bull and 5 of his calves under 1 year—First to C. Younger, for Thorndale. Second, to R. Ashburner, for Water Prince.

The committee awarded special premiums as follows: To Jeff Bridgford for his fine exhibit of thoroughbred cattle, a gold medal; to Jesse D Carr a silver cup. for his stallion Membrino and colts, and to R. Ashburner for the best milch cow on exhibition.

The Great Cattle Sale.—A meeting of the State Association of Thoroughbred Cattle-Breeders was held at the Grand Hotel, in San Francisco, Wednesday evening, and it was largely attended by the leading cattle men of the State. The committee appointed at the previous meeting of the Association to arrange for a public sale of blooded cattle, reported that they had selected San José for the place and the 7th and 8th days of October for the time of sale. This will be during our county fair. A catalogue of the names and pedigrees of the stock to be sold will soon be published. It is expected that all the advanced cattle-breeders of the Pacific Coast will be present to buy and sell stock at this first public sale authorized by the society.—*San Jose Mercury, Sept.* 11.

American Pears in London.—Specimen pears from the famous pear orchard of G. F. B. Leighton, Norfolk, Va., were sent last season to London, England, and exposed for sale in Covent Garden market. They were pronounced equal both in size and flavor, to the same kind of pears imported from France. They weighed from sixteen to twenty-one onuces each, and measured fourteen and a half inches in circumference.—*Horticulturist.*

No. 2 at Hand.—After a long rest following the birth of *The Patron's Helper*, No. 2 has reached us. We bid it welcome. The words of cheer from many quarters cannot but be encouraging to Bro. Garretson. In this issue will be found an article from the *Helper* entitled, "The Grange Fleet of California." Read it, brothers; it will do your hearts good.

An experimental hemp field of about five acres, belonging to the Pacific Cordage company, in Alameda county, yields about 1,000 pounds to the acre, of remarkably strong fibre, which, when prepared, will be worth $250 per acre.

The warehouses at Sunol are filled with grain. Farmers are determined to hold for better prices.

The sheep farmers of San Diego are raising their own tobacco to use for the purpose of sheep-wash.

A herd of 1,000 horses from California are coming across north western Colorado.—*Col. Stock Journal.*

David Lewis, of El Monte, Los Angeles county, has twelve acres of hops, from which he expects to pick about 26,000 pounds.

Farm Laborers, Engineers, Teamsters, Blacksmiths, Milkers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery sleeet, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

We guarantee satisfaction. ag22-tf

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Sept. 15th, 1874.

For Week Ending Sept. 1st, 1874.

Joint Holder.—Charles Buckner, Jr., S. F., Cal.

Horse Power.—John D. Harner, S. F., Cal., and Corydon A. Fargo, Stockton, Cal.

Gas Heater for Cooking Oysters.—A. W. Manning, S. F., Cal.

Float for Steam Boiler Safety Gauges.—Andrew Moon, S. F., Cal.

Water-Supply Regulator.—David Morris and Theodore Morris, S. F., Cal.

Ore-Washing Machine.—Charles P. Robbins, S. F., Cal.

Clod Crusher.—William P. Anderson, Albany, Oregon.

Hydraulic Cement.—Frank E. Brown and Wilfred L. Brown, Mare Island, Cal.

Fireman's Ladder.—Heyman Fox, S. F., Cal.

Baling Press.—C. P. Littlepage, Thomas J. Hubbard and William A. Greenly, Big Pine, Cal.

Composition Fuel.—James A. Mars and Wm. Irelan, S. F., Cal.

Construction of Sewers.—James M. Thompson, S. F., Cal.

N. B.—Our list published in our issue of Sept. 12th should have been dated Aug. 25th.

———The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Sept. 16th, 1874.

The local Grain market presents no new features this week. The tone of our country exchanges is without exception the same, and it is certain that the feeling generally prevalent among farmers is that prices cannot well go lower; hence they prefer to hold off for a rise.

The movement of Produce is steadily increasing Receipts of wheat are unusually large, owing to the arrival of vessels on Grangers' account.

Receipts of State Produce at this port during the week under review have been as follows: Flour, 28,722 qr-sks; Wheat, 345,894 centals; Barley, 16,124 do; Oats, 3,025 do; Corn, 100 do; Bran, 907 sks; Middlings, 100 do; Hay, 11,335 bls; Straw, 868 do; Hops, 496 do; Wool, 1,497 do; Potatoes, 5,070 sks; Onions, 1,223 do; Beans, 896 do; Wine, 14,297 gallons; Brandy, 140 do; Hides, 2,249; Pelts, 202 bdls; Butter, 1,096 centals; Cheese, 815 do; Tallow, 485 do; Sugar Pine Lumber, 135,000 ft; Leather, 220 rolls; Skins, 21 cs; Flax Seed, 1,033 sks; Mustard Seed, 291 do; Tan Bark, 50 cords.

Barley—Is steady with large sales for the week. There is still a little old crop Brewing on the market, for the very best samples of which as high a price as $1.80 hes been obtained.

Beans—Market quiet.

Buckwheat—Quotations nominal.

Broom Corn—New crop does not yet appear to affect prices perceptibly. No business being done.

Corn—Is very weak at the quotations given. Although $1.80 can still be realized, sales to-day are reported as below that figure.

Dairy Produce—There has been another advance of 2½c in Fresh Butter. Firkin does not move. Pickled Roll is higher. California Cheese is more active. Eastern is unchanged.

Feed—Quotations unchanged.

Flour—Considerable is going forward to China and Panama. The trade is brisk, but prices do not improve.

Fresh Meat—Market steady.

Honey—Dull.

Hops—Later and more definite intelligence concerning the deficiency in various sections of this and other countries has caused another upward move. The price in this city is now 2½c. for best 1874.

Oats—Are strong at the range of $1.40@1.60. Oregon tops the extreme.

Potatoes—Remain as before quoted. Santa Barbara are out of market. Humboldt and Bodega will soon be in.

Poultry—The price of Turkey Hens and Gobblers is now on a par and lower than when last quoted. Many very small, scrub Ducks are being shipped to this market, and the quality varies so much that the rauge is large. Geese are a shade off in price again.

Provisions—Steady.

Seeds—Market more active, as is usual at this season, the fall demand having set in. See Table for a new and fuller list.

Wheat—Is a trifle more active. Liverpool advices are more favorable. During the week the gain there was 9c ₰ ceutal. The price abroad is now one-fifth lower than it has been for three years. Shipments go on steadily of Grangers' wheat.

Wool—The fall clip is coming in. It is reported not being up to the average in quality. The quantity is not yet ascertained. Market unchanged.

FRUITS AND VEGETABLES.

WEDNESDAY M., Sept. 16, 1874.

Oranges, Lemons and Limes are much scarcer. Tahiti Oranges are now selling at $3@40. Limes are $5.50 ₰ 1,000 higher. Blackberries and Huckleberries are out of market. Strawberries are held at 20c ₰ lb., wholesale. Watermelons and Muskmelons are selling at $12.50@$20. Figs and Grapes are unchanged in supply and price.

Dried Fruits are steady and quoted as before.

Vegetables are plenty and generally cheap.

FRUIT MARKET.

Tahati, Or. ₰ M	35 00	@	40 00
Lorita, do.....	—	@	—
Cal. do.....	—	@	—
Limes, ₰ M.....	12 50	@	5 00
Cal. Lemons, ₰ M	—	@	—
Australian do	40 00	@	45 00
do per box.....	4 50	@	5 00
do Sicily ₰ b'x	—	@	—
Bananas, ₰ bnch	3 00	@	4 00
Cocoanuts, ₰ 100	6 00	@	8 00
Pineapples, ₰ doz	4 00	@	5 00
Apples, ₰ box	40	@	1 00
Cherries.....	—	@	—
Blackberries.....	—	@	—
do wild.....	—	@	—
Huckleberries.....	-	@	—
Strawberries ₰ lb	—	@	20
Gooseberries.....	—	@	—
Raspberries.....	—	@	—
Currants.....	—	@	—
do black.....	—	@	—
Apricots.....	—	@	—
Plums.....	1	@	5
Peaches, bskt.	50	@	1 00
do, ₰ box	1 00	@	1 50
do ext Mountain ₰	8	@	10
Pears, eating, bx.	50	@	1 50
do Cooking.....	40	@	50
Cran Apples.....	—	@	—
Nectarines.....	—	@	—
Wat'rmel's ₰ 100	12 50	@	20 00
Muskm'l's ₰ 100	12 50	@	20 00
Pomegran's ₰ 100	6 00	@	7 00
Figs.....	8	@	10
Grapes, Bl'k H'g	2	@	4
do Muscat..	4	@	6
do Malavo'e..	4	@	5
do Sweetw'r.	1½	@	2½
do Mission....	1	@	2
do Rose of Peru	4	@	5
do Tokay.....	4	@	5
do Morocco.....	—	@	—
do St. Peter....	—	@	—

DRIED FRUIT.

Apples. ₰ lb.....	6	@	7½
Pears, ₰ lb	10	@	12½
Peaches, ₰ lb.....	3	@	9
Apricots, ₰ lb.....	10	@	12½
Plums, ₰ lb.....	8	@	10
Pitted, do ₰ lb	14	@	16
do Extra, ₰ lb..	—	@	—
Raisins, ₰ lb.....	5½	@	12½
Black Figs, ₰ lb....	8	@	10
White, do	10	@	15
Prunes.....	6	@	8
do German....	16	@	20
Citron.....	30	@	35
Zante Currants,	8½	@	8½
Dates.....	12½	@	14

VEGETABLES.

Asparagus.....	4	@	5
Beets.....	—	@	1
Cabbage, ₰ 100 lbs.	—	@	2 00
do new, doz	.50	@	60
Carrots, ₰ 100 lbs....	1 00	@	1 25
Cauliflower, doz.....	50	@	60
Celery, doz.....	50	@	65
Garlic, ₰ lb.....	5	@	6
Green Peas.....	3½	@	4
Green Corn ₰ doz..	15	@	18
Sum'rSquash, lb.....	4	@	5
Marro'fat Sq'sh, tn	60	@	—
Artichokes, ₰ doz..	15	@	25
String Beans, ₰ lb ...	—	@	5
Lima Beans.....	4	@	5
Parsnips.....	12½	@	15
Shell Beans.....	3½	@	7
Peppers, ₰ lb.....	12½	@	20
Okra ₰ lb.....	.25	@	40
Okra, Green.....	5	@	6
Cucumbers, doz	6	@	8
Tomatoes.....	3	@	5
Egg Plant ₰ lb.....	6	@	8
Rhubarb	—	@	—
Lettuce	10	@	—

RETAIL GROCERIES, ETC.

WEDNESDAY M., Sept. 16, 1874.

Butter is again higher. Prices of other Groceries are unchanged.

Butter, Cal. ch'ice	40	@	45
do common....	30	@	40
Cheese, Cal., lb..	12½	@	17½
Lard. Cal., lb....	12½	@	15
Flour, ex. fam, bl	5 00	@	5 50
Corn Meal. lb....	2½	@	3½
Sugar, wa.orsh'd	—	@	12
do lt. brown, lb	7	@	9
Coffee, Sbarburn's family gr'nd, lb	32½	@	—
Coffee, green. lb..	24	@	32½
Tea, fine blk, 50, 65, 75	@1	00	
Tea, finst Jap, 55, 75, 90	@1	00	
Candles, Adamant'e 17	@	25	
Soap, Cal., lb....	@	10	
Can'd Oysters, dz.	2	@	2 50
Syrup, S F. Gol'n.	35	@	40
Dried Apples....	8	@	10
Dr'd Ger. Prunes	15	@	17
Dr'd Figs, Cal...	9	@	10
Dr'd Peaches....	10	@	?
Oils. Kerosene ..	30	@	35
Wines, Old Port	3 50	@	5 00
dn Fr. Claret..	1 00	@	1 25
do Cal. dz. bot.	3 00	@	4 50
Whisky, O.B. gal.	3 50	@	5 00
Fr. Brandy	4 00	@	10 00
Rice, lb.....	10	@	12½
Yeast Powders, dz.	1 50	@	2 00

GENERAL MERCHANDISE.

WEDNESDAY M., Sept. 16, 1874.

Bags and Bagging are unchanged in price and still low. The present dull state in this line is entirely unexpected; but it is no doubt due, in great part, to the disposition of holders of Grain not to part with their produce, which of course directly affects the Bag business, as Bags are not necessarily used till shipment. Coffees are weaker. Coal is unchanged in price. Fish are quiet. Oils are steady. Sugar remains firm. Tobacco is buoyant.

BAGS.

Eag. Stand Wht.	—	@	12½
Detrick's Machine Sewed, 22x36 E..	—	@	13
do 22x36, do E W	—	@	13¼
do 20x40, do A....	—	@	14½
Flour Sacks ⅛s..	9½	@	11½
" " ¼s.	6	@	7
Stand. Gunnies.. double seam...	15	@	—
single seam....	13¾	@	14
" Wool Sacks.	65	@	—
Barley Bags 24x36	—	@	14
do 23x40	—	@	14½
do 24x40	—	@	15
do 24x36	—	@	16
Oat Bags, 24x40....	16	@	16½
do 28x36.. .	—	@	17
Hessian 40-in.gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15

CANNED GOODS.

Asst'd Pie Fruits in 2½ lb cans.	2 75	@	3 00
do Table do...	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl..	—	@	3 50
Sardines, qr hoxl	80	@	—
do hf boxes,	3 20	@	—

COAL—Jobbing.

Anstrelian, ₰ ton	10 00	@	—
Coos Bay.....	—	@	10 00
Bellingham Bay.	—	@	8 50
Seattle.....	—	@	11
Cumberl'd, cks.	22 00	@	23 00
do hulk	18 00	@	20 00
Mt. Diablo.....	6 25	@	8 50
Lehigh.....	—	@	19 00
Liverpool.....	11 00	@	12--
West Hartley....	12 50	@	—
Scotch.....	9 50	@	10 00
Scranton	15 00	@	17 50
Vancouver's Isl..	11 00	@	11 50
Charcoal, ₰ sk...	75	@	—
Coke, ₰ bbl.....	—	@	60

COFFEE.

Sandwich Island ..	—	@	22
Central Americ'n	19	@	20
Costa Rica per lb	21	@	22
Guatemala.....	19	@	20½
Java.....	—	@	28
Manilla.....	20	@	21½
Ground in cs....	—	@	30
Chicory.....	10	@	—

FISH.

Pac. Dry Cod, new	5	@	6
cases.....	6	@	—
do boneless....	11	@	12
Eastern Cod.....	7	@	8
Salmon in bbls..	9 00	@	29 25
do ½ bbls	4 50	@	4 75
do 2½ lb cans	—	@	3 00
do 2 lb cans..	2 65	@	2 75
do 1 lb cans..	1 75	@	—
Do Col. R. ½ lb..	—	@	—
Pick. Cod, bbls.	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra....	—	@	9 00
" in kits....	2 00	@	2 50
" Ex mess.	3 00	@	3 50
" Ex mess. ½ hs	—	@	12 00
Sm'k Herr'g, bx.	50	@	60

NAILS.

Assorted size, lb.	5 00	@	7 25

OILS.

Pacific Glue Co. Neat F't No. 1.	—	@	1 00
Pure.....	1 25	@	—
Castor Oil, No. 1..	—	@	1 75
do do No. 2..	—	@	1 60
Cocoannt.....	45	@	50
Olive Plagniol..	5 00	@	—
do Possel....	4 75	@	—
Palm.....	9	@	—
do Bagicalupi.	—	@	—
Linseed, raw....	—	@	1 02
do boiled.....	—	@	1 07
China nut in cs..	—	@	95
do hulk....	75	@	80
Sperm, crude....	—	@	1 40
do bleached..	—	@	2 20
Coast Whales....	35	@	40
Polar, refined....	50	@	55
Sperm.....	1 40	@	1 50
Lard.....	1 00	@	1 10
Coal, refined Pet	37½	@	40
Oleophine.....	—	@	34
Devoe's Bril't....	25	@	28
Long Island.....	—	@	34
Eureka.....	37½	@	40
Devoe's Petro'm	26	@	29
Barrel kerosene	20	@	25
Olive.....	4 00	@	9 50
Downer Kerose'e	35	@	40
Gas Light Oil....	—	@	34

PAINTS.

Atlan. W. Lead.	7½	@	12½
Whiting	—	@	2
Putty	4	@	4½
Chalk.....	—	@	2½
Paris White.....	2¾	@	—
Ochre.....	4	@	5
Venetian Red...	3½	@	5
Red Lead.....	7	@	11
Litharge.....	10	@	11
Eng. Vermillion	2 00	@	2 10

RICE.

China No. 1, ₰ lb	6½	@	6¾
do 2, do.	5½	@	5¾
Japan.....	5½	@	6
Slam Cleaned...	7	@	—
Patna.....	—	@	6¼
Hawaiian.....	7	@	7¾
Carolina.....	10	@	10½

SALT.

Cal. Bay, per ton	10 00	@	14 00
do Common..	5 00	@	7 00
Carmen Island..	11 00	@	13 00
Liverpool fine...	20 00	@	23 00
do coarse	15 00	@	20 00

SOAP.

Castile ₰ lb....	10	@	11
Local brands....	5	@	8

SPICES.

Allspice, per lb..	15	@	16
Cloves.....	47½	@	—
Cassia.....	22½	@	25
Citron.....	—	@	30
Nutmeg.....	1 20	@	1 25
Whole Pepper...	20	@	22
Pimento.....	—	@	15½
Gr'nd Allsp'r dz	—	@	1 00
do Cassia do ..	—	@	1 50
do Cloves do..	—	@	1 50
do Mustard do	—	@	1 25
do Ginger do..	—	@	1 00
do Pepper do..	—	@	1 00
do Mace do..	—	@	2 00

SUGAR, ETC.

Cal. Cube per lb.	11½	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs..	—	@	12
do in 25 lb bxs.	—	@	12¼
Circle A crnshed	—	@	11½
Powdered.....	—	@	11¾
Granulated.....	—	@	11
Dry granulated	—	@	11½
Hewaiian.....	8	@	10½
California Beet.	—	@	11¼
Golden C.....	—	@	10½
do Key'g grade	—	@	6½
Cal. Syrup in bls.	—	@	55
do in ½ bls.	—	@	55
do in kegs..	—	@	60
Hawaiian Molasses.....	25	@	27½

TEA.

Oolong, Canton, lb	19	@	25
do Amoy...	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune..	60	@	1 00
Gunpo'der, Cant.	30	@	42½
do Pingsuey	50	@	90
do Moyune.	65	@	1 25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune..	65	@	85
Japan, ½ chests, hulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb hxs	45	@	90
do pl'n hx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55

TOBACCO—Jobbing.

Bright Navys....	50	@	60
Dark do	45	@	55
Dwarf Twist....	57	@	62½
12 inch do	57	@	62½
Light Pressed...	65	@	75
Hard do ..	60	@	70
Conn. Wrap'r....	40	@	50
Penn. Wrapper..	20	@	30
Ohio do ..	7	@	15
Virgi'a Smok'g..	60	@	95
Fine ct che'g, gr..	8 50	@	9 25
Fine out chewing, buc'ts. ₰ lb..	75	@	90
Banner fine cut..	—	@	9 00
Eureka Cala....	8 75	@	9 00

TURPENTINE.

Eastern.....	60	@	65

LEATHER.

WEDNESDAY M., Sept. 16, 1874.

The Leather trade continues fairly active, with a slightly better call for State made Leather. The demand for imported Kips is good.

City Tanned Leather, ₰ lb			25@28
Santa Cruz Leather, ₰ lb			25@29
Country Leather, ₰ lb			24@28
Stockton Leather, ₰ lb			25@29
Jodot, 8 Kil., per doz			$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz			66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₰ doz			55 00@ 72 00
Cornellian, 12 to 16 Ko			57 00@ 67 00
Cornellian Females, 12 to 15			60 00@ 64 00
Cornellian Females, 14 to 16 Kil			66 00@ 74 00
Beaumcrville, 15 Kil			60 00@ — —
Simon, 18 Kil., ₰ doz			61 00@ 63 00
Simon, 20 Kil. ₰ doz			65 00@ 67 00
Simon, 24 Kil. ₰ doz			72 00@ 74 00
Robert Calf, 7 and 9 Kil			35 00@ 40 00
French Kips, ₰ lb			1 00@ 1 15
California Kip, ₰ doz			40 00@ 60 00
French Sheep, all colors, ₰ doz			8 00@ 15 00
Eastern Calf for Backs, ₰ lb			1 00@ 1 25
Sheep Roans for Topping, all colors, ₰ doz			9 00@ 13 00
Sheep Roans for Linings, ₰ doz			5 50@ 10 50
California Russett Sheep Linings			1 75@ 4 50
Best Jodot Calf Boot Legs, ₰ pair			5 00@ 5 25
Good French Calf Boot Legs, ₰ pair			4 00@ 4 75
French Calf Boot Legs, ₰ pair			4 00@ — —
Harness Leather, ₰ lb			30@ 37½
Fair Bridle Leather, ₰ doz			49 00@ 72 00
Skirting Leather, ₰ lb			34@ 37½
Welt Leather, ₰ doz			30 00@ 50 00
Buff Leather, ₰ foot			18@ 21
Wax Side Leather, ₰ foot			17@ 19
Eastern Wax Leather			—@—

LUMBER.

WEDNESDAY M., Sept. 16, 1874.

No change in the Lumber market. Business is moderately brisk, and will continue so till the rainy season sets in.

CARGO PRICES OF REDWOOD.

Rough, ₰ M.....	$16	@	00
Rough refuse, ₰ M.....	12	@	00
Rough clear, ₰ M.....	32	@	50
Rough clear refuse, M..	22	@	50
Rustic, ₰ M.....	30	@	00
Rustic, refuse, ₰ M.....	24	@	00
Surfaced, ₰ M.....	26	@	00
Surfaced refuse, ₰ M...	16	@	00
Flooring, ₰ M.....	30	@	00
Flooring, refuse, ₰ M..	20	@	00
Beaded flooring, ₰ M...	32	@	50
Beaded floor, refuse, M.	22	@	50
Half-inch Siding, M.....	22	@	50
Half-inch siding, ref, M.	16	@	00
Half-inch, Surfaced, M.	25	@	00
Half-inch Surf. ref., M..	18	@	00
Half-inch Battens, M...	22	@	50
Pickets, rough, ₰ M....	13	@	00
Pickets, rough, p'ntd....	16	@	00
Pickets, fancy, p'ntd....	25	@	00
Shingles, ₰ M.....	2	@	25

PUGET SOUND PINE—Retail Price.

Rough, ₰ M.	20	@	00
Fencing and Stepping, M	37	@	50
Fencing, 2d quality, ₰ M	30	@	00
Fencing, ₰ lineal foot..	1	@	c
Flooring and Step, ₰ M	30	@	00
Flooring, narrow, ₰ M..	32	@	50
Flooring, 2d quality, M..	25	@	00
Laths, ₰ M.....	3	@	25
Furring, ₰ lineal ft....		@	¾

REDWOOD—Retail.

Rough, ₰ M.....	20	@	00
Rough refuse, ₰ M.....	16	@	00
Rough Pickets, ₰ M....	18	@	00
Rough Pickets, p'd, M..	20	@	00
Fancy Pickets, ₰ M.....	30	@	00
Siding, ₰ M.....	25	@	00
Tongued and Grooved, surfaced, ₰ M.....	32	@	50
Do do refuse, ₰ M.....	22	@	50
Half-inch surfaced, M..	40	@	00
Rustic, ₰ M.....	35	@	00
Battens, ₰ lineal foot...		@	¾
Shingles ₰ M	2	@	50

DOMESTIC PRODUCE.

WEDNESDAY M., Sept. 16, 1874.

BEANS.

Beans, sm'l wh. lb	3¼	@	3½
do. butter.....	—	@	2
do, large, do...	—	@	—
do, bayo.....	2	@	2¼
do, pink.....	1½	@	2
do, pea.....	3	@	3¼

BROOM CORN.

Per ton.....	$100	@	175

COTTON.

Cal. 1873, ₰ lb.....	—	@	20

DAIRY PRODUCE

Butter, Cal. choice ₰ lb	40	@	42½
do, good.....	37½	@	40
do, inferior....	32½	@	37½
do, firkin.....	30	@	33
do, pickled....	32½	@	37½
Cheese, Cal. new	10	@	15
do, Eastern ...	12½	@	15

EGGS.

Eggs, Cal. fresh	37½	@	40
do, Oregon.....	30	@	35
do, Eastern....	25	@	30
do, Ducks'	40	@	42½

FEED.

Bran, per ton....	17 00	@	18 00
Middlings	27 50	@	30 00
Hay	10 00	@	14 50
Straw, ₰ osle....	55	@	60
Oil cake meal...	—	@	32 50
Corn Meal.....	40 00	@	42 00

FLOUR.

Extra	4 50	@	5 25
Superfine.....	4 00	@	4 50

FRESH MEAT.

Beef, fr quality.. lb	8	@	8½
oo, second do..	6	@	7
do, third do....	4½	@	5
Veal.....	4½	@	6
Mutton	4½	@	5
Lamb.....	5½	@	6
Pork, undressed.	6½	@	6½
do, dressed....	9	@	9½

GRAIN, ETC.

Wheat, coast...	1 35	@	1 45
do shipping ..	1 45	@	1 55
do milling....	1 55	@	1 57½
Berley, coast....	95	@	1 05
do light.....	1 05	@	1 20
Oats, choice...	1 45	@	1 60
do common ..	1 40	@	1 45
Corn, White.....	—	@	1 80
do, Yellow.....	—	@	1 85
Buckwheat.....	2 75	@	3 00
Rye	1 05	@	1 10

HOPS.

California, 1874..	30	@	32½
East'rn, '73 ch'ice	30	@	40

MISCELLANEOUS.

Beeswax, per lb..	25	@	27½
Honey in comb..	20	@	25
do Strained....	7½	@	10
Pulu.....	9	@	10½
Onions.....	60	@	1 00

NUTS—JOBBING.

Cal. Walnuts	14	@	15
Peanuts per lb...	8	@	9
Chile Walnuts..	10	@	11
Pecaa nuts.....	13	@	15
Brazil do.....	14	@	16
Alm'da b'd shell	10	@	12½
do, soft.....	20	@	25
Filberts.....	18	@	—

POTATOES.

Sweet, per cwt..	1 50	@	1 62½
Cuffee Cove	90	@	1 05
H. M. Bav..	90	@	1 05
Pigeon Pt...	90	@	105
Humboldt..	—	@	—
Petalnma ..	—	@	—
Mission	50	@	95
Salinas.....	50	@	70
Bodega.....	—	@	—
St Barbara.	—	@	—
Sec. River..	—	@	—

POULTRY & GAME.

Live Turkeys, hens per lb.....	17	@	19
do gobblers...	17	@	19
Hens, per dz....	5 50	@	7 00
Roosters, young, large.....	4 50	@	6 00
Broilers, small..	2 00	@	3 00
do large.....	3 00	@	4 00
Ducks, tame, doz	5 00	@	7 50
Geese, per pair.	2 00	@	2 25
Hare, per doz...	2 50	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz....	1 50	@	2 00
Mallard Ducks..	—	@	—
do small.....	-	@	—
Wild Geese, gray	—	@	—
do white.....	—	@	—
Doves, per dozen	00	@	1 25
Prairie Chickens	—	@	—
Grouse.....	—	@	—
Rabbits.....	1 25	@	1 50
do tame.....	5 00	@	6 00
Venison, per lb.	—	@	10

PROVISIONS.

Cal. Bacon, Light	14	@	15
do Medium....	—	@	13
do Heavy.....	—	@	12½
Eastern do.....	13½	@	14
Hams, Cal	15	@	15½
do Whittakers	—	@	17
do Duffield, ch	—	@	16
do Plankton & Armour.....	—	@	15
do Boyd's	—	@	15½
do Stewart's..	—	@	15½
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard.....	13	@	14

SEEDS.

Alfalfa, Chili..	—	@	11
oo California.	—	@	14
Canary.....	4	@	4½
Cotton.....	6	@	10
Flaxseed.....	3	@	4
Hemp.....	—	@	8
Ky. Blue Grass..	50	@	60
do 2d quality..	40	@	50
do 3d quality..	30	@	40
Millet.....	12	@	15
Mustard, white.	3	@	4
do. Brown....	2	@	2½
Italian Rye.....	30	@	40
Perennial do....	30	@	40
Rape.....	—	@	11
Timothy.....	11	@	12
Sweet V Grass..	60	@	75
Orchard do....	30	@	35
Red Top do...	30	@	40
Hungarian do	10	@	13
Lawn do.....	50	@	60
Mesquit do...	27	@	—
Clover Red.....	—	@	20
do White	—	@	65
Alsike.....	—	@	60

WOOL, ETC.

Spring, short, lb.	22½	@	25
do choice Nort	25	@	31½
Medium grades....	18	@	22
Fall clip.....	18	@	20
Burry.....	14	@	18
Hides, dry.....	19	@	20
do wet salted	6½	@	9½
Tallow, Crude..	5	@	6
do Refined...	6	@	7

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Sept. 16, 1874.

POULTRY, GAME, FISH, MEATS, ETC,

Turkeys are 5c ₰ lb lower. Other Poultry is rather scarce. Quail have been in season since the 15th inst., and are to be seen in the market, quotable at from $2 to $2.75. The excessively warm weather renders it difficult to keep them fresh. Meats and fish are unchanged in price.

Spring Chickens	50	@	75
Hens.....	75	@	1 00
Eggs.....	—	@	45
do Ducks'.....	45	@	0
do Farallones.	30	@	35
Turkeys, ₰ lb..	—	@	25
Ducks, Can Bk, pr	—	@	—
do Mallard, pr	—	@	—
Tame, do.....	1 50	@	2 00
Teal, ₰ doz....	—	@	—
Geese, wild, pair.	—	@	—
Tame, ₰ pair..	3 00	@	4 00
Snipe, ₰ doz....	—	@	—
Quail, per dozen	2 00	@	2 75
Prairie Ch'k's, ea	—	@	—
Pigeons, dom. dz	—	@	1 00
Wild, do.....	—	@	2 00
Squabs.....	—	@	4 50
Hares, each ...	37½	@	50
Rabbits, tame, pr	75	@	1 00
Wild, do, ₰ dz.	2 00	@	—
Squirrels do....	15	@	20
Beef, tend, lb..	—	@	20
Corned, ₰ lb..	8	@	10
Smoked, ₰ lb..

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes.

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambonillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

N. GILMORE,

Importer and Breeder of

Angora or Cashmere

GOATS

—OF—

PURE BLOOD

—AND—

ALL GRADES.

For sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address

N. GILMORE,
El Dorado, El Dorado county,
11v6-eow California.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

Angora Goats and Thoroughbred Cattle.

I will sell at public sale, without reserve, on Friday, September 25th, 1874, at 12 o'clock M., on the State Agricultural Society's Fair Grounds, THIRTY-THREE HEAD OF PURE BRED ANGORA GOATS. Also, one Jersey Bull, one Ayrshire Cow, one two-year-old and two one-year-old Ayrshire Bulls. Pedigrees guaranteed. Terms Cash. ROBT. BECK.

Sacramento, August 24th, 1874. 9v8-td

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT

P. S.—*Special rates to members of the Grange.*

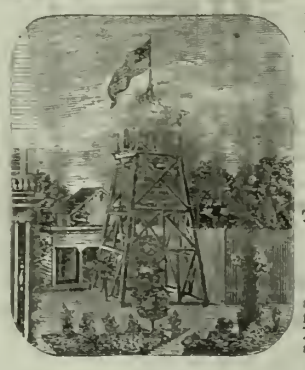


L. U. SHIPPEE, Importer and Breeder of Thoroughbred Spanish Merino Sheep and Short-Horned Durham Stock, Stockton, Cal.

I wish to call your attention to my flock of Spanish Merino Sheep, both Ewes and Bucks, imported during the last two years, and selected from the best flocks in Vermont. Unequaled on the Pacific Coast for quality and size, many of them having taken first premiums both in Vermont and California. Should you or any of your friends require sheep of this quality, you will do well to call and examine this flock before purchasing elsewhere, as I intend to sell them at greatly reduced prices from what they have formerly been sold.

My Flock Consists of 1,500 Sheep, 1,200 Imported and 300 of my own Breeding.

P. S.—This flock is not only the finest but the largest flock of imported Spanish Merino Sheep on the Pacific Coast. They have been selected from the flocks of the best breeders in Vermont, such as Rockwell, Sanford, Rich, Hammond, Saxton, Dean, Ellsworth, Remley, Stickney, and others who are acknowledged to be among the best breeders of Spanish Merinos in America. 24v7-eow-4m



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the **Plains of Kansas, Nebraska, Missouri, Iowa and Illinois**, where no other mills have been known to stand any length of time. All we ask is a full investigation of the **DEXTER.**

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO

4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.



The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept upon the MERINO RANCH



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. **City Office—315 California Street, San Francisco.**

SEVERANCE & PEET,
10v7-eow Importers and Breeders of Spanish Merino Sheep.

ALFRED S. MOORE. W. L. THWING.

ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.

7v8-3m

SATISFACTION GUARANTEED IN ALL CASES.



BROWN LEGHORN COCKS, $5 Each.

Wilson's Brown Leghorn Cock, "Eureka."

Fowls of all varieties for sale in pairs, trios or singly. Adult fowls, $5 each. Young fowls, $3 and upwards. Write for further particulars to

C. W. WILSON,
East Oakland, Cal.,
Breeder of Land and Water Fowls in variety. 10v8-1m



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 44 Cal. Market, S.F

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, ETC.

For Sale, wholesale or retail, by

B. F. WELLINGTON,
(Successor to E. E. Moore).
425 Washington St., San Francisco. 22v7-1y

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rate. Storage taken at lowest current rates. 4v8-tf

Davis & Sutton, Commission Merchants,

For California Fruits: also for the sale of Butter, Eggs, Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.

3v8-1y

Agricultural Articles.

Ryder's American Fruit Drier.



It is claimed no Drier can equal, and it is guaranteed no Drier can excel the AMERICAN in the excellence of its work. We suit this Drier to the wants of Farm and Factory. We make one series, Nos. 1, 2 and 3; one line of trays, capacity, say of apples, 8, 12 and 20 bushels per day of 12 hours; prices, $100, $125, $150. Factory Series, Nos. 1, 2 and 3; capacity, 25, 40 and 60 bushels per day. Again we make a Double Factory over one Furnace with capacity over 100 bushels per day. Two of these Driers should turn off at least 1,200 pounds, or over half a ton per day. The prices given include the right and every item of expense to commence work, and are all constructed to be portable. Every variety of Fruits, Vegetables, Cereals or Meats can be cured on this Drier for the home or foreign markets. The company have established depots in all the principal Eastern cities for the sale of Fruits, etc., prepared for the market on this Drier, and prices will from time to time be given to parties interested. This Drier took the first premium and silver medal at the Fair of the Maryland Institute, held at Baltimore in 1873. Send for Circulars. Farm, County and State Rights, and Driers complete with Heaters, sold by

J. M. KEELER, General Agent,
306 California street, San Francisco

O. CREGO. S. C. BOWLEY

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET..... .....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harnesses, of the most celebrated makers:

O Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
24v5-3m San Francisco.

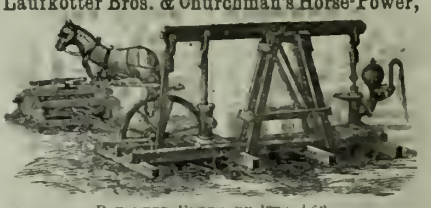
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



PATENTED FEBRUARY 13TH, 1872.

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers Corn Sheilers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
v7-2m-3m Cor. J and 10th Sts., Sacramento.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

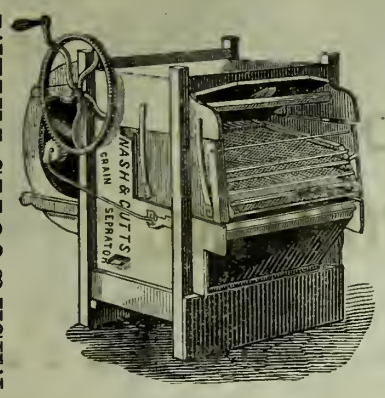
Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT



GRAIN SEPARATOR AND FAN MILL.

THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

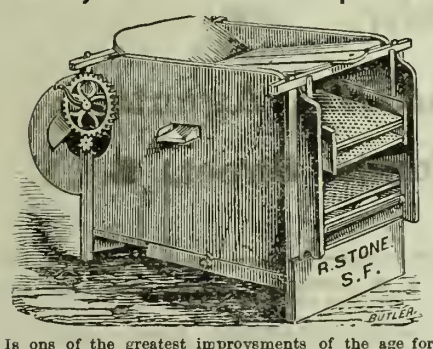
The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars address

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Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

THE PATENT
Novelty Mill and Grain Separator



Is one of the greatest improvements of the age for cleaning and separating grain, while it combines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

For further information, apply to

R. STONE,
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POISON! POISON!
WAKELEE'S PATENTED
Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ :—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ABGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is one death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

EUREKA WAREHOUSE,
Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY, 1874.

First month 50 cts ₱ ton } If delivered on Eureka wharf.
Afterwards, 30 cts ₱ ton }

Season Rates, fixed at time of storing, $1.50 per ton.

If hauled with teams, first month 25 cts per ton.

Afterwards, 30 cts per ton. Second Weighing, 10 cts. Grain received on Dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to E. E. Morgan's Sons, S. F.

sep19 **A. J. GOVE, Manager.**

STATE FAIR FOR 1874,

—AT—

SACRAMENTO, CALIFORNIA.

COMMENCING MONDAY, SEPTEMBER THE 21ST,

—AND CLOSING ON—

SATURDAY, THE 26TH OF SEPTEMBER.

$45,000 CASH TO BE DISTRIBUTED IN PREMIUMS.

THE EXHIBITION will be divided into seven Departments, and the SOCIETY'S GOLD MEDAL to be awarded to the most Meritorious Exhibition in each department.

The Largest STOCK SHOW ever had by any State in the Union.

The most attractive SPEED PROGRAMME and LIBERAL PURSES ever offered by any Agricultural Society.

A PLOWING MATCH, giving all Plows entered a thorough test, will be had on the grounds.

A GRAND REGATTA on the river, which will be open to all Rowing Clubs in the State.

Public Sale of THOROUGHBRED STOCK at the Park each day of the Fair.

The Central Pacific Company's Railroads and Steamers will carry all articles to and from the Fair FREE OF CHARGE.

Wells, Fargo & Co's Express will deliver all packages FREE not weighing over twenty pounds.

☞ Applications for Stalls at the Park and Space at the Pavilion should be made to ROBERT BECK, Secretary, at once.

MEMBERSHIP.....$5 00
SINGLE ADMISSION..... 50

R. S. CAREY, President,
ROBERT BECK, Secretary.

VISITING GRANGERS.—Sacramento Grange, Saturday, passed this resolution: "*Resolved*, That all Grangers visiting at the State Fair are cordially invited to make the hall of Sacramento Grange, No. 12, their headquarters." The Hall is on Seventh street, between J. and K —Pioneer Hall. sep5-3t

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE, EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

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HOME SEWING MACHINE.

This machine is manufactured after an experience of twenty years. It contains within itself every known improvement. **It is the best** because the **simplest, easiest to understand** and by far the **lightest to run**, and the equitable adjustment of all its parts makes it the **most durable** Machine in the market. Take the INTERESTED STTEMENTAS OF NONE, but

EXAMINE for YOURSELF.

SEND FOR A CIRCULAR.

It uses a **Shuttle, Straight Needle, Two Threads,** and makes a stitch alike on both sides.

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HOME SHUTTLE SEWING MACHINE.
Price, $45.

Mme. Demorest's Reliable Paper Cut Patterns. Send for a Catalogue. I5v7-eow-6m

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H. H. BALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have no interests that will conflict with those of the producer. 4v23-1y

PEACHES.

An enormous stock of trees, exceedingly cheap, embracing the BLOOD-LEAVED RIVERS', and other new varieties. Our assortment of FRUIT and ORNAMENTAL TREES is unusually complete. New Trade List sent free.

HOOPES, BRO. & THOMAS,
Cherry Hill Nurseries,
10v8-6t Westchester, Pa.

TREES, ETC.

AUTUMN OF 1874.

We invite the attention of PLANTERS and DEALERS to our large and complete stock of

Standard and Dwarf Fruit Trees.
Grape Vines, Small Fruits.
Ornamental Trees, Shrubs, Roses.
New and Rare Fruits and Ornamental Trees.
Evergreen and Bulbous Roots.
New and Rare Green and Hot-House Plants.

Small parcels forwarded by mail when desired.

Prompt attention given to all inquiries. Descriptive and Illustrated priced Catalogues sent prepaid, on receipt of stamps, as follows: No. 1—Fruits, 10c. No. 2—Ornamental Trees, 10c. No. 3—Greenhouse, 10c. No. 4—Wholesale, FREE. Address,

Estab'd 1840. **ELLWANGER & BARRY,**
MOUNT HOPE NURSERIES,
sep5-eow-3t Rochester, N. Y.

The Sewing Machine
—FOR THE—
GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

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7v8-tf **SAMUEL HILL, General Agent.**

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Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

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Or, W. F. JOHNSON, Folsom, Sacramento County, California. Refer to Lachman & Co., San Francisco, and Johnston Brandy and Wine Manufacturing Co., Sacramento and Marysville. 2v8-12w

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A long residence in the interior, preceded by a ten year's experience in this city, in the business of supplying help for both city and country, has given the undersigned such a general knowledge of the wants of the community in relation to help of every kind, and the sources of supply for the same, that we feel abundantly confident of our ability to give the best satisfaction to both those in search of, and those who are in need of help—whether for the chamber, the kitchen, the farm, the mine, the factory or for general work.

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Manufacturers of

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OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

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AULD.....Master.

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11v7-6m

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We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. special attention given to furnishing Domestic Servants.

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THE **LAFLIN & RAND POWDER CO.** is shipping

THEIR CELEBRATED **"ORANGE SPORTING"** POWDER

Overland in their own cars.

The first car load of Powder has been just received by the Agents and put on the market; the sportsmen pronounce this Powder to be

THE BEST, THE CLEANEST AND STRONGEST.

Orange Lightning---No. 1 to No. 7. In one pound canisters only. The best powder made.

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POWDER FRESH FROM OUR ORANGE MILLS
Received here 21 days after it is made.

10 Powder Mills. 5,000,000.00 Invested in Powder.

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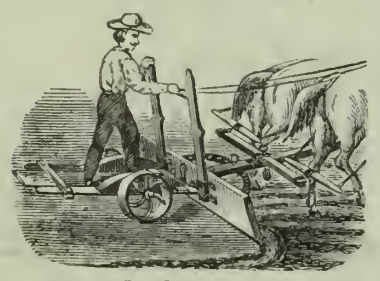
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THE CALIFORNIA SCRAPER.

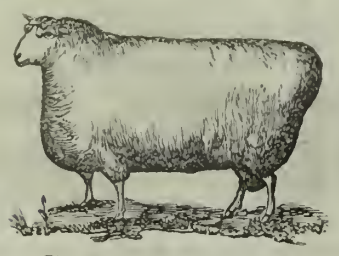
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The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

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Cotswold Rams,

Half, three-quarter and seven-eighths (⅞) from imported sires. Lambs—yearlings and upwards—for sale by LEWIS & McCRACKEN,
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FARMERS write for your paper.

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SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

And Tree Seeds,

GARDEN TOOLS, TREES, PLANTS, Etc.

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Young Fowls now for sale at reduced prices. Also a few of my imported Fowls in pairs or trios. Send stamp for illustrated circular, containing a full description of all the best known and most profitable fowls in the world, to

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PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

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R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

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N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Mooay & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

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GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, SEPTEMBER 26, 1874. [Number 13.

Farming on a Small Scale.

This is one of the subjects upon which Eastern Agriculturists are particularly liberal in their advics to California farmers; and if they fail to note any evidence of our profiting by their advice, they should not attribute it either to stupidity or stubbornness on our part. We probably realize equally with them the benefits that would grow out of the division of agricultural land and the multiplication of farmers. Our time for this desirable state of things has not yet arrived, but is gradually approaching, and we do not chafe under our present expensive and weighty system. It is a bridge that has carried us safely over a wide chasm, we are therefore disposed to speak well of it. What would be our present condition without our "California system of farming," which some of our own people, even, are ready to denounce. When we adopt the small farm system, we shall discard some Eastern notions which are now supposed inseparable to it, and embody in it some features with which our Eastern friends are unfamiliar. For example, we believe that their favorite "hobby," mixed farming, never will prevail here, and that special farming will predominate to quite an extent in the subdivided scale in the future, as it does in the mammoth scale of the present time. Our Eastern farmers are, we fear, deluded in a manner, with a sort of semi-romantic notion of the possible independence of farm life, and expect to enter this millenium through mixed farming. It may be possible with them, but it is not with us. Our ways are not their ways; and there is much in our agricultural surroundings to render their well meant advice inapplicable here.

We are pleased to see our own practical farmers discussing the subject of small farms, and it is with extreme gratification that we give a synopsis of an address delivered at the Stanislaus County fair, at Modesto, by our friend, and sometimes contributor, Mr. V. E Bangs. The views expressed by Mr. Baugs on this occasion are the result of experience; he being what is considered in California a farmer on a small scale, owning and working a farm of 320 acres near Modesto.

A correspondents sends to the San Francisco *Bulletin* the following synopsis of the address of Mr. Bangs, the subject of which is:

How to Make a Small Farm Pay.

He locates the farm, the subject of the essay, in Stanislaus county. To accomplish the desired end, these conditions, he says, are necessary:

First—Diversity of husbandry.

Second—More thorough tillage.

Third—Practice of economy.

With regard to the first, the author considers that under the present system—wheat-raising and nothing else—the time of the farmer cannot be occupied more than two thirds of the year, and moreover, when the wheat-crop fails, he is left without other resources. In the diversity of husbandry is included rearing hogs, cattle, horses, chickens, turkeys, etc., and tending garden, orchard, and vineyard. "Hogs," says Mr. Bangs, "can run at large during eight or nine months without injury to growing crops, while in the fall they can fatten on the stubble." Thus bacon and hams for home consumption and sale can be secured. One or two cows and brood-mares should also be kept—the cows for milk and butter for the family, and the brood-mares for colts and draught purposes. Chickens, turkeys, and ducks, Mr. Bangs maintains, can be kept at little or no expense to the farmer, and $100 a year gained from each class of poultry. Upon the question of the garden and the orchard, the author considers that not less than an acre should be enclosed for these purposes, not too much irrigation provided, and then trees enough set out for mutual protection. Mr. Bangs maintains that vineyards can he successfully cultivated on the plains of Stanislaus county without irrigation, if only the ground be cultivated between the rows, and he cites his own experience and the experience of James E. Laughlin, near Modesto in support of his statement.

Upon the second head—more thorough tillage—Mr. Bangs insists upon deep-plowing. "Land should be plowed to the depth of eight or nine inches once in five years; at other times, deep enough to cover weedseed beyond the power of resurrection." He also recommends the method of putting in a crop of wheat or barley in the winter, by using a gang-plow, with seed-sower and harrow attached. He also recommends, in a farm of the average quarter section, that at least 40 acres should be summer-fallow once in the winter and again in June. By this means noxious weeds are more effectually exterminated, the chance of a good crop increased, and the expense of harvesting lessened, while the yield under any circumstances is the same. Volunteer crops for any other purposes than hay should be discarded, except under the most favorable conditions. Harrowing the ground in the spring is also an effectual means of increasing the yeild where a heavy crust has formed on top of the land.

The third head—economy—is discussed at considerable length, the author using the word in its broadest and wisest sense. He argues for more forethought, the use of the best machinery, the cultivation of home habits and home comforts, and closer attention to the markets.

The ranchers appeared to appreciate the essay of Mr. Bangs. but whether they will put his precepts into practice can only be seen in their future operations. In this connection of farming profitably it has been mentioned to me that a farmer might save considerable money if he occupied his spare time between harvesting and plowing and plowing and harvesting in making his own bags. No great skill is required, and bags form an important item in the California farmer's outlay. The labor of making is one principal element in their cost, and there certainly seems no reason why, with the material obtained, a rancher cannot sew a bag together as well as a Chinaman in San Francisco.

Agricultural Lectures at the University. The first of several courses of agricultural lectures, for which arrangements have been made by the Board of Regents, will be given at Berkeley, by Professor E. W. Hillgard, formerly Professor of Agriculture in the University of Michigan. The lectures will be given daily (except Saturday and Sunday) at half-past 2 o'clock, P. M., beginning Friday, Sept. 25th, in the agricultural lecture-room.

The junior and senior students in the College of Agriculture and Chemistry will be required to attend these lectures; and all other persons (whether students in the University or not), who are interested, are invited to do so.

In addition to the agricultural course, Professor Hillgard will give a course of lectures on the "Chemistry of Common Life," on Tuesdays and Thursdays, at 10 o'clock, A. M.

It is estimated that the wheat crop in Montana this year is 50 per cent. less than last, and the oat crop 33 per cent. less.

Extensive fruit shipments are being made almost daily from Auburn station—mostly for parts east of the Sierras.

Camping Out.

The hunting season commenced last week, the game law having expired on the 15th inst. The slaughter of quail has begun and numerous parties are "blazing away" unmercifully and enjoying themselves for a brief season in the woods. Camping parties are in order once more and hundreds of them started this week with hunting outfits, intent on killing as many dozen quail as possible. The wild character of California is very favorable for "campers" and no recreation is probably so much enjoyed, especially by city people as a week's camping in the woods. After the fatigues of a days work they can gather around the camp fire, smoke and spin yarns and in a day or so begin to feel that they have never lived in any manner. Our illustration shows a party of hunters round a camp fire, some carrying wood, while the others are enjoying a rest after the exertions of the day. The scene will be recognized as familiar by many who have participated in this healthy recreation.



CAMPING OUT.

North Pacific Coast R. R.—There are now about 20 miles of iron laid on the narrow-gauge road, and as both tunnels under White's hill are completed, there is little doubt of the road being completed from Saucelito to Tomales this season. This will be good news to the farmers about Tomales and Bloomfield, Two Rocks, Bodega, etc.

Five Alden fruit driers are being put up at Los Angeles. The common Mission grape by this process makes an excellent raisin, and as this fruit grows larger and of better quality in Los Angeles than in any other part of the State, the raisins produced are expected to be of the best.

The steamer "Varuna" arrived from the upper Sacramento Monday, towing the barge "Granger," loaded with 10,050 sacks of grain—nearly 700 tons—the largest load brought down from the upper Sacramento this season, and one of the largest that ever arrived from above.

From a measured field of eleven acres, on Shermans Island, Mr. Shaw of Berkley harvested 59,325 pounds of clean white Australian wheat, being within a fraction of ninety bushels per acre. The quantity of seed used was sixty pounds per acre, one pound producing ninety

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Big Meadows, Plumas county, farmers are anticipating another hard winter, and are putting up large quantities of hay.

Farmers and stock-men in Rogue valley are making extensive preparations in anticipation of another heavy winter.

Cash Versus Compliments.

It is the hight of folly to suppose that our fairs can be successfully conducted on any other than a cash basis; and the dull sermons that deplore this condition of things are delivered from about the same altitude of insincerity. To us there is nothing humiliating in the acknowledgment that "money makes the mare go." If there is anything degrading growing out of this condition of things it is the supposed necessity of resorting to hypocritical deceit, in endeavoring to make people believe that we are actuated by any other than a pecuniary incentive in our various undertakings. The long-haired Daniels who have come forth to judge the American people socially, are particularly shocked at the idea of our worshipping "the almighty dollar" yet notwithstanding they comb their locks back of their ears, displaying a vast surface of intellect externally, they manifest a woful lack of mental caliber in failing to fathom this predominating trait of our national character. They cannot distinguish between the greediness that seeks to obtain the dollar for the purpose of hoarding it, clinging to it until death releases the grasp, and the manly desire that only prizes the dollar as a means by which some worthy object can be accomplished. This we are proud to say, is the true basis of our pecuniary religion; and the almighty dollar is symbolical of progressiveness in every direction; and, in our opinion, the contribution-plate that is passed around at the close of a sermon denouncing the worship of the almighty dollar, is a more humiliating acknowledgment of its mightiness than the frank, good humored confession that "money makes the mare go."

Our industrial fairs are evidently in danger of being restricted in their usefulness by this superficial view of the dollar question. A certain degree of disgust is manifested in some quarters at the idea that cash, in the form of premiums, is needed to bring exhibitors out; and those who fail to discover in the glory of the thing a sufficient incentive for exhibiting their products are sharply criticised. At some of the non premium fairs in the interior, owners of stock in the neighborhood made no exhibit, but took their stock to those fairs that offered some cash return for the expense incurred; consequently such local fairs were unattended, and the almighty dollar did not flow into the treasuries of the societies. It is certainly to be regretted that the limited means of these societies would not warrant the offer of cash premiums to any extent; but does not the experience thus gained teach us that in managing fairs, as in other enterprises, money expended will bring a return in money?

We should not expect to have individuals make very great sacrifices to localized patriotism; or that exhibitors will be satisfied with the cheap patronage that "encourages and fosters worthy objects." They will go where they can get praise and pence at the same time, the latter being, in addition to its specific value, a guarantee of the sincerity of the former.

Fairs that have succeeded without awarding premiums, have done so by converting them into advertising mediums solely; and here the mightiness of the dollar is manifested in its most offensive aspect. Give us, we say, in preference to this mode, the downright demand of the exhibitor for a specified award for superiority. In the the latter case merit stands a far better chance of obtaining its just rewards, and when the cash is paid the exhibitor has no further demands upon the managers or visitors, or, failing to secure the specified premium, he has a definite idea of the inferiority of his product, and the matter being of a strictly business character, there is less occasion for sensitiveness over a declared failure than there would be if it were all for glory, and would be far more inclined to try again.

If we would consider our fairs as business transactions, merely, and in seeking to improve their tone would endeavor simply to stick to a fair and square business basis, better results would follow than by striving to evangelize them, or to convert them into mediums of social advancement.

The Fresno lumber mill is turning out 20,000 feet per day. The flume has already been completed ten miles.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Seedlings, etc.

EDITORS PRESS:—In last week's RURAL PRESS my attention was called to this subject by the article on "Orange Culture," in which I perfectly agree with Mr. Day in regard to seeds producing the same kind of fruit, provided the plants from which the seeds were taken had not been amalgamated by grafting, budding or the roots being intermingled with other plants.

My experience has shown me that the fruit of the seedlings of my original fruit can be much enlarged and improved, both in color and flavor, by cultivation; and that the seedlings of fruit-bearing plants that have been grafted, budded or otherwise intermingled with other plants are very apt to produce new varieties, which, in some instances, are much improved, but generally their qualities are deteriorated. I believe the stalk on which the graft is set has also some influence upon the fruit. For illustration: I have three Flemish Beauty pear trees from the same nursery, the fruit of one of them being large and handsome, but dry and poorly flavored; a second is medium size, quite acid and pleasant flavor; and the third bears fruit large, handsome, sweet, juicy and of superior flavor. Can any one account for this difference except in the way I suggest?

GIDEON AUGHINBAUGH.

Alameda, Sept. 14th, 1874.

Physician Wanted.

EDITORS PRESS:—I seldom write for the papers, but a communication from our part of the country is seldom seen, and, being in need of a good family physician, I thought I would venture to write to you, hoping it may be the means of attracting some doctor's notice. Langville is quite a flourishing little town and steadily growing.

The new Grangers' hall is just completed, and I assure you it is quite an ornament to the town. This town is situated 15 miles due west of Woodland, at the mouth of Cspay valley, in the center of a large farming district, Capay valley alone having produced the last season 50,000 sacks of wheat. This valley is well watered by Cache creek, the outlet of Clear lake, flowing through its entire length. Hungry Hollow, on the north, is a large grain-growing district and its nearest town and post-office is Langville. We have an irrigation canal for several miles which insures crops when rains are insufficient. There are also two more canals to be constructed near the mouth of the valley; one on the north and one on the south; and will be completed next year. They will be large enough to irrigate 5,000 acres per day; which will render this section of the country one of the most fertile in the State.

The RURAL PRESS comes along regularly and is always a welcome visitor. SARAH.

Langville, Yolo Co., Sept. 14th, 1874.

[This, it seems to us, offers an inviting location for one of the many physicians who are anxious to secure a field for their professional labors and a desirable place for a permanent home. The fact that the RURAL PRESS is duly appreciated by the people of Langville speaks well for the intelligence and taste of the community; and we take this opportunity to inform our fair correspondent that, on the same day on which her modest compliment was received, we opened a copy of the London *Farmer*, one of the leading agricultural journals of Great Britain, and saw therein, reprinted and endorsed, the views put forth by the RURAL PRESS, a few weeks since, on "The Future of California Wheat Growing." This, with many compliments of a similar character, which we are continually receiving through the leading agricultural papers of the East, interspersed with innumerable friendly encouragements from friends nearer home, gratifies a feeling higher than mere journalistic vanity; affording increased assurance that we are on the right track and are doing our work in a satisfactory manner.—EDS. PRESS.]

THE use of infusorial earth as a non-conductor of heat is suggested by the *Monetary and Mining Gazette*. Tripolite or infusorial earth, being a worse conductor of heat than coal ashes, and almost as poor as flax chaff, and being refractory, is adapted for walls of ice-cellars and fire-proof safes, for casing steam boilers and pipes, etc., and possesses the advantage of affording protection against rats and mice. Its lightness is also a great recommendation. One cubic foot of it weighs 21¼ to 26 pounds; the same bulk of dry coal ashes 40½ to 42½ pounds, and of dry earth 94 to 128 pounds. For casing steam pipes it is mixed with dry flax seed.

RECENT experiments by M. Sorel prove that carbon retains its reflecting capacity even at the highest temperatures. A sunbeam becomes reflected by diffusion and is polarized in exactly the same manner, whether it falls upon a brilliant flame or upon earth.

The Centennial Exposition.

The United States Centennial Commission are still busily engaged in perfecting their plans for the Exhibition. The Commission has recently issued a circular, giving particulars with regard to the mode of making application for space, etc. The exhibition will be opened April 19th, 1876, and will close on the 19th of October following—remaining open just six months.

The exhibits will be arranged in 10 departments, and all articles belonging to the several departments will be located in the space set apart for that special department—except in such collective exhibits as may receive special sanction for such severance. This will enable the visitor to readily make a competitive examination of exhibits—a thing almost impossible to do in the Exhibition now in progress in this city, where, owing to the tardy manner in which exhibitors made application for space, no time was left for the managers to classify.

The Commission announces its readiness to receive applications for space. It is important that it should be known, with the least possible delay, what space will be required in each of the departments of the Exhibition by American exhibitors, in order that it may be determined what room can be assigned to foreign nations. Manufacturers and others who purpose exhibiting on this occasion should therefore make known their intention promptly, and thus avoid the disappointment of finding the room they desire preoccupied. The departments have been arranged after the following

Mode of Classification.

1. Raw materials—mineral, vegetable and animal.
2. Materials and manufactures used for food, or in the arts, the result of extractive or combining processes.
3. Textile and felted fabrics; apparel, costumes and ornaments for the person.
4. Furniture and manufactures of general use in construction and in dwellings.
5. Tools, implements, machines and processes.
6. Motors and transportation.
7. Apparatus and methods for the increase and diffusion of knowledge.
8. Engineering, public works, architecture, etc.
9. Plastic and graphic arts.
10. Objects illustrating efforts for the improvement of the physical, intellectual and moral condition of man.

The General Rules and Regulations are Substantially as follows:

Applications for space and negotiations relative thereto should be addressed to "the Director-General, International Exhibition, Philadelphia, Penn."

Exhibitors will not be charged for space.

A limited quantity of steam and water-power will be supplied gratuitously. The quantity to be settled at the time of the allotments of space. Any power required in excess will be furnished at a fixed price.

Exhibitors must provide, at their own cost, all show-cases, shelving, counters, fittings, etc., and all countershafts, belting, etc., for the transmission of power from the main shafts. All arrangements of articles and decorations must be in conformity with the general plan adopted by the Director-General.

Special constructions of any kind, whether in the buildings or grounds, can only be made upon the written approval of the Director-General.

The Commission will take precautions for the preservation of objects in the Exhibition; but it will not be responsible for damage or loss by fire or otherwise.

Favorable facilities will be arranged by which exhibitors may insure their own goods.

Exhibitors, or such agents as they may designate, shall be responsible for the receiving, unpacking, and arrangement of objects, as well as for their removal at the close of the Exhibition.

The transportation, receiving, unpacking, and arranging of the products for exhibition will be at the expense of the exhibitor.

The installation of heavy articles requiring foundations should, by special arrangement, begin as soon as the progress of the work upon the buildings will permit. The general reception of articles at the Exhibition buildings will commence on January 1st, 1876, and no article will be admitted after March 31st, 1876.

Space not occupied on the 1st of April, 1876, will revert to the Director-General for reassignment.

If products are not intended for competition, it must be so stated by the exhibitor; and they will be excluded from examination by the International Juries.

If no authorized person is at hand to receive goods on their arrival at the Exhibition building, they will be removed without delay, and stored at the cost and risk of whomsoever it may concern.

Articles that are in any way dangerous or offensive, also patent medicines, nostrums, and empirical preparations whose ingredients are concealed, will not be admitted to the Exhibition.

The removal of goods will not be admitted prior to the close of the Exhibition.

Immediately after the close of the Exhibition, exhibitors shall remove their effects, and complete such removal before December 31st, 1876. Goods then remaining will be removed by the Director-General and sold for expenses, or otherwise disposed of under the direction of the Commission.

An official catalogue will be published in four distinct versions—English, French, German and Spanish.

The Centennial Commission reserves the right to explain or amend these regulations, whenever it may be deemed necessary for the interests of the Exhibition.

BEES.

California Honey.

Among the other numerous products for which California seems destined to become famous, honey ranks as by no means the least valuable item. It has already found its way into the Eastern markets, though so far in limited supply, and is much admired for its purity and delicacy of flavor. Its production is not limited to any part of the State, but at present it is chiefly made a specialty in San Diego county, near the Mexican border. The honey crop of that county for 1873 was 119,000 pounds, and it is expected it will this year equal 200,000 pounds.

The bees commence working in that county about the first of February, and the season for storing honey lasts from June to September. The finest honey is made from the flowers of the sage plant, which grows there in such abundance. This is the true sage, and must not be confounded with the "sage brush" of Nevada and the northern counties. The flat top or "buckwheat grasswood" also affords excellent honey. The bloom of this plant closely resembles that of buckwheat, hence the name. The flower of the anmac is another source, and the ice plant which covers so much of the country is likewise sought by the bees. This latter plant makes a very white honey, but it is liable to the objection that it turns very quickly to sugar, or "candies," as the honey men term it. The bee keepers therefor try to avoid it.

The bulk of the honey finds a market in the East. Several car loads were shipped from San Diego East last year and found a paying and appreciative market, and much more will be shipped this year. The honey made in San Diego is exceedingly white and handsome, and of fine flavor, and commands a good price and ready market wherever offered. Little or no strained honey can be sold during the prevalence of the green fruit season, and it will not be until next fall that any great amount can be moved. The total crop in California this year is variously estimated at from 600,000 to 700,000 pounds.—*Economist.*

ITALIAN BEES IN BAD ODOR.—We have a report of a meeting of the German agriculturists of Ober Hesa, conveying an unfavorable account of Italian bees. Herr Dorr, of Mettenheim, said he had kept Italian bees since 1857, and taking the utmost pains with them he became possessed of many fine, pure colonies, and also some crosses in the first and second degrees. As a result of his experience he would not give a straw for the foreign races. There seem to be two great drawbacks; one the foul brood and the other the strong propensity to swarm. With foul brood he had lost heavy colonies, and on the whole many large apiaries have gone entirely to ruin from these causes. Some who started with 20 to 30 stocks have not now an ounce of honey. He acknowledged, however, that half-breeds are now doing well, and he thinks that if the money expended on Italian and other bees had been devoted to improving such native stocks as had distinguished themselves, a great progress would have been made. Many bee keepers in this country as well have become disgusted with their experience with the Italians, and especially in their purchases from persons who ought to be above deceit and sharp practice; and it looks now as though there would be a decided reaction against Italian bee culture. The suggestion of Herr Dorr, that good results could be secured by propagating such stocks as distinguish themselves, seems worthy of special attention. —*N. Y. Tribune.*

WHITENING BEESWAX.—In cool weather wax can be whitened in a little while in the sun by spreading it out in very thin flakes or layers. Take a very thin board or a clean shingle and wet it thoroughly, and dip it first in pure melted wax. It will adhere to the shingle in sufficient quantity thick as is necessary, and it will cool off almost instantly on being taken out of the melted wax. Now draw a knife along the melted edges and you can readily cleave it off the shingle, and you have the thin layer of wax. Expose this to the sun on the snow or on the window sill, and it will become perfectly white, when it can be made up into cakes or any fancy form suitable for market, where it will command a much higher price than the yellow wax.

NEW PUMPING APPARATUS.—Messrs. John Jones & Sons, of the Old Buffery Colliery and Furnaces, Dudley, England, have lately put down a powerful pumping apparatus, the engine of which does a vast amount of work with a minimum of power. It is called a "bull" engine, is of 80 horse power, and was made by Messrs. Lee, of Patricroft, near Manchester. The cylinder is 30 inches in diameter, with a working barrel of 12 inches to the lift and an eight-foot stroke. With one boiler 30 feet by five and a half feet, this engine raises 1,250 tons of water per day.

THE HORSE.

Diseases of the Horse's Eye.

Amaurosis.

Amaurosis is a disease which is occasionally noticed amongst our Canadian horses, and consists in diminution or complete loss of vision without any visible alteration in the organization of the eye, and is due to either partial or complete paralysis of the optic nerve, or its terminal expansion, the retina.

Amaurosis is sometimes seen as symptomatic of other diseases, as in parturient apoplexy in cows; disease of the digestive organs; and it not unfrequently exists with cataract. It may also proceed from injury to the brain interfering with the special nerve of sight. The action of the optic nerve is also impaired by allowing horses to stand for a lengthened period in very dark stables. We have met with several cases of the disease in this city attributable to this injurious practice.

When amaurosis is independent of any other disease, the pupil is dilated and loses its elliptical form, and the eye has a glassy appearance; hence the term "glass eye," which is often applied to this impaired condition of the optic nerve. The animal carries his head high, moves his ears quickly, and steps with high action.

If a strong light is brought to bear upon the eye, the pupil remains dilated, thus showing that the nervous influence is lost. Treatment is generally of little avail if the disease has existed for a length of time.

Bleeding Fungus (Fungus Hæmatodes).

This formidable and malignant disease of the eye is happily of rare occurrence in the horse. These tumors are generally rapidly developed and are exceedingly vascular. In some cases they may result from injury, but usually proceed from constitutional disease.

In an early stage of the disease the pupil is dilated, and the interior of the eye has a yellowish appearance, caused by the growth of the tumor in the posterior part of the eye; the growth extends and presses upon the cornea, rupturing that membrane, and very soon attains an enormous size. We have met with cases where the fungoid growth extended halfway down the cheek, giving the poor sufferer a most ungainly and loathsome appearance. In the treatment of these cases it is necessary to use the knife keenly; the whole tumor and eyeball must be carefully removed and the parts afterwards dressed with caustic. In some cases the hemorrhage is very great, and it may be necessary to apply the actual cautery which, as well as arresting the bleeding, also tends to destroy the malignant growth.—*Ex.*

Anthrax—Black Leg, Quarter Evil, Etc.

I have been ten miles south of my home visiting where they are having considerable loss among the cattle by a disease that they call black leg, one man having lost eleven head the past week. I told him I would write you the symptoms and see if you could help him any.

The stock that has died were mostly one and two years. They appeared to be perfectly well, and in from twelve to twenty hours were dead. The first they noticed was that they acted stupid, but the cattle are affected in different parts of the body. Some go lame in one hind leg, and some in a foreleg. One was taken on the hip close to the backbone, near the kidneys, I should think. Another was taken under the chops, causing the tongue to swell out of the mouth the whole length. The place that is diseased is about the size of a dinner plate and swells considerably, but not as bad as might be. Upon cutting into one of these places it sounds like cutting into a sponge, and the flesh looks spongy and very dark colored.

Those that have died are all steers and nearly half his herd are heifers; has not had one taken sick and live. They are in good running order, not fat; they have all the wild blue joint hay they want and some cornmeal all winter.

Spencer, Iowa. J. H. P.

This disease, and all such, is very insidious and shows itself either as an epizootic (i. e., spreading over a whole country), or as an enzootic (i. e., confined to a neighborhood or much more circumscribed in its extent). By some this is termed an inflammatory disease. Such an idea, by other eminent men, is scouted as ridiculous and very wide of the real facts. By the French the disease is called charbon, from being both like charcoal, carbon, etc. Dr. Dadd's remedy is: Spirits of hartshorn, four drachms; tar water, one quart; tincture of blood root, one ounce. Mix tar water and hartshorn, then add the blood root. For topical dressing, oil of cedar, three ounces; sulphuric ether, three ounces; tincture of capsicum, one ounce; cod liver oil, eight ounces. Mix, and rub all the affected parts. Mix first the two oils, then the ether, lastly the tincture.—*W. H., in Western Farmer.*

REMEDY FOR A HORSE COUGH.—Take one pint of wheat bran, wet it with water; put from five to seven drops of tar oil in bran; stir it well and give to the horse twice a day, mornings and evenings. It is also good for the distemper; in fact, it is good for any kind of cough a horse may have. The tar oil can be had at any drug store; it costs but a trifle.

Poultry Yard.

Mortality in Poultry.

Ordinarily, six or eight per cent. of adult fowls will die of disease annually, when they are kept for profit and given a stimulating diet to make them lay as much as possible. This is not surprising when we reflect that our domestic fowls are in a highly artificial condition. The production of large numbers of eggs is unnatural, being a habit induced by man, and causes a great strain on the constitution. The artificial supply of food in unlimited allowance, with no necessity for exercise on the part of the fowls, is another source of disease. In the wild state every species of bird must work for a living and procure their food a little at a time. It may be observed, also, that during the very part of the year when food, perchance, is abundant, the wild fowls are kept from laziness by the necessity of feeding their young, nature having fixed the breeding time in the flush season as regards forage. Again, the structure of fowls is so changed by ages of breeding, that the wings and legs, and whole sets of muscles connected therewith are dwarfed by disease, while other portions of the body are made relatively larger, which impairs the general vigor by destroying to some extent the natural balance of the organization. For these and other reasons it is to be expected that the ordinary death rate in the poultry yard will be considerable. The fact that fowls will die of old age anyhow, when five or six—at most eight years old (in most cases)—renders it likely that a certain proportion will die annually at an earlier age. In conformity with this idea, geese, which do not reach old age till 20 to 100 years, do not drop off in the early years of maturity to so great an extent as hens.

The moral of the above is that novices in poultry-raising need not worry over their ill luck, or mistrust that their management is any worse than that of their neighbors, because, perchance, a few of their fowls of two or three or four years old die every summer. It is to be expected unless the breed kept is uncommonly hardy, and all the circumstances are unusually favorable. Reduce the death rate as much as possible by hygienic measures, rather than by medicine. Give plenty of air and sunshine, feed moderately and promote exercise, and expect some losses in spite of all precautions. —*Buffalo Live Stock Journal.*

Vermin on Young Chickens.

At this season of the year there much trouble all over the country on account of parasites of a large size found on the heads and under the wings of young chickens, which are not merely an annoyance, but prove fatal in many cases. If due care was taken to sprinkle the sitting hen and her nest and eggs with powdered sulphur before the chickens were hatched, the trouble would be prevented. But if chickens are infected for lack of the prevention that is easier than cure, take kerosene and apply it in moderation to the mother hen's feathers, near the skin, paying particular attention to the under parts of her body and wings, because these come in contact with the chickens Also, take each chicken separately and pursue the same course, giving especial attention to the head, where the vermin are generally lodged. If the chickens are quite young and delicate, it will not do to let the kerosene touch the skin, for violent inflammation will follow, which may result in death. A neighbor of ours killed the whole of a fine brood of chickens by too "heroic" a treatment with kerosene. Exasperated by the vexatious vermin, he attempted to "go for" them, and as it proved, he fetched chickens and all. A little judgment must be used, if harsh applications are to be made to delicate chickens. Blindness is sure to follow, if the kerosene touches the eye. One application, if thorough, will be sufficient to kill every insect. The point, is to moisten the feathers slightly and evenly near their roots, especially with kerosene, while at the same time as little as possible must be allowed to touch the skin. Any sort of oil or grease will answer instead of kerosene, but the great advantage of the latter is that it will dry and leave the birds clean and neat, while the non-drying oils leave them in a hopelessly bedraggled condition.—*Live Stock Journal.*

Gapes in Poultry.—Paschal Morris says, in his *Practical Farmer*, that the prevention of gapes in poultry is usually accomplished in the practice of many persons of his acquaintance, by simply putting the hens with their young broods on the barn floor, and keeping them there off the damp ground and wet grass, and away especially from putrid and foul water. The barn doors being kept wide open, they have the benefit of sun and air, and a small board in front, or wire screen, keeps them in until the age when there is no danger from this parasite.

The Cochin not Degenerated.—A veteran poultry breeder writes the London *Field* that, in his opinion, "we do not possess any breed in a more primitive and less degenerate state than the Cochin; that the Cochin is one of the least, if not the least domesticated fowls we possess."

It is said that Rhode Island raises more poultry per acre than any other State in the Union. In one neighborhood there are kept in families living on three-quarters of a mile of road, 3,000 chickens, ducks and turkeys.

Selecting Breeding Fowls.

Whoever wishes to reproduce animals of any breed or variety should look carefully at his ideal and make judicious selections. It is a want of discernment or experience, or both, in making these selections which causes our valuable breeds of fowls to "run to sorts," as it must be admitted that they do. The trouble arises from a disregard of this law. Standards are neglected or wrongly understood, and numerous strains of blood make their appearance, and this strain or that strain is sought for, and this strain or that strain is paired or mated, and our splendid breeds become mixed or muddled, and are in fact injured in the hands of many. This may be seen in our boasted and worthy light Brahmas. One breeder says, "give us large frames;" another, "that too much daylight can be seen under them." One says, "neck hackle black, with a lacing of white around the edge of each feather;" another, "neck hackle white, with a distinct black stripe down the center of each feather." One breeds for feathers on the middle toes; another does not. One adheres to the true Brahma form; another attempts to imitate that of the Cochin. All of these are breeders and "advertise their wares." A cock is purchased from one and a hen from another. In the progeny we find three distinct "styles," and none of them satisfactory or truly "standard." There will be seen large cheeks, light necks, dark necks, and, on the whole, the purchaser is disappointed and dissatisfied and disgusted, and perhaps condemns fancy fowls and their breeders altogether, when, in fact, the cause is this law of nature, which is so well understood, yet so indifferently heeded—that like produces like. —*N. Y. Herald.*

Artificial Incubation.—*Paterson's Magazine* tells of an instance where artificial incubation took place by the eggs of a hen lying for a few weeks in a pile of horse manure. It seems a hen had managed to make her nest in a cavity in the heap, and after laying eleven eggs the opening had been closed by the stableman piling on more of the cleanings of the stable. The warmth generated in the heap had incubated the eggs, and nine out of the eleven hatched out. This may be a discovery which some one may turn to account.

Barley is much used in Europe, but should never be the only food in the poultry yard. Fowls do not fatten on it. Oats are good as a change, but are inferior as nutriment.

Stock Breeders.

How to Improve Farm Horses.

We have often advised with reference to the improvement of the great class of farm horses, and we say again that this must be done by crossing thoroughbred stallions, or those nearly so, such as the English call stout hunters, upon our roomy, half-bred mares. The horses fitted to do the work of the farm and go to market should have an average weight of 1,200 pounds, and be models of muscular development. Such will be able to plow at the proper depth, in all classes of soils, and 50 per cent. faster than the light, ill-formed horses now used. This must be done by judicious selection. We have abundant material for this purpose. We have only to discard every stallion or mare for breeding that does not come up to the requisite standard.

In establishing this standard farm horse, the disposition should be considered, as well as the form, weight and muscular development. Intelligence, gentleness, and a teachable disposition are requisite. Any vice is likely to be transmitted to progeny, and, therefore, vicious animals should never be bred from. One that is skittish or very restive should be discarded.

A proper system acted upon for 10 years, would quite change the character of the farm horses of the whole country; but so long as farmers will breed from any horse or mare they possess, without regard to qualities, we can not expect progress from them. We think many of our prominent breeders would find it for their interest to commence breeding the proper horse for the farm along with their fast stock. When we consider the necessity for this particular class of horses, and the great demand to be supplied, it appears evident that this is now the great unoccupied field, and will pay better on a large scale than any other.—*Live Stock Journal.*

Short-horn Colors—Fashions in England—From Mr. John Thornton's Circular, it appears that the 1st, 2d and 3d prizes in the class of aged bulls were awarded to white animals, and the 4th and high commendation was given to the roans. In the two-year-old class, the 1st, 2d, 3d and 4th were all given to roans. In the yearlings' ring, 1st, white; the 3d red, the others roan; and in prizes for bull calves, three were roan, one red and white. For aged cows, two were white, two red and white. In two year-old heifers, one red, one white and two roan. In a total of thirty-three pizes, five were red and white in color, six white, eighteen roan, and only four red. Thus what is unfashionable in color here is most fashionable there.—*Live Stock Journal.*

To render stock-growing as profitable as it should be, good grass for winter and summer is indispensable.

The Origin of the Duchesses.—A writer in the *Mark Lane Express* gives the following history of one of the most fashionable and valuable strains of Short-horned cattle. He says: "As the Duchess tribe has became so famous and sells at such enormous prices, I may here give a few particulars regarding it. The first of the family we hear anything of was bought by Charles Colling from the Duke of Northumberland's agent at Stanwix, a massive, short-legged cow, of a yellowish-red color, with the breast near the ground. She had a wide back and was a great grower. Colling called her Duchess, and had often described her to Bates as a very superior animal, especially in her handling; and told him that he considered her the best cow he had ever seen, but that he could never breed so good a one from her. She was descended from the old stock of Sir Hugh Smithson, of Stanwick. Thomas Bates bought from Colling one of the descendants of this cow in 1804 for 100 guineas, bing the same I have mentioned as being such a fine dairy animal; and he bought another at Colling's sale in 1810. For the latter he paid 813 guineas, and styled her Duchess First, and from her all the present family have descended. Bates tells us he was induced to select this tribe from having found that they were good growers and quick feeders, with fine quality of meat, consuming little food in proportion to their growth, and also from finding that they were great milkers."

Swine Breeding--Prof. G. W. Jones, in the *Farmers' Home Journal*, says: "For the health of swine, I have counted the following conditions essential: Abundant, nutritious, and varied food at regular intervals. Comfortable shelter from rains, hot suns and cold winds. Pure water and pure air. Access to fresh earth. Exercise and sunshine. Which of these conditions is most important, I do not know, but I am sure that the failure in any one of them will work mischief. I have myself carefully attended to them all, and so far have no sickness, no sows to die in farrowing, no sows to eat their young, no broken down foot joints, no barrenness; but as I look about among my neighbors, I see frequent failures. One gentleman has recently lost forty-five out of forty-eight pigs, mostly at three to five weeks old. Upon examination, I found they were confined in small floored pens, with no access to the ground; other pigs near by which ran out, but received the same treatment otherwise, were doing well. I believe fresh earth would have helped them. Another gentleman has his pigs stinted; they are in small lots, with insufficient shelter, and are fed mainly on corn-meal. A large range, better shelter and greater variety of food would save them."

Notes for Herdsmen.—Abortion in cows proceeds from hereditary causes as well as others, as weakness in the womb, etc., will follow, for I know one striking instance of its going to the third generation. A farmer who had a desire to improve his herd, but did not like to give a great price for a bull, bought a bull calf at a few weeks old from a valuable thoroughbred herd of Short-horns, getting it at half price because it was small and had come before its proper time. His cows were great, strong, Yorkshire-bred ones and never had any miscarriages, and never had any by this bull, which sired many very fine heifers; but when they came to breed there were several which calved prematurely, and continued to do so year after year. Consequently there can be no doubt but the weakness or malformation, or whatever produced the abortion in the bull's mother, was inherited by the heifers from the grandam. Dairymen in England never put a cow to the bull again that has once calved prematurely.—*A. W. F. in Rural New Yorker.*

Remedy for Sterility.—The London *Agricultural Gazette* recently made a suggestion that seems worthy of trial. Two Short-horn breeders in Ireland hired two aged but valuable bulls, and used these to cows recently purchased at sales at long prices, and which have been more or less forced. They found their cows in heat again and again; but finally tried the experiment of each driving his own cows in the ordinary country manner, seven miles to the other's bull, and succeeded in getting calves from all the cows. The result plainly shows that the driving of cows in heat some distance before serving is of decided benefit in cases where the cows are in high order. In one case the treatment has answered when the cow has been two years barren, and had been served at home thirty times by seven different bulls.

A reporter of an English paper describing the show of horses at the late fair of the Royal Agricultural Society at Bedford, objects to the habit of naming horses and mares after their breeders and their wives, as for instance, a Clydesdale horse, "Mr. Muir," and a mare, "Mrs. Muir." He thinks it objectionable because it may in time come to be applied to jackasses, and the breedor of a prize ass might not feel specially honored by the animal in its journey through life bearing his name.

The flax production of Russia is 195,900 tons per annum; Austria, 45,000; France, 40,600; Belgium, $20,000; Great Britain, 18,000; Italy, 12,000; Bavaria, 9,000; Saxony, 3,000; other countries, 8,000. The total production in Europe is 350,000 tons.

Stanislaus is the banner wheat county.

Sheep and Wool.

Keeping Long-Wools.

C. K. Ward writes to the *Country Gentleman:* Our flock now consists of about 300 sheep. We have 20 to 25 first-class imported Cotswolds and their descendants, with a few thoroughbreds from some of the best flocks in Canada. The remainder are high grades.

We have kept them in lots of 50 to 100, with no inconvenience, summer and winter. They are very hardy, and as free from disease as Merino sheep, and on some accounts more so, as I believe they never have the foot disease. They fatten much more readily than fine-wool sheep. The same amount of feed will produce more pounds of meat and wool than if fed to Merino sheep. They feed and mature much younger, and when mature will weigh about 300 pounds. Their mutton is worth in market one to two cents per pound more than that of fine-wool sheep.

Our thoroughbred sheep shear from 10 to 20 pounds, and the grades six to 10 pounds each. We have sold our wool from five to 15 cents per pound above the price of Merino wool. The present year we have sold it for 50 cents when fine wool brought in this market 40 cents. The ewes are good mothers. Last year we raised about ten per cent. more lambs than we had ewes. The present year we are raising 90 lambs from about the same number of ewes. Our lambs from three to four months old weigh 75 to 90 pounds each. Our experience with them is very satisfactory. Whether they are more profitable to keep than other breeds of sheep, every farmer must be his own judge —*Live Stock Journal.*

A New York Shearing.—J. J. Brainard, Attica, N.Y., sends us, rather late, the particulars of the shearing of the "Maple Home Flock," from which we gather the following particulars: Rams—One four-year-old, fleece 29 lbs. 2 oz., carcass, 139 lbs.; one two-year-old, fleece 25 lbs. 6 oz., carcass 109 lbs.; one seven-year-old, very thin, fleece 25 lbs, carcass 104 lbs.; one one-year-and-two-weeks, fleece 20 lbs. 8 oz., carcass, 74 lbs.; one same age, fleece 17 lbs., carcass, 94 lbs.; one nine-year-old, fleece, 20 lbs., carcass 85½ lbs. Ewes—Two two-year-olds (twins), fleece 17 lbs., carcass 70 lbs., and fleece 17 lbs., carcass, 80 lbs.; one two year-old, fleece 18 lbs., carcass 60 lbs.; one three-year-old, fleece 18 lbs., carcass, 63 lbs.; one four-year-old, fleece 18 lbs., carcass, 69 lbs.; one four-year-old, fleece 19 lbs., carcass 85 lbs.; eight three-year-olds, heaviest fleece 18 lbs. 8 oz., lightest fleece 14 lbs., heaviest carcass 80 lbs. (the 80 lbs. one gave the lightest fleece), lightest carcass 56 lbs.; one two-year-old, fleece 15 lbs. 8 oz., carcass 84 lbs.; one two-year-old, fleece 13 lbs. 8 oz.; carcass 82 lbs.; one two-year-old, fleece 13 lbs. 12 oz.; carcass 55 lbs. The total shearing of 100 Merinos was 1,310 lbs., a trifle over 13 lbs. per head.—*Live Stock Journal.*

Ohio fleeces are packed for market by spreading them upon a table, turning in the head and tail, then the flanks, and rolling them and tying the roll with two strings around it and one across lengthwise. These fleeces thus put up bring three cents a pound more than Michigan fleeces of the same quality, for the reason that in Michigan wool is not so carefully packed for market.

The Rider Hot Air Engine.

The latest modification of Ericsson's invention for employing hot air in place of steam, has been placed on exhibition in the boiler room of the Mechanics' Pavilion, lately, by Huntington, Hopkins & Co. Several attempts, since the original device of Ericsson's, have been made to render the hot air engine a practical success; but for one reason or another none have as yet succeeded, unless we accord success to this new candidate for public favor, which, having only been patented since 1871, can hardly, as yet, be considered entitled to a reliable record. We understand, however, that this engine has thus far met with much favor wherever it has been introduced, and it certainly appears to be an important step towards meeting the requirements for an economical, safe and reliable engine for light work. It is comparatively noiseless, works very steadily, and is compact and simple in its construction. The one on exhibition, we are assured, can be worked up to two-horse power, with the use of from fifty to sixty pounds of coal for each day of ten or twelve hours, with continuous work, and it requires no more care or skill in attendance than does an ordinary stove. There is no water, steam, nor water nor steam pipes, nor boiler, to care for, consequently there is nothing to explode or endanger, and but little to get out of repair, beyond what is attached to an ordinary office stove; in fact it is much simpler than a kitchen stove with its accompanying furniture. It occupies but a small amount of space—3¼x2¼ ft. on the floor and 7 ft. in hight. This engine attracts much attention, and all who are curious or interested in examining it can have the opportunity of seeing it in operation every evening.

One hundred and fifty acres of hops were planted this season in Pierce county, Wyoming Territory.

Patrons of Husbandry.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well as Treasurer's reports.

J. M. Hamilton.

State Grange Agency.

Patrons will please take notice that Bro. I. G. Gardner, State Grange Agent, the Farmers' Mutual Fire Insurance Company and the State Grange Secretary, Bro. W. H. Baxter, have removed to No. 6 Leidesdorff street, south side California street, next to Merchants' Exchange—rear of Grangers' Bank of California (415 California street). sep5-tf

To Wool and Potato Growers.

All Subordinate Granges which are interested in raising Potatoes and Wool, are requested to elect two delegates to meet in convention, October 14th, at 10 o'clock A. M., in San Francisco, for the purpose of organizing Associations in the above interests.

W. H. Baxter,
sep26-td Sec'y State Grange.

The State University.

The Committee of the Board of Regents, appointed to prepare a reply to the memorial of the Committee of Grangers and mechanics demonstrating against the removal of Prof. Carr from the Chair of Agriculture (which memorial has already appeared in these columns), have prepared and published a lengthy reply, from which we make the following extracts:

What the University Is.

The committee state that the memorialists "are under a misapprehension in supposing that the Congressional grant, as it is called, was 'for the support of State Universities.' The grant was for 'the endowment, support and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches as are related to agriculture and the mechanic arts, in such manner as the Legislatures of the States may prescribe.' The Act of Congress does not establish a university, but a college, leaving the State great liberty to carry out the details of the plan. The University of California is established by the State of California, and includes the college referred to in the Congressional Act. The law of the State says: 'The University shall have for its design to provide instruction and complete education in all the departments of science, literature, art, industrial and professional pursuits, and general education; and also special courses of instruction for the professions of agriculture, the mechanic arts, mining, military science, civil engineering, law, medicine and commerce; and shall consist of various colleges, namely: First, colleges of arts; second, a college of letters; third, such professional and other colleges as may be added thereto or connected therewith.' The University is founded by the State, and includes the *College* referred to in the Act of Congress."

The Mechanical Department.

The Committee deny that they have totally ignored the mechanical department; but that, on the contrary, that department was early organized with a complete four-years' course, as may be seen by consulting the annual registers published for the last four years.

The Attention Given to Agriculture.

The Regents hold that the memorialists are in error in the assertion that they have chosen but one professor for Agriculture, while for the College of Letters they have 19 professors and assistants. They say that "the students of the College of Agriculture have a *right* to receive instruction from *all* the instructors," and that they are "*compelled* to receive it as a part of their prescribed course from *thirteen* of the professors."

The organic law creating the University, makes it the duty of the Regents to establish the College of Agriculture first, and next, the College of Mechanics. This duty the Regents have faithfully discharged. Those two colleges were the first organized. They were the first equipped with the necessary material and apparatus. * * * The College of Letters stands precisely as the Legislature bequeathed it to the University.

In reply to the assertion that the College of Agriculture has been neglected, the Regents call attention to the following facts, premising that not a year has yet passed since the completion of the building and the beginning of instruction at Berkeley. They also remark that Dr. Carr, under oath, last winter, before the Legislative committee testified that the Regents had done as well as they could in the time and with the money at their disposal. He also testified that the course of instruction compared favorably with that of agricultural colleges elsewhere. That course of instruction has not since been modified.

The Progress of a Year.

Within the past year the following, among other things, have been accomplished:

The Berkely property has been surveyed by a competent engineer, the right places marked out for agriculture, horticulture, botanical garden and forestry, and also for roads, paths, buildings and bridges. This has also been mapped.

A special survey has been made of the water rights of the University, so that the supply of water for household and garden purposes and the drainage may be wisely regulated.

The grounds have been placed under the charge of a competent agriculturist, who is also by law the Secretary of the Board, residing and holding his office at Berkeley.

With him is associated a well trained gardener, who has charge of horticultural work.

The manual labor of the students have been employed and paid for at good prices.

A convenient propagating house, with the necessary appurtenances, has been constructed.

A barn has been contracted for.

Additions have been made to the Agricultural and Botanical Museums.

A special appropriation of $1,000 has been made for the purchase of Auzoux models, showing the internal structure of domestic animals and plants.

The lecture diagrams made use of by the late Professor H. J. Clarke, of the Amherst Agricultural College, have been bought.

Four Eastern gentlemen, familiar with the agricultural schools of other states, have been invited to come here and give special instruction to the students in agriculture, in addition to what they will receive as heretofore from the Professor of Agriculture.

Arrangements are making to secure the aid of California agriculturists in the specialties of which they are devoted, and to enable the students to visit the best farms, dairies and gardens of the neighborhood.

A diploma, equal if not superior to that given in the College of Letters, and appropriate to aid the scientific colleges, has been engraved and given to the agricultural graduates of this year and the last.

A printing establishment, at an expense of some $6,000, has also been equipped, where some twenty or thirty students, under proper regulations, will find appropriate practice and remuneration.

Why Prof. Carr was Removed.

As regards the removal of Prof. Carr the Regents give no other reason than that already assigned; but simply claim it their duty to "know more of the fitness or unfitness of any member of the educational staff than their fellow-citizens of the State, in general can know."

In relation to the expression of the memorialists in opposition to the appointment of agricultural lecturers, the Regents say in effect that the organic act makes them the judge of this matter, and that they have acted accordingly.

In conclusion the committee expresses the opinion that much apprehension exists with regard to the condition and management of the University, to correct which it advises the people of the State to visit the University and observe for themselves its administration and system of instruction.

Life Insurance.

In a few days the State Grange will be in session, and many questions of vital importance to the Order will be discussed and acted upon. The future prosperity of the Grangers upon this coast depends very much upon the wise or unwise councils which prevail at our next State meeting. Second to none of these important questions—excepting that of grain-shipping—is the question of life insurance. Should this body meet and separate without bringing into existence and active operation a full-fledged life insurance company, we shall feel that one of the most important matters has been omitted. The amount of money drawn from the pockets of our farming population by genteel, smooth-tongued life insurance agents is truly surprising. Millions of dollars are thus spent annually, and often the last dollar is taken from the purse or bank, and money borrowed, besides, to pay for the exorbitant and almost constantly increasing premiums. Almost every week brings to our notice new cases which show little else than robbery. Among all of our acquaintances who have had their lives insured by any of these rich and powerful corporations, not one at the present date holds a policy in active force. Some of these have been insured to the amount of $30,000, and after paying some $5,000 or $6,000, becoming disgusted with the constantly increasing demand for money and the decreasing dividends, allowed their policies to "lapse," thus sustaining a total loss of all the money paid, or, what is little better, have taken what is known as "paid-up policies." One case will illustrate the many. Eight years ago, a gentleman of our acquaintance was induced to take a policy for $3,000 in a New York insurance company, the premiums on $2,000 to be paid in cash, and the company loaning the premium on $1,000; interest to be paid annually. This policy was taken with the assurance from the agent that the dividends would increase annually, so that in a few years they would cover the entire premiums. Now, this all looks very well, but what has been the practical working of this case for eight years? The first two or three years the premiums remained about the same, no dividends being issued. Then came a year or two in which small dividends were issued, perhaps for effect; then came a circular from headquarters, announcing that for certain reasons no dividends would be issued for the next *four years*. During all this time the loans were increasing, and consequently the interest which was added to the yearly payment.

At the end of eight years the gentleman had paid out to the company in clear cash over $1,200, and a debt of over $400 had accumulated from the loans, upon which he was paying interest; so that his yearly payments instead of decreasing had changed from $140 to $173, and constantly increasing. Becoming wearied with this constant strain upon his finances, and not being able to see where it would end, he determined to take a paid-up policy, and last week incurred the expense of a trip to the city for this purpose, and now comes the beautiful working of this most gigantic swindle. The gentleman was informed that he could take a paid-up policy for the amount of money already paid, plus the amount he would have paid, had all the premiums been cash, minus the interest which had accrued on the loans; that for this amount he would receive no interest whatever, the simple amount being paid to his family at his death; and furthermore, that he would be required to pay yearly the interest accruing on the $400 loaned, amounting to about $26 per year, amply sufficient to insure him for $2,000 on the mutual benefit plan, proposed by the Grangers. He asked if this $400 could not be deducted from the amount of the paid-up policy so as to stop the interest; but he was informed that it could not be done. That *he* owed the company $400, but the company owed *him* nothing until he died. After consulting legal authority, and finding that he could do nothing better, he was compelled to accept these unjust and unfavorable terms. As it stands, he receives nothing for the $1,200 paid until his death, and annually pays $26 interest for what? Another friend of ours took a loan for one-half his premium. He has now taken a paid-up policy. He is a young man, and should he live to the age of fifty, the interest on this loan will have entirely eaten up the policy, and he will be in debt to the company.

Another friend took a policy for $30,000. After sinking about $8,000 he has taken a paid-up policy. Many others whose names we could mention have allowed their policies to "lapse" and all "go by the board," losing from $300 to $1,500. The insufferable burden which these insurance companies have become, and the yearly drainage which they cause from the scanty purses of our farmers, make it of the utmost importance that we shake off the tyrants who come to us in the shape of friends and with smooth words and fair promises inveigle us into traps from which we cannot free ourselves except at a great loss. Surely the pure and humane teachings of the Grange will lead to the development of a plan which, without being burdensome, will enable us to secure our wives and little ones against want when the strong arm which now supports them is paralyzed by the rude shaft of death. What we want is pure and simple mutual aid. No highly salaried officers in New York or Massachusetts, occupying sumptuous parlors and living in splendor. No complicated machinery which none can understand; no dandified clerks nor insinuating traveling agents on high commissions; nothing but this: "I will pay $1.00 to the family of a brother when his support is taken away from them, and I will pay annually a sum sufficient to defray the necessary expenses of the company;" only this and nothing more. Let the matter be attended to at our next State meeting, and let us have a full fledged mutual aid society when the gavel falls at the close of our deliberations.

In Memoriam.

At the last meeting of the Kelseyville Grange the following resolutions were adopted:

Whereas, Since our last meeting the Great Master of the Universe has called from time to eternity our beloved Sister Mary Harris, and passed her we trust to a higher degree of enjoyment,

Resolved, That while we deplore the loss of our sister, and shall miss her in our deliberations and social gatherings, still we humbly bow in submission to the will of the Master above, feeling well assured that our loss is our sister's gain.

That we mourn with profound regret the severance of the first link in our fraternal chain, and that we extend our sympathies to the bereaved family of our worthy sister and commit them in this the time of their affliction to Him who tempers the wind to the shorn lamb.

Resolved, That these resolutions be spread upon our minutes and the Secretary be directed to send a copy of them to the family of the deceased and also to the Rural Press and Lake County *Bee* for publication.

Thos. Ormiston, Sec'y.

Kelseyville, Sept. 12th, 1874.

Kelseyville Grange has endorsed the resolutions of the Santa Barbara Grange in reference to Professor Carr of the Agricultural University.

T. O.

The State Grange will meet at Stockton, Oct. 6th. Bro. Baxter, Secretary, says that if all those who are not 5th degree members will bring credentials, under seal of their Grange, it will facilitate business very much. He also wishes to call the attention of Secretaries of subordinate Granges to the importance of sending in their quarterly reports promptly by the first of Oct. Those neglecting to do so will of course be reported delinquent at the meeting of the State Grange.

Correspondence.

Editors Press:—We have had, during the past week, various attractions in Modesto, chief among them the Fair of the Stanislaus County Agricultural Society and meeting of the Stanislaus County Council, at Grange Hall, on the 16th inst.; as a result the town has been filled with people from various parts. The council had an interesting session, which was prolonged into the small hours of the night. We listened with pleasure and profit to our State lecturer, J. W. A. Wright, who exemplified the late change in the secret work. He also spoke of the various Grange enterprises in California, in such a way as to prove himself fully competent for the position he occupies.

On the following evening we listened to the annual address before the Stanislaus County Agricultural Society, delivered by Prof. E. S. Carr, to a large and appreciative audience. The Prof. was introduced by President Ross amid the cheers of a promiscuous throng. His discourse called forth frequent applause. When he had finished ex-President Gallup publicly thanked him for the sentiments expressed in his address, referring to them figuratively as "pearls dropped in our midst" and to the Prof. in person as a "*Car* that had never been hitched to the train of the monopoly."

After the address a vote of thanks was tendered to Prof. Carr.

The election of officers of the Stanislaus County Agricultural society, held on the evening of the 17th, resulted as follows: F. H. Ross, President; Caleb Dorsey and C. C. Baker, Vice-Presidents; J. J. McEwen, T.; Geo. Buck, Sec'y. Directors: J. R. Briggs, Ben. Ducker, W. E. Stewart, L. H. Pinkston, Thos. A. Wilson, A. S. Fulkerth, S. M. Gallup, T. S. Benley and S. V. Wardrobe.

At the Council meeting on the 16th, the Santa Barbara Grange resolutions condemning the course pursued by the Regents of the University were slightly amended and adopted. The amendent consisted in the proposition to thank J. M. Hamilton, W.M. State Grange and all other regents who voted from *sincere* motives against the dismissal of Prof. E. S. Carr, etc. [The remainder as in the original.]

Yours truly, Vital E. Bangs, Sec'y.
Modesto, Cal., Sept. 20th, 1874,

Santa Clara Co. Council Meeting.

Editors Press:—The council were entertained to-day by Bro. Wright, Lecturer of the State Grange. This is the first visit he has made us since the State Grange one year ago. Bro. W. looks in good health and spirits after the late jaunt he has taken through a large portion of the State; and he brings nothing but cheering news from all quarters, although he finds the footprints of the enemy, who would leave no means untried to weaken our forces or destroy our purposes. But fortunately both appear well secured.

The Worthy Lecturer recalled the first meeting of the Grangers of this State in Convention, one year ago, in this very hall, when Brother Garretson was still with us in his mission to lay the foundation of the Order on this coast to be developed by us; and we have the authority of Bro. G. himself to say, that, although the progress of the Order in numbers and efficiency has been rapid everywhere, yet nowhere has there been more solid work done than here in our own California.

Among the visible works, the shipping of wheat, the staple product of the country, stands foremost. What a spectacle for producers to charter their own ships, which they load for a market thousands of miles away! Instead of the rings to buy and the rings to ship, and the monopolists to control this crop in every way possible, they have their own commercial agents, in the house of E. E. Morgan's Sons, in whose integrity and ability they have an abiding faith.

Of no less importance is the "Grangers' Bank of California," located in San Francisco, and now in successful operation, from which will grow into being a net-work of banks to be owned by the people in all settled portions of the State.

The work of the year, replete with everything to the success, and personal independence and consequent elevation of the farmer and his calling, was all presented in this single address plainly and forcibly. Further, Bro. W. exemplified the secret work of the Order.

I. A. Wilcox, Sec'y.
Santa Clara, Sept. 14th, 1874.

The San Luis Obispo Grangers have resolved to patronize only those merchants of that place who will lend their support to the local millers by purchasing their flour; provided, First—That they (the millers) can supply the demand. Second—That the quality of flour will be such as will give satisfaction; and provided further, that the flour can be purchased by said houses at a rate as low as it can be delivered from San Francisco.

Wants Them to Divulge.

The *Southern Californian* is sour because the Grangers of Kern county will not tell all they know. Wants them to divulge through the press all their plans and purposes. To keep nothing secret, save the manner of admission and the signs whereby they recognize each other. Says that after a few meetings of the different societies in the county, and when the novelty wore off, "a general lukewarmness ensued, which threatens danger to the life of the organization." Says: "we look in vain among our farmers for the improvement that was to come of the new combination, and wonder at the little known by the members of the uses and expectations of the society."

Here are half a dozen texts, each of which would serve as a sermon, with half a dozen headings. Lukewarmness, indeed. If the Grangers have been lukewarm the past year, what is expected of them? Publish all our plans? Why don't Friedlander publish all his plans? Why don't all the combinations and rings who want to see the farmers fail in their organization, publish all their plans? To do what the *Californian* wishes, would please outsiders too well. "Need the press to further their aims?" Yes they do, and they have nearly every influential paper on the coast in their favor, and if publishers of papers have not seen and heard enough of the plans and purposes of the grangers to convince them that they are "working out their own salvation" without fear or trembling; that they are nobly struggling to free themselves from the fetters with which they have been bonnd for years; then we pity the ignorance of such publishers.

"Wonders at the little known by the members of the uses and expectations of the society." Perhaps the members know more than the *Californian* thinks they do. If this paper or any other will show that it is an honest friend of the good cause, it will receive all the information it wishes. Papers which throw as much cold water as the *Southern Californian*, are not likely to awaken those kindly feelings in the Grangers that would lead to free, confidential communications. "The agents of capital boast of the weakness of design and the destructive elements in the Grange." If the design is so *weak*, and the elements of destruction so numerous, why don't the "agents of capital" let them alone and let them die of their own inherent weakness? Why make such strenuous efforts to overreach them in planning, and circumvent them in their efforts to ship their own grain and manage their own affairs. The boasting, if there be any, is all for effect; like the whipped rooster, they crow to keep their courage up.

To show how "luke-warm" the Grangers of Kern county are, we publish the following from the Tulare *Times*.

Thinking that some of the many readers of your paper (especially Grangers) would like to hear from this section of the country, I have concluded to write you a letter, as we know of no better way than through the columns of your paper, as that is the medium by which most of us are kept acquainted with the general news.

Like every other enterprising neighborhood, we have a Grange organized, and in good working order, trying to keep pace with the rest of the world in developing the resources of the country, and protesting against monopolies. On last Saturday the Grangers of this little valley held their first picnic, it being the first ever held on this river. Between 10 and 11 o'clock there was quite a crowd in the little grove, near the river, about a half mile from Weldon. The Grangers commenced singing one of their songs, and Rev. Mr. Stout, of the M. E. Church, being called upon, came forward and offered an able and appropriate prayer for the occasion, after which he was introduced to the audience by the Master of the Grange, and gave us a short history of the Grangers—their rise, what they had done and were doing. This was followed by the reading of a communication from Bro. Debrutz, of Glennville, by Mr. Gray, who made quite an interesting speech. The ladies then proceeded to prepare dinner and in a short time the baskets were all collected and their contents spread out in the shade of the forest trees. All gathered around and partook of the feast with as much enjoyment as kings sip their wine at the gorgeous banquet. The Grange met in the afternoon and received nine applications for membership. A special meeting being called for the 16th inst., the Grange adjourned, all well pleased with the enjoyment of the day.

M. T. R.

South Fork, Kern Co., Cal., Sept. 15, 1874.

School Text Books.

The following resolutions should be passed by every Grange on the coast.

The evil caused by the frequent change of text books in our common schools is very great, to say nothing of the heavy tax imposed upon parents and guardians. While we are in favor of progression and improvement, and believe that improvements are being constantly made in text books, still we know that many of the changes made are not on account of the superior merits of the new books, but for some personal friend's pecuniary benefit. Changes should be made, when made at all, very gradually and only when new books are needed, so that no unnecessary expense may be caused. See the open letter published elsewhere to-day, to Messrs. Bancroft & Co., on this question.

At a meeting of Compton Grange, No. 37, P. of H., held Sept. 12th, 1874, the following preambles and resolution were adopted, and the Secretary was instructed to forward the same to the Los Angeles *Herald* and the PACIFIC RURAL PRESS for publication:

WHEREAS, There has been manifested on the part of the State Boards of Education, during the past decade, a growing tendency for the frequent change of text books in our common schools, and

WHEREAS, Such changes invariably involve an outlay of several hundred thousands of dollars, which has proven an onerous tax upon the patrons of our public schools, and

WHEREAS, It is but too evident that such changes have frequently been made in order that certain book publishers and parties in interest might be benefitted, be it therefore

Resolved, That it is the sense of this Grange that the frequent change of text books in our public schools is injudicious, unwise and unjust; and, as patrons of the schools, we bitterly oppose such frequent changes, as the imposition of an unnecessary and uncalled for tax.

JOHN JAY BULLIS, Sec'y *pro tem.*

Text Books—An Open Letter.

TO MESSRS. BANCROFT & CO., PUBLISHERS—*Gentlemen:*—Your circular, addressed to me as Secretary of Santa Clara Grange, I suppose is sent to all the Granges of the State, and therefore has a public interest which justifies this public answer.

You say: "Through a recent number of the PACIFIC RURAL PRESS, we learn that several Granges have passed the following resolution, viz:

Resolved, That it is the sense of this Grange, that the frequent change of text-books for the use of common schools is injurious, unwise and unjust; that the books we now have are sufficient in number and good enough in quality."

And further you say: "We believe that this does not represent the true sentiments and principles of the Granges," etc.

I will briefly say that the Santa Clara Grange took action on the question of a change of text-books as soon as it became known that the hon. Board had passed the resolution you refer to, as follows:

Resolved, That the publishers of text books be invited to lay before the Board, on or before January 5th, 1875, proposals for supplying text books for use in the public schools of this State, said proposals to be accompanied by sample copies of the books to be furnished, together with a statement of the retail prices at which the books will be sold in this State for the full term for which they are adopted.

Concerning which you say: "That the whole question of text books is thereby opened, and that the Board is compelled (in accordance with Sec. 1874 of the Political Code, which you refer to), to make a decision among the several competing series."

Now, gentlemen, if you intend to mean that a selection must be made from the text books of new authors, to the exclusion of those now in use, I beg leave to say I do not so understand it.

The Constitution of the excelsior State of New York provides for a convention to be held every ten years—I think ten years is the term—so as to supply all the needs of a progressive profile in this progressive age. But this does not necessarily imply any change in that organic instrument, their State Constitution, which they are authorized to alter or amend. And such, I apprehend, will be the view taken by the hon. State Board of Education at their meeting on the 5th of January next. Indeed, Mr. Bolander, in response to our resolution, sent to the said Board, by direction of our Grange, most respectfully replied that he should present our resolution before the Board, for their consideration.

Now, then, allow me to say, that our resolves were much stronger than those you quote, so far as the change of books is concerned; and they not only expressed my individual opinions, which you seek, but the united sense of the Grange.

So far as the Granges of the State have expressed themselves, there has been but one sentiment — earnestly and emphatically expressed.

I agree with you, that in making a selection of books required for our schools (in short, for all our supplies) our own home productions should always receive all the consideration and preference it is consistent to give them, with due regard to the wants and requirements of the schools.

Wishing every reasonable success to your house, as one of our enterprising State establishments, which should ever receive all resonable support from the people, I am yours, most respectfully,

I. A. WILCOX,
Sec'y of S. C. Grange, No. 71.

OREGON STATE GRANGE.—The first annual session of the State Grange, Patrons of Husbandry, was begun here on the 16th instant. There was a full attendance at the opening, more than 200 delegates being present. An able address was delivered by the Grand Master, Daniel H. Clark, in which he recounted the progress and spoke encouragingly of the prospects of the Order in Oregon and the Territories. Committee reports were afterward received, and then the Grange adjourned until evening, when secret business was taken up. The number of Granges represented in this jurisdiction were, in Oregon, 175, and Washington Territory, 52. There was a full representation yesterday, on which occasion the fifth degree was conferred and the various officers installed. The Grange then adjourned.—*Chronicle.*

Who are Eligible?

EDITORS PRESS:—Considerable uncertainty exists among our members about the action of the National Grange, in February last, concerning the meaning of the words "interested in agricultural pursuits," in Article V, Constitution of National Grange. Allow a few words in explanation. At that meeting it was deemed a matter of vital importance to decide for the future more clearly, who are eligible for membership in any Grange. Hence, after careful deliberation and much discussion, Article V of the Constitution was amended, to read as follows:

"MEMBERSHIP.—Any person engaged in agricultural pursuits and having no interest in conflict with our purposes, of the age of sixteen years, etc."

The "purposes" alluded to are all those included in our Declaration of Purposes, adopted at that meeting. It includes character qualifications as well as others. Recollect, however, that neither this amendment nor any others can become law until ratified by three-fourths of our State Granges. This requires their ratification by 27 State and Territorial Granges. No one of the amendments has yet been ratified by the required number. It of course takes some time to do these things.

But the National Grange, recognizing the importance of immediate action on this point, adopted a resolution which took effect at once, and was in force as soon as communicated in our printed proceedings to each State and Subordinate Grange.

The resolution reads as follows:

"*Resolved*, That in the sense of the National Grange, the expression, 'Interested in agricultural pursuits,' in Article V of the Constitution, means engaged in agricultural pursuits, and having no interest in conflict with our purposes."

This is the law by which we must now be guided. For all applicants as charter members or otherwise, we must ask:

1st. Are they "engaged in agricultural pursuits?"

2d. Have they "any interest in conflict with our purposes?"

If they are not engaged in agricultural pursuits they are not eligible. If they have any conflicting interest they are not eligible. Organizing officers and the members decide these points.

Observe carefully, however, this ruling is not retro-active. It is not an *ex posl facto* law. It is not intended to affect those already in the Grange. Once a Granger, always a Granger, so long as one is true to the interests of our Order and "behaves himself." Our members cannot be too careful to understand these points.

We should be strict in applying the rule to those we admit hereafter. But don't let it make our good members in the Grange feel uncomfortable. It was never, for a moment, intended to apply to them. Yours fraternally,

Sept. 10th, 1874. J. W. A. WRIGHT.

Commendatory Resolutions.

At a regular meeting of Montezuma Grange, P. of H., held September 19th, 1874, the following resolutions were unanimously adopted:

Resolved, That we recognize Bros. A. C. Hawkins and E. I. Upham, as being foremost in the great enterprise of bringing to our doors the first sea-going vessel to take our own grain direct to a foreign market.

Resolved, That we hereby tender our thanks to Bros. S. H. Depuy, F. W. Wise, Wm. Quick, Wm. Juhb, Mr. Muzzy and Wm. Dannell for their integrity in standing by the cause and assisting Bros. Hawkins and Upham in loading the ship "St. Charles," at Collinsville.

Resolved, That we recommend to our brother Grangers throughout the county and State to stand by the house of E. E. Morgan's Sons to the last, both as a measure of safety to ourselves and an act of justice to our agent, who has thus far borne the brunt of the battle waged against us by our enemies.—[Amen—Ed. PRESS.]

Resolved, That a copy of these resolutions be sent to the California Grange and RURAL PRESS.

C. KNOX MARSHALL, Sec'y.

NEW POTATO.—Dr. Glynn has produced a new variety of potato that excels nearly all the known varieties in most respects. This variety was propagated from the seed three years ago, and this season the Dr. has raised nearly half a ton of them in his garden at the lower end of town. In appearance and taste they resemble the Kidney potato, but are larger than any we ever saw, are very solid, cook beautifully, and are as good as we have ever eaten. The inside is slightly flocked, similar to the Neshanock. They come to maturity in from three to four months after planting, and are very prolific, a single seed end producing from eight to 10 pounds. They have been kept until the first of June in perfect condition, and no rot has ever appeared. They have been named the Glynndales.—*El Dorado Republican.*

THE Indiana *Farmer* says information from many counties leads it to believe that the hog crop will fall nearly one-fourth below an average one this ear. The hog cholera is given as the principal cause.

THE Watsonville *Pajaronian* reports an average potato crop in the Pajaro valley. It was thought a week ago that the potato crop in this section would be ruined.

AN English company is at work reclaiming about 20,000 acres of swamp land near Alviso. A large force of Chinamen is employed.

IN the Green River valley, Wyoming Territory, snow fell to the depth of an inch on Sept. 1st.

Closing of the Marysville Fair.

The Northern District Fair, at Marysville, closed on September 19th. We copy from the *Morning Call*, of September 21st, a list of the premiums awarded on that occasion:

Thoroughbred stallions, Class 1—Langford, owned by John Beggs, of Colusa county; premium, $50.

Horses of all work—Stallions 4 years old and over—Messenger Boy, owned by James Clark, premium, $40.

Stallions 3 years old—Young Bloombury, owned by M. McWare; premium, $30.

Stallions 2 years old—Hunter, owned by A. M. Dick premium, $20.

Yearling horse colt Billy, owned by William Findley; premium, $10.

Sucking horse colt Bill Murphy, owned by Solomon Breeden; premium, $5.

Mares for all work, 4 years old—Flora, owned by William Daly; premium, $30. Seal, owned by Hollister special premium, $20.

Mares 3 years old—Belle, owned by Tom Doty; premium, $25.

Mares 2 years old—Goldsmith Maid; premium, $20; No. 2, owned by J. A. Jones; premium, $15.

Draft horses—Stallion 4 years old, Jim Porter, owned by Jim Hooper; premium, $40.

Roadsters—Stallion 4 years old, Copperhead, owned by Jim McCue; premium, $40.

Gelding, 4 years old—Dan Rice, owned by McKoker; premium, 30.

Mares, 4 years old—Gipsy, owned by William Findley; premium, $30.

Roadsters, double-teams—Billy and Frank, owned by A. J. Scoggins; premium, $40.

Carriage team—Stonewall Jackson and General Washington, owned by A. J. Scoggins; premium, $40.

Sweepstakes, stallion—Langford; premium, $40.

Sweepstakes, mares—Lizzie Jasper, owned by D. McVicar; premium, $30.

Thoroughbred cattle—Bulls 3 years old, Lord of Sutter, owned by Cly Bockius; premium, $30. Bulls 2 years old, Short-tail, owned by John McElmoil; premium, $20. Bulls, 1 year old, Newton Booth; premium, $20.

Cows, 4 years old, Nellie Ione, owned by C. G. Bockius; premium, $30. Cows 2 years old, Elfiena, owned by M. V. Sparks; premium, $15. Heifer year-olds, Alice, owned by J. McElmoil; 15.

Graded cattle—Bull 3 years old, Greeley, owned by Dr. Durst; premium, $20. Bull 1 year old, Bismarck, owned by McElmoil; premium, $10.

Cows 4 years old, Maid of Oaks, owned by Bockius; premium, $20.

Cows 3 years old, Wheatland Maid, owned by Dr. Durst; premium, $15.

Sweepstakes—Bulls, Newton Booth, owned by J. F. Sparks; premium, $50.

Cows, Maid of Oaks, owned by Bocklus; premium, $40. Bull calf, Duke of Lorne, owned by Bockius; premium, $90.

Sheep—Fine wool ram, 2 years old, Thomas Brewer, owned by Thomas Brewer; premium, $20. Ram under 2 years old, owned by A. J. Scoggins; premium, $15. Three hundred lambs, by Dr. Durst; premium, $15. Two ewes, by Mr. Hopkins; premium $20. Ewes under 2 years, by Mr. Hopkins; premium $15. Long wool sheep, ram 2 years old, by T. Brewer; premium, $15; Rams under 2 years, Thos. Brewer, Pride of California, premium, $10. Three ewes owned by same; premium, $10. Three lambs by same owner, $10. Sweepstakes—Rams, R. Durst's Thomas Brewer; premium, $20. Ewes—Flora, owned by Hopkins; premium, $15.

Swine—Best boar, owned by M. Hutchings; premium, $10.

Poultry—White Leghorns by Joe Selby, $5; Buff Cochins, $3; Japanese Bantams, $3; Seabrights, $3. These fowls were all imported.

ROTATION OF CROPS.—The agricultural editor of the Sacramento *Record*, speaking of the rotation of crops, says: The peculiarity of our seasons and their influence on the best grain lands of our State renders it impossible here to adopt a general system of rotation that will embrace the different kinds of grains and root crops as they are grown in England. Our great plains are our best small grain lands. They receive and absorb the water during the rainy seasons, and retain it just about long enough, under favorable circumstances, to mature a crop of small grain, as wheat or barley, but the moisture is evaporated too early in the season to produce good corn or any of the root crops. It is plain, therefore, that although we are now the foremost agricultural State in the Union, because we have not yet exhausted the wheat ingredients from our soil, we cannot maintain that position after we shall have done so. We may give our wheat lands rest every other year and summer fallow them to great advantage, for the reason that this practice will assist in restoring the ingredients which the wheat extracts; but this plan gives us but one crop in two years, whereas, the rotation system would give a crop every year, and be fully as effectual in the restoration of the wheat ingredients as the rest and summer fallowing plan. We would alternate between wheat, barley and hay, but this plan generally adopted would give us a superabundance of barley and hay, and render these crops comparatively worthless because of a want of a market for them.

MR. MERKLEY'S hop-drying houses, near Sacramento, were destroyed by fire on September 19th. From 50 to 60 bales of hops, valued at $64 per bale, were destroyed. The buildings were insured for $3,500.

MRS. Margaret McGee, from Cynthiana, Ky., is a female drover, who has just brought two car loads of cattle through to Pittsburg from her 400 acre farm in the blue grass region.

ACCORDING to the Humboldt *Times*, prunes equal in size to any produced elsewhere in California, have this year been raised in Humboldt county.

FIVE THOUSAND tons of wheat have already been stored in Napa.

THE warehouses in the vicinity of Livermore are filled with wheat.

TWENTY-FIVE or thirty thousand tons of wheat are stored at Merced.

LARGE quantities of wood are daily arriving at San Diego.



The Bar-Tender's Story.

I.

When I knowed him at first there was suthin'—
A sort of general air—
That was very particular pleasin'
And what you might call debonair.
I'm aware that expression is Frenchy,
And ruther high-dandy, perhaps;
Which accounts that I have the acquaintance
Of several quality chaps.

II.

And such is the way they converses.
But speakin' of this here young man,
Apparently natur' had shaped him
On a sort of liberal plan;
Had guv him good looks and good language
And manners expressin' with vim
His belief in hisself, and that others
Was just as good fellers as him.

I hev noticed (I'm rather observin')
That them that is cheerfulest here
Is the sort that is seldomest given
To indulgin' theirselves in the fear
That they aint bein' thought of sufficient,
Whatever's the company by,
Or that somebody, some how or other,
Is toppin' of 'em onto the sly.

IV.

But this chap that I meutioned was pleasin',
And neither stuck up nor stuck down;
And was thought to be jolly agreeable
Whenever he went around town.
He used to come in for his beverage
Quite regular every night;
And I took a considerable interest
In mixin' the thing about right.

But he got to increasin' his doses,
And took 'em more often, he did;
And it growed on him faster and faster
Till inter a bummer he slid.
I was grieved to observe this here feller
A shovin' hisself down the grade,
And I lectured him outo it sometimes
At the risk of its sp'ilin' the trade.

At last he got thunderin' speedy,
And he lost his respect for hisself,
And all his high notions of honor
Was bundled away on the shelf.
But at times he was dreadful remorseful
Whenever he'd stop for to think,
And he'd swear to reform hisself frequent,
And end it by takin' a drink.

VII.

What saved that young feller? A woman!
She did it the singlerest way.
He come into the bar-room one evenin'
(He hadu't been drinkin' that day),
And sot hisself down to a table
With a terrible sorrowful face,
And he sot there a-groanin' repeated
And callin' hisself a goue case.

VIII.

He was thinkin' and thinkin' and thinkin',
And cussin' hisself and his fate,
And ended his thinkin' as usual
By orderin' a Bourbon straight.
He was holdin' the glass in his fingers,
When into the place from the street
There come a young gal like a spirit,
With a face that was powerful sweet.

IX.

And she glided right up to the table
And took the glass gently away,
And she says to him: "George, it is over;
I rejected you once in my anger,
But I come to you lowly and meek,
For I can't live without you, my darling;
I thought I was strong, but I'm weak.

X.

"You are bound in a terrible bondage,
And I come love to share it with you;
Is there shame in the deed? I can bear it,
For at last to my love I am true;
I have turned from the home of my childhood,
And I come to lover and friend,
Leaving comfort, contentment and honor;
And I'll stay to the terrible end.

XI.

"Is there hunger and want in the future?
I will share them with you and not shrink."
Then she raised up the glass firm and steady,
But her face was as pale as the dead—
"Here's to wine and the joy of caronsals,
The songs and the laughter," she said.

XII.

Then he riz up, his face like a tempest,
And took the glass out of her hand,
And slung it away stern and savage—
And I tell you his manner was grand!
And he says "I have done with it, Nelly,
And I'll turn from the ways I have trod,
And I'll live to be worthy of you, dear,
So help me, a merciful God.

"You have saved me, my love and my darling,
On a noble and womanly plan;
Go back to your home till I seek you
In the garb and the strength of a man!"

* * * * *

I seen that same feller last Monday,
Lookin' nobby and handsome and game;
He was wheelin' a vehicle, gen'lemen,
And a baby was into the same.

PELEG ARKWRIGHT.

In an address which he delivered some time back at Liverpool college, Lord Derby told the students that there were three great maxims of study—first, that mental labor never hurts anybody unless taken in great excess; second, that those who cannot spare time for physical exercise will soon have to spare it for illness; third, that morning work is generally better than night work. There has never been a time in the history of the world when an appreciation of these truths was more important than it is now.

Good Advice for Girls.

[Written for the PRESS.]

If your father is in moderate circumstances you will be expected to know all about housekeeping; be sure and explain this to your friends, that they may not think him mean and stingy in not hiring servants; and you are a dear, noble girl who would sacrifice her pleasure, anything, for her father's sake. When you are called in the morning, do not wake directly; sudden light has been known to seriously affect the eyes; always yawn before leaving the bed, as this tends to prepare the facial muscles for their accustomed exercise during the day. Rsise the body gently from the bed, do not hurry, and proceed with the toilet. First, draw on your stockings, if you have not slept in them, which you should have done by all means; if you cannot find your garters, strings will do just as well—you can tear one off your balmoral—and be particular and tie them in a bow-knot, allowing the ends to hang at least a quarter of a yard. Don't exert yourself; you need not lace your shoes but half way, as it is not so easy to draw three or four knots in succession through eyelets when the tin has dropped out; let the tops of your shoes hang over your ankles, and it will be cooler if you can mansge to slit the back seams of your shoes; it won't show at all, as you are now old enough to wear long dresses. If your shoes will not go on, on account of the hole in your stocking and the torn shoe lining, cut out the lining; provided the scissors are not handy, jerk it out. The remainder of your underclothing now comes in order, which you should be careful not to change too often, as your mother already has too large washings. A set of hoops, the dilapidated state of which shows how economical your mother has taught you to be; the steels are broken, and the covering worn off; but this will not be seen under your balmoral. As for your dress, that need not trouble you; any of your mother's or sister's cast-off wrappers will do to slip on; if it is highly oolored it will set off your figure to more advantage. If you cannot find a belt, a soiled apron or string will do to hold your wrapper to your waist, lest your father and brother have occasion to consider you slouchy. You can let your front hair stay on hair-pins, at least until after breakfast. After you have prepared the morning meal, provided your mother waited for you, you may run into a neighbor's for a few minutes, just to see what you can learn in the way of new dishes for dinner; don't go home until ten o'clock; by that time the dishes will be washed, the beds made and the sweeping done. Should your mother ask you to make the pies for dinner tell her, of course, you will in just a few minutes, as soon as you have combed your hair. After you have run up stairs for this purpose you will be so warm that you had better sit down and rest awhile; you will find a fan on the cover of a book, under the table or behind the glass; but you may as well put off combing your hair and brushing your teeth until after dinner. If you intend remaining at home through the afternoon it will be perfectly useless to dress; should any one call, you can pick up any old unstarched slatless sun-bonnet, slap it on your head, rush to the door, open it, and if it happens to to be a young gentleman, blush, stammer duly, regain your voice, invite him in and tell him you are washing, cleaning house, or anything else that comes handy to excuse your appearance; be as lively as possible; most men like to associate with spirited women. You might introduce a little gossip over the fashions. He will undoubtedly go into raptures over the new shades, dots, etc.; talk as though you read the papers; but be careful not to mix your subjects, as for instance political men with Beecher-Tilton affair. If he asks you to sing and play, do so by all means, and strive always to reach the highest note first. Entertain him well; look cute at him from under your sun-bonnet, and undoubtedly he will leave with the impression indelibly fixed in his imagination that you are a noble girl, who takes upon herself the whole care of the household, although you are but a comparative child; a woman, yet an angel; wise and meek and good; an admirable young lady; oh, but an exqnisite little darling! I wouldn't advise you to bother about anything else that day, only you might if you liked wipe the supper dishes. When you go to your room if your bed is not made, don't worry yourself to make it; the feathers are all there, and of course you will sleep just as soundly, that is, of course, if you have on your stockings and put your shoes at the foot of the bed with the toes pointing out to keep the witches away.

ET. WORDS

"A LATE Duke of Athole had invited a well-known character, a writer of Perth, to come up and meet him at Dunkeld for the transaction of some business. The Duke mentioned the day and hour when he should receive the man of law, who accordingly came punctually at the appointed time and place. But the Duke had forgotten the appointment, and gone to the hill, from which he could not return for some hours. A Highlander present described the Perth writer's indignation, and his mode of showing it by a most elaborate course of swearing. 'But whom did he swear at?' was the inquiry made of the narrator, who replied, 'Oh, he didna sweer at ony thing particular, but juist stude in ta middle of ta road and swoor at large.'"

What they Hated.

An amusing incident occurred recently in the smoking-car of a C. C. C. and I. R. train between Shelby and Cleveland, Ohio. A woman, accompanied by a poodle dog, entered the car just prior to the departure of the train from the former point, and, after depositing her dog on one seat, turned over the back of another one, so that each seat faced the other. Together she and her canine companion thus monopolized two entire seats.

Appearances seemed to indicate that she was not aware that the car was one exclusively for the convenience of those addicted to the use of the "weed;" but of this fact she was soon apprised by the conductor, who advised her to obtain a seat in another car, informing her at the same time that the accomodations in the way of seats in the other coaches were superior to those where she then was. However, she insisted on remaining, urging that her presence would deter the occupants of the car from smoking, and she would consequently experience no discomfort from the fumes of tobacoo. Long before the train reached this city, however, a gentlemen sitting directly in front of her produced his case, and taking therefrom a cigar, began puffing away at it in a manner which seemed peculiarly calculated to aggravate the "strong-minded" woman immediately back of him. In an instant, by a strategic movement, she wrested the obnoxious cigar from his mouth and threw it out of the window, exclaiming:

"If there's anything I *do* hate, it's tobacco smoke."

The passengers who had wituessed the affair were convulsed with laughter; but the offending smoker suppressed whatever emotions may have been struggling for expression in words or actions, and maiutsined throughout the same imperturbable gravity which had charaterized him from the first.

Calmly rising from his seat, he opened the car window nesrest him, took that woman's little poodle dog and threw him out of the window, as far as possible, at the same time saying:

"If there is anything I *do* hate, it's a poodle dog."

The scene which followed beggars description The car resounded with peal after peal of laughter, and, as the extreme ludicrousness of the affair became apparent to the principal actors in it, they too joined with the rest. Despite the regret incident to the loss of her dog, the woman could not repress her inclination to laugh at the unexpected finale of the affair.

GOING TO BED.—The *Science of Health* is credited with the following: "We should never go to bed with a hope for rest, sleep and perfect repose until "all ready." The preliminaries for retirement are all just as important as those for the day's duties. We must not go to bed with an overloaded stomach, in an anxious or troubled state of mind, with cold extremities, or without anticipating or responding to the calls of nature in all respects. Standing over a register, before the fire, or in a stove-heated room, is not the best way to get warm for a night's sleep. We should take such vigorous exercise as will give quick circulation to the blood, and not depend on artificial, but on natural heat. Attention to all these things, followed by such devotional exercises as will bring all the feelings, emotions and sentiments into accord with the divine will, subduing passions, removing hatred, malice, jealousy, revenge, and opening the portals of heaven to all who seek rest, peace and sweet repose."

A GOOD joke is told of Horne Tooke, whom the Tories in the House of Commons thought to crush by imposing upon him the humiliating task of begging the House's pardon on his knees. Tooke went on his knees, begged pardon for the offensive expression he had used; but, on rising up, he knocked the dust off his knees, and exclaimed, loud enough to be heard by the whole House, "It's a dirty house, after all!" Roars of laughter followed this exclamation, and the Tories saw clearly enough that they had failed in the object which they had in view.

Two housewives in Fifeshire, who had gone out to give the pigs their supper, met at a gate, and naturally took advantage of such a favorable opportunity for a "twa-handed crack." "Losh, Peggy, woman," said one to the other, "I hear folks say there's a man in the moon." "Oh, ay," returned Peggy, "I've heard aboot him; but he canna be very fond o' his ain wife, for he's aye glowerin' this way."

THERE is no outward sign of politeness which has not a deep, moral reason. The education teaches both the sign and the reason. Behavior is a mirror in which every one shows his own image. There is a politeness of the heart akin to love, from which springs the easiest politeness of outward behavior.

"Do you believe there are any people who never heard of "Old Hundred?" asked a musical young lady at the family table. "Lots of folks never heard it," interrupted a precocious young brother. "Where are they, I should like to know?" "In the deaf and dumb asylums!"

THE other day a Brooklyn policeman, in making out a charge against an arrested party, wrote: "The prisoner set upon me disorderly, and called me an ass, and a precious ruffian, and an idiot—all of which I certify to be true."

How to Promote Peace in a Family.

1. Remember that our will is likely to be crossed every day, so prepare for it.
1. Everybody in the house has an evil nature as well as ourselves, and therefore we are not to expect too much.
3. To learn the different temper and disposition of each individual.
4. To look on each member of the family as one for whom we should have a care.
5. When any good happens to any one to rejoice at it.
6. When inclined to give an angry answer, to "overcome evil with good."
7. If from sickness, pain or infirmity we feel irritable, to keep a very strict watch over ourselves.
8. To observe when others are suffering, to drop a word of kindness and sympathy suited to them.
9. To watch for little opportunities of pleasing, and to put little annoyances out of the way.
10. To take a cheerful view of everything, of the weather, and encourage hope.
11. To speak kindly of the servants—to praise them for little things when you can.
12. In all little pleasures which may occur, to put self last.
13. To try for "the soft answer which turneth away wrath."
14. When we have been pained by an unkind word or deed, to ask ourselves: "Have I not often done the same and been forgiven?"

—*Exchange.*

A Beautiful Sentiment.

Shortly before his departure for India the lamented Heber preached a sermon in which was the following:

Life bears us on like the stream of a mighty river Our boat glides down the narrow channel—through the playful murmuring of its grassy borders. The trees shed their blossoms over young heads and the flowers on the brink seem to offer themselves to our young hands; we are happy in hope, and grasp eagerly at the beauties around us—but the stream hurries on, and still our hands are empty. Our course in youth and manhood, amid objects more striking and magnificent. We are animated at the moving pictures of enjoyment and industry that are passing us; we are excited at home by a short-lived disappointment. The stream bears us on, and our joys and griefs are alike left behind us. We may be ship-wrecked, we cannot be delayed. Whether rough or smooth, the river hastens to its home, until the roar of the ocean is in our ears, and the tossing of the waves is beneath our feet and the land lessens from our eyes, and floods are lifted around us, and we take our leave of earth and its inhabitants, until on our further voyage there is no witness save the Infinite and Eternal.

HOME QUESTION.—An old western farmer, about the time that the temperance reform was beginning to exert a healthful influence in the country, said to his man-servant, "Jonathan, I did not think to say that I think of trying to do my work this year without rum. How much more must I give you to do without it?" "Oh, I don't care much about it," replied Jonathan; "you may give me what you please." "Well," said the farmer, "I will give you a sheep every autumn if you will do without." "Agreed," responded Jonathan. The eldest son said, "Father, will you give me a sheep too, if I will do without rum?" "Yes, Marshall, you shall have a sheep if you will do without." The younger son, a stripling, then said, "Father, will you give me a sheep if I will do without?" "Yes, Chandler, you shall have a sheep also if you do without." Presently Chandler spoke again. "Father, hadn't you better take a sheep too?"

A CORRESPONDENT of the Boston *Traveler* gives some figures showing the present age of many of our prominent writers: John Quincy Adams is 41; George William Curtis, 50; William R. Alger, 51; Edward Everett Hale, 52; William B. Washburn, 54; Julia Ward Howe, 54; Harvey Jewell, 54; James Russel Lowell, 55; Edwin P. Whipple, 55; George B. Loring, 57; Nathaniel P. Banks, 58; Richard H. Dana, Jr., 59; Henry Ward Beecher, 60; Harriet Beecher Stowe, 62; Andrew P. Peabody, 63; Wendell Phillips, 63; James Freeman Clarke, 64; Oliver Wendell Holmes, 64; Peter Harvey, 64; George S. Hilliard, 65; Robert C. Winthrop, 65; John G. Whittier, 66; Henry W Longfellow, 66; Ralph Waldo Emerson, 71; Mark Hopkins, 72; Leonard Bacon, 72; Lydia Maria Child, 72; Catherine E. Beecher, 73; George Bancroft, 74; Caleb Cushing, 74; Richard H Dana, Sr., 87.

A WISE EXCUSE.—On one occasion at a dinner at the Bishop of Chester's, Hannah More urged Dr. Johnson to take a little wine. He replied, "I can't drink a little, child, and, therefore, I never touch it. Abstinence is as easy to me as temperance would be difficult." Many have the same infirmity, but are destitute of the same courage, and therefore are ruined.

ONE of the illusions is that the present hour is not the critical decisive hour. Write it on your heart that every day is the best day in the year. No man has learned anything rightly until he knows that every day is doomsday.

CUNNING men are like mice, who think they are safe if their bodies are in a hole, though their tails stick out the whole length.

Lost at the Fair.

"Witch Hazel" tells the readers of the Contra Costa *Gazette* how it feels to be left alone in the crowd at the Fair:

"As I was sauntering along in the most leisurely graceful manner in the music department, while my head was turned for an instant, the crowd rolled between me and my companion, and I saw him no more that night. Not alarmed at first, and confident that the separation would be bnt momentary, I stationed myself near the railing, and waited to be hunted up. But as minute after minute slipped by, and I wasn't found, I began to feel decidedly lost, and to realize uncomfortably that I was in the very unpleasant position of a lady alone in a public place. I tried to feel and look as if I didn't care—I wasn't there from choice and I couldn't help myself—why need people look at me as if I too were on exhibition and they were trying to decide in which department I belonged? It became embarassing. My attempts to look as if it wasn't the least consequence failed miserably. In desperation I started to hunt for my companion, though conscious that a lone, lorn woman, elbowing her way through a crowd, was scarcely less conspicuous than one standing like patience on a monument. But it was a relief to be moving, and perhaps I should meet my escort. Once I thought I almost had him. Seeing some one who resembled him a little, I made a rush toward him, but fortunately discovered my mistake before speaking. The embarassment of my position increased. There wasn't even the satisfaction of getting angry, for my own carelessness had caused the separation, and the gentleman I knew was searching as anxiously as I was. But to find any particular person in such a crowd! You might as well follow a shooting star, expecting to find where it dropped. There was every prospect that we should go on hunting and missing each other like Evangeline and her lover. I moved on with the crowd till I reached the door, and there I stood and waited—not long, however, till a little boy of our party who had left us early in the evening, and who had likewise been lost, came rushing up. Very glad were we of each other's society for the home walk. I've told this terrible story as a warning. If any of your readers visit the Fair, tell them that before entering they'd better agree upon some spot to wait for their friends in case of a similar separation. The refreshment room wouldn't be a bad place to meet.

Prayer Before Battle.

Whether it is true or not that the Welsh are a quarrelsome people, we cannot undertake to say; the following laughable anecdote, however, would seem in some measures to countenance the conclusion (and Shakespeare, we believe, almost invariably represents his Welch characters as touchy to a degree) that there is a modicum of truth in the charge. But to the story. A Scotch peddler, without the remotest intention on his part of getting into a quarrel or fight with any man, had put up (with his pack) for the night, at a country ale-house bordering on Wales, where, as the fates would have it, he found a motley assemblage in the kitchen of the inn, of not the most desirable individuals; and, among the rest, a Welshman, whose aim, from the very first, it seemed to be to get into hot water with poor Sawney. The latter, sagaciously appreciating the true character of his tormentor, and determined to get rid of him in the quietest way possible, told him that he "did not want to fight." This only excited to still higher pitch the bravado of the Welshman, and he told the Scotchman that he would "make him fight." "Well," says Sawney, "if I must fight, let me say my prayers before I fight," which the Welshman conceding, the Scotchman fell upon his knees, imploring his Maker to pardon him for the two men he had already killed, and for the one that was about to die." The Scotchman slowly rose from his knees, but not before the Welshman had made a precipitate retreat from the room.

An inveterate toper, when receiving a lecture from his wife on the subject of his convivial habits, savagely reminded her that woman brought more sin and sorrow into the world by her eating than ever man had done by his drinking.

Never put much confidence in such as put no confidence in others. A man prone to suspect evil is mostly looking in his neighbor for what he sees in himself. As to the pure all things are pure, even so to the impure all things are impure.

False happiness renders men stern and proud, and that happiness is never communicated. True happiness renders them kind and sensible, and that happiness is always shared. —*Montesquieu.*

Leave your grievances as Napoleon did his letters, unopened for three weeks, and it is astonishing to find how few of them will require answering.

He that hath tasted the bitterness of sin will fear to commit it; and he that hath felt the sweetness of mercy will fear to offend it.

The fool seeketh to pick a fly from a mule's hind leg. The wise man letteth out the job to the lowest bidder.

Indolence is the rust of the mind, and the inlet of vice.

Young Folks' Column.

Mr. Nobody.

I know a funny little man,
As quiet as a mouse,
Who does the mischief that is done—
In everybody's house.
There's no one ever sees his face,
And yet we all agree
That every plate was cracked
By Mr. Nobody.

'Tis he who always tears our books,
Who leaves our doors ajar;
He pulls the buttons from our shirts,
And scatters pins afar.
That squeaking door will always squeak
For, prithee, don't you see,
We leave the oiling to be done
By Mr. Nobody?

The finger-marks upon the doors
By none of us are made;
We never leave the blinds unclosed,
To let the curtains fade.
The ink we never spill; the boots
That lying round you see,
Are not our boots; they all belong
To Mr. Nobody!

Letters to Boys—No. 5.

Dear California Boys:—I think your eyes would open very wide if you should wake up to-morrow morning and find yourselves in the cold, shady grove where I have been living for the past two weeks. I wonder if you will all understand the word camp-ground, as I use it. It is a place where religious meetings are held. In old times, people went to the ground and pitched their tents, for a week or more of preaching, prayer and praise. This kind of camping-out was not pleasant unless the weather was warm and dry. They had the ground for floor and bedsteads, and sometimes but one thickness of cloth for a roof, through which the rain would come in a hard shower. But now, in most places, a large number of cottages are built and people live in them for weeks. There are over 150 houses upon this ground; and I think there are nearly 300 houses and tents. There are a large circle of them beside parks and avenues outside. Inside this circle, there is a large, covered stand for the ministers who come with their people, from many towns around. There are seats enough for a few thousand people, placed upon rising ground in front of the stand. The shade is so fine that but few stray sunbeams light upon the sea of upturned faces. Some eyes are turned upward so far that we know it cannot be the preacher they are looking for. What do you suppose it is? Well, suppose you were sitting there, and the seat was pretty hard—just the "soft side of a plank"—and you, perhaps, could not understand all the preacher said, and there were such a lot of birds and squirrels twittering in the trees, do you suppose you would look up to see them? The birds must be surprised when they look down upon 10,000 people. There goes a little boy, who was here last year, and undertook to whip some horses; all the pay he received was a broken arm, which kept him out of mischief for some time. But this year he seems to enjoy playing as well as any of the dozens of children here. But I must go to the evening service. By-the-way, I want you all to go to Old Orchard beach with me—now remember, the first pleasant day.

Jennie E. Jameson.

Epping, N. H., Camp-ground.

Something for Young Men.

There is something instructive and encouraging for young men in the history and present position of Hon. Alex. Mackenzie, now Premier of the Dominion of Canada. He started in life with no capital but his brains and his hands, and worked at his chosen avocation, as a stonemason, and subsequently as a practical farmer. By perseverance and untiring energy united with sterling integrity, he pushed himself up to the highest position in the country of his adoption. He brings to the management of public affairs a well-trained mind, a clear head, a strong intellect and a vigorous constitution. He is emphatically a self made man, and his position at the head of the Government is a compliment to the farmers and mechanics of our country. Mr. Mackenzie's history and example should impress upon young men three important lessons:—1. That every legitimate occupation, no matter how humble, is honorable in itself. 2. That true greatness is achieved by the exercise of industry, perseverance, faithfulness and integrity. 3. That lack of intellectual training and disadvantage of early education may be overcome by hard study, careful reading and diligent improvement of leisure moments. Let young men and particularly farmers and mechanics, lay these lessons to heart, and strive to achieve success in life and true greatness by the exercise of perseverance and industry, united with integrity of purpose and a firm determination to do right under all circumstances. The country wants thousands of self-made men to occupy positions of trust and usefulness; to take the places of the bar-room and corner-loafers, the political cormorants and party hangers-on, who have long dishonored honorable positions in life and in the public service. The country wants many men of the stamp like Hon. Alex. Mackenzie.—*Exchange.*

Why are our naval training ships like pine trees?—Because they furnish stuff that the tar is made of.

Good Health.

Food and Work.

In a recent number the *Journal of Chemistry* explained how "a day's work" is measured in foot-tons, and its average amount, including both the "external" work, or that performed in labor or walking, and the "internal" work, or that done by the organs of circulation, respiration, digestion and other vital processes. The former averages from 300 to 500 foot-tons, the higher figure representing an exceedingly hard day's work. The latter may be reckoned taking the average of the best estimates, at 260 foot-tons. As might be expected, it is difficult to measure this internal work with precision, and the estimates of different physiologists vary widely, those for the heart alone ranging from 122 to 277 foot tons. The former is the amount calculated by Haughton, who puts the respiratory movements at about 11 foot-tons for the 24 hours, while others have set them as high as 44 foot-tons. The exact value is of no importance for our present purpose. Taking the lowest estimate, the internal work is no insignificant addition to the other labor performed by the wonderful mechanism of this body of ours.

Where does all this force come from? What keeps the machine going? The idea of "perpetual motion," or a self moving machine, is as absurd here as in any other department of mechanics. A steam-engine may as well be expected to run without its boiler and furnace, as the body without its equivalent for boiler and furnace; and both alike must have fuel to keep up their fires. We need not dwell on this point, for the fact that the *food* we eat maintains the heat of the body, builds up and renews its muscular tissues, and nourishes all its varied energies, has been familiarly explained. It has been shown, moreover, that the food is literally *burned* to produce this heat and force, and that the air we breathe supports this combustion, which is a process of oxidation, and dependent on a constant supply of oxygen, precisely like the fire under the boiler of the steam-engine.

Now, we know that it is impossible to calculate just how much work a pound of coal burned in the furnace of an engine is capable of doing. The heat generated in the combustion is equivalent to something more than 11,000,000 foot pounds, and if none of it were wasted it would actually do that amount of work. In the steam engine, however, only about a tenth part of the energy stored up in the fuel is realized as work.

May we not calculate in the same way what work the food we eat, considered as fuel, is capable of doing, and compare this result with the actual amount accomplished by it in the body? The problem is somewhat more complicated than in the case of the steam-engine, but several physiologists have tried their hand at it, and have attained reasonably consistent results.

Dr. Frankland has determined the "mechanical energy" of various kinds of food, both when burnt in oxygen and when consumed in the body. The amount is sometimes smaller in the latter case than in the former, because the combustion is not so complete. For example, an ounce of albumen generates a certain amount of heat when burnt in oxygen; but in the body some of its constituents are only partially oxidized, being excreted in the form of urea. An ounce of sugar, on the other hand, is generally all burnt up into carbonic acid and water, and its actual energy in the body, under whatever form it appears, is equivalent to its theoretical energy.

Disinfectants and Deodorizers.

To deodorize an ill-smelling room or locality intelligently, substances must be used, which, by causing a new chemical combination, destroy the odor altogether; but if the decomposition continues to go on, other odoriferous particles begin to arise requiring a new application of the deodorizer; on this account all deodorizers are efficient only temporarily; hence the only rational method is either to remove the offending material or employ disinfectants which arrest further decay. If the material both arrests the decay and destroys or absorbs the ill-smell, then it is doubly valuable. Two hundred grains of chloride of zinc in an ounce of water is a powerful agent in neutralizing bad smells and in arresting both animal and vegetable decomposition in ships, hospitals, dissecting rooms, cellars, privies and water-closets, without having any ill-smell of its own: for disinfecting purposes, mix one pint of the above fluid to four gallons of water.

There are three powerful disinfectants: carbolic acid, but its smell is objectionable; chlorine and permanganate of potash; these disinfectants act by combining with deleterious substances and rendering them harmless, while antiseptics prevent and arrest the decomposition of animal substances.

The only perfect disinfectant is habitual cleanliness and thorough ventilation; next to that is a dry heat of 250 degrees.

The most common and availing disinfectant and deodorizer is copperas, crude copperas, sold by druggists at a few cents a pound under the name of sulphate of iron, one pound to two gallons of water, to be used as often as necessary to render all odors imperceptible, acting at the same time as an antiseptic, deodorizer and disinfectant, and if instantly thrown over what passes from the body in cholera, is one of the cheapest and best means known for preventing its communication to others.—*Ex.*

Imagination Power.

Many persons are sick merely from the effect of imagination or habit, the old woman, for example, who had been bed-ridden for years with her rheumatics. She was left alone one summer day at the farm house with both front and rear doors open. She saw a mad bull tearing across the pasture in the direction of the house, and feeling that it was "neck or nothing" she bounced out of that bed in double quick time, barred both the doors, and never complained of rheumatism afterward.

Many cases are given in the medical journals of persons who have been bitten by dogs, and have afterwards taken to foaming at the mouth, shuddering at the sight of water, and imitating a dog's bark, imagining that these are signs of hydrophobia, and have actually died in convulsive agonies, the facts being that mad dogs don't foam at the mouth, never bark, and can drink water "like a fish." So far from running about in desperation as if a hundred thousand dilapidated tin pans were tied to their caudal prolongation, really mad dogs are the quietest individuals in the world, make no noise, seem to want to be alone, keep their mouths shut, the distinctive symptoms of such madness being great restlessness, pawing the face and eating their own fresh dejections. Mad dogs do not run after people, but will snap at anyone who comes in their way, especially individuals of their own kind; they seem to trot or run as if looking at something straight ahead. Infinite mischief is done in publishing cases of persons becoming hydrophobic one, ten, and even 20 years after the last remembered biting of a dog, the reporters of such tales not having taken pains to inquire if there has not been a later biting. Such monstrous absurdities are well calculated to keep nervous persons, who have been once bitten by a dog, in a state of wearying uneasiness all their lives long afterwards. If a person has been bitten by a dog supposed to be mad, the animal should be put in a quiet room and let alone, only slipping in food and drink from time to time; if really mad death will take place in a day or two, and if not mad there will be a complete recovery.

Only one bite in 20 of dogs supposed to be mad is fatal.

A dog in New Jersey last year bit a woman, and ran under the sofa; her husband dragged him out by the tail, held him up and whipped him; in this position the dog got a chance of biting his master, who died in a few days of hydrophobia; this shows that the state of mind of the animal gives virulence to the bite. A mother nursing her infant child was thrown into a sudden, a tempestuous rage; as soon as it was over, she finished nursing the child, which was at once taken with convulsions; the state of mind of the mother imparting virulence to the milk of her bosom. A lady saw at a distance a window sash falling immediately on the ends of the fingers of her little grandchild; the child's fingers were crushed—those of the grandmother were similarly affected. This is given on the testimony of the distinguished Dr. Brown Sequard. The lesson is, seek to control the imagination and to guard against intense mental excitement by habituating the mind to take a calm, measured and deliberate view of all the circumstances of life. Intelligent people should bear these things in mind. The greatest throat swabber of the age began to think he had sore throat too, and swabbed himself every day; and when he died his throat was found to have been as well as anybody's.

The best way to escape imaginative diseases is to be just as busy as you can in doing something useful, profitable or good; to have the mind fully employed in some commendable object; it is thus that the washerwoman is often happier than the wife of the millionaire; the hod carrier, than he who has "retired from business."—*Hall's Journal of Health.*

Proposed Law Against Quackery in Texas. The committee appointed by the Texas Medical Society to examine the act to regulate the practice of medicine in that State, have presented the following amendment, among others, to be recommended to the legislature: "Any person who is not a citizen of Texas, entitled to vote, who shall come into the State and advertise to perform surgical operations, or cure diseases, shall, before entering upon such practice, pay into the county treasury the same tax as is paid by persons exhibiting a circus performance or menagerie, and, for violating this act, parties guilty of the same shall be subject to the same penalties, to be collected in the same way, as for circus and menagerie exhibitions."—*Boston Medical Journal.*

Rinz has found that pus or matter is able to reduce potassic chlorate to the chloride, whereby it must itself undergo decomposition. Burrow has already observed that finely-powdered potassic chlorate, when strewn on gangrenous ulcers and tumors, helped them, and we may suppose that it is due to the oxidizing power of the salt upon pus.

Formula for Summer Catarrh.—Dr. Hoover, in the *American Medical Journal*, recommends a solution of chlorate of potassa, 60 grains, sulph. morph., 12 grains, to six ounces of water to be used as an atomizer. He says it will give relief immediately, and effect a complete cure in a few days.

A writer in an English medical journal considers it well established that "some relation still exists between a depressed state of the barometer and the prevalence of frontal headache."

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SAN FRANCISCO:

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We are not Entirely Forgotten.

Mr. Gideon Aughinbangh, of Alameda—who by the way has an interesting letter in the correspondence department of our paper to-day, —sends to our office a basket of delicious pears, of the Flemish beauty variety. Mr. A. besides wishing to disperse among his friends the good things from his fruit garden, offers this basket of pears as proof of his theory that fruit is very materially affected by the stock upon which it is grafted, and by the treatment which it receives while in the nursery and in the orchard. The pears alluded to were, as we stated, of the same variety, the Flemish beauty, but grown on different trees. They are alike in size—all being very large—but are quite unlike in other respects. They are from two trees, the product of one showing a clean skin, of dark green color, the skin of the other is thickly coated with rust, the greenness that is discernible being of a lighter shade than that of the other. It has altogether the appearance —except in shape—of the Golden Russet apple; but we failed to recognize the difference in flavor that is claimed by their donor. On comparing the two, being alike in their degree of ripeness, we could scarcely perceive any difference in the grain or flavor of the fruit.

Our views, however, coincide with those of Mr. A. in regard to the effect of the stock on the product of the scion; and we believe that one of the worst faults of which nurserymen are chargeable, is the carelessness in selecting their stocks. Their attention is concentrated on the question of scion and they give too little thought to the record and condition of the stock upon which the scion is grafted.

THE Illinois Legislature has passed a law which provides that whoever adulterates any milk with water, chalk, or other substance, or sells such milk, shall be confined in the county jail for a period not exceeding one year, or fined in a sum not exceeding $500.

APPLES throughout Michigan are small on account of dry weather.

Fluctuations of Prices for ten years in the San Francisco Wheat Market---Monthly Quotations from July 1st, 1864, to September 23d, 1874.

		1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
January.	HIGHEST.....	1 55	4 37½	2 25	1 80	2 75	2 05½	1 75	2 60	2 52	2 15	2 30
	AVERAGE....	1 45	4 25	2 20	1 77	2 58	2 05	1 70	2 27½	2 27	2 02½	2 20
	LOWEST.....	1 25	3 45	2 06	1 50	2 55	1 52½	1 40	2 00	2 20	1 75	2 15
Feb'y....	HIGHEST.....	1 75	5 30	2 25	1 75	2 91	2 05	1 75	2 52	2 25	2 00	2 25
	AVERAGE....	1 55	4 75	2 17½	1 71	2 90	1 90	1 70	2 40	2 17½	1 87½	2 02½
	LOWEST.....	1 25	3 90	2 10	1 37½	2 42½	1 52½	1 37½	2 25	1 52½	1 60	1 85
March...	HIGHEST.....	2 40	5 25	2 25	1 94	3 10	1 95	1 70	2 50	2 25	1 98	2 00
	AVERAGE....	1 85	5 00	2 17½	1 80	3 00	1 80	1 67	2 40	2 05	1 36	1 90
	LOWEST.....	1 60	4 75	1 88½	1 42	2 50	1 52½	1 27½	2 22	1 85	1 70	1 80
April.....	HIGHEST.....	2 50	5 25	2 25	2 22	2 70	1 77½	1 95	2 85	2 05	1 90	2 00
	AVERAGE....	2 25	5 00	2 17½	2 00	2 62	1 72	1 62½	2 53	1 82½	1 82½	1 82½
	LOWEST.....	1 70	4 77½	1 65	1 50	2 37½	1 32	1 47½	2 37½	1 60	1 75	1 80
May.....	HIGHEST.....	3 00	5 00	1 75	2 15	2 45	1 55	1 94	3 15	2 16	2 00	2 00
	AVERAGE...	2 67½	4 75	1 70	2 10	2 22	1 54	1 65	3 10	2 05½	1 91	1 80
	LOWEST.....	2 45	4 62½	1 62½	1 65	2 10	1 17½	1 47½	2 60	1 75	1 75	1 70
June.....	HIGHEST.....	2 75	5 00	1 77½	2 00	2 50	1 65	1 98	2 60	2 16	1 85	1 85
	AVERAGE....	2 60	4 75	1 70	1 77	2 06	1 57½	1 56	2 45	2 05	1 77½	1 77½
	LOWEST.....	2 30	1 75	1 47½	1 55	2 00	1 32	1 60	2 30	1 82½	1 60	1 70
July.....	HIGHEST.....	3 52½	2 00	1 60	1 82½	2 30	1 80	2 10	2 45	1 82½	1 82½	1 80
	AVERAGE....	3 10	1 88½	1 50	1 72	2 00	1 75	1 96	2 22	1 62	1 74	1 65
	LOWEST.....	2 75	1 75	1 37½	1 50	1 80	1 56	1 70	2 21	1 42½	1 60	1 57½
August..	HIGHEST.....	3 55	1 75	1 60	1 87	2 00	1 85	1 96	2 45	1 66	2 12½	1 80
	AVERAGE....	3 50	1 70	1 50	1 77	1 85	1 80	1 88½	2 27	1 50	2 02	1 60
	LOWEST.....	3 25	1 60	1 40	1 65	1 52½	1 42½	1 57½	2 12½	1 25	1 72½	1 40
Sep't.....	HIGHEST.....	3 65	1 96	1 55	2 15	2 05	1 77½	1 80	2 85	1 70	2 35	1 65
	AVERAGE	3 52½	1 87	1 45	2 10	1 96	1 75	1 75	2 37	1 62½	2 25	1 52½
	LOWEST.....	3 30	1 70	1 25	1 75	1 70	1 42½	1 55	2 35	1 40	2 05	1 05
October..	HIGHEST.....	4 37½	2 00	1 95	2 64	2 05	1 67½	2 05½	2 85	1 70	2 37½	
	AVERAGE....	3 90	1 96	1 60	2 42	1 96	1 66	1 87	2 65	1 50	2 25	
	LOWEST.....	3 60	1 80	1 35	2 17½	1 27½	1 20	1 67½	2 62	1 40	2 15	
Nov.....	HIGHEST.....	4 37½	2 12½	2 07	2 64	1 94	1 64	2 17	2 80	1 80	2 32½	
	AVERAGE....	4 25	2 05	1 80	2 53½	1 88	1 60	2 12½	2 75	1 65	2 27½	
	LOWEST.....	3 00	1 75	1 65	2 16	1 42½	1 05	1 87	2 50	1 40	2 20	
Dec.....	HIGHEST.....	3 75	2 10	2 00	2 64	1 94	1 64	2 30	2 83	2 05	2 35	
	AVERAGE....	3 52½	2 05	1 87	2 53½	1 85	1 58	2 20	2 67	1 93	2 28	
	LOWEST.....	3 25	1 94	1 75	2 50	1 52½	1 17½	1 87	2 42	1 65	2 17½	

Wheat Fluctuations.

There have been periods in the history of agriculture and trade in this country when a depression in the wheat market like that which has recently occured, would have created a disastrous panic; and the fact that we have passed through our late trial without the appearance of this disturbing element, is attributable to the same cause that has prevented panics generally in trade and commerce during the last quarter century. This cause is to be traced to the widely diffused commercial intelligence, and the consequent broader views entertained by producers and dealers. People are less inclined than formerly to go to commercial oracles to have the future of trade opened up to them and to obtain a comprehensive view of its actual condition. Prophecies of industrial or commercial millenniums have become powerless in accelerating these blissful periods, and predictions of disaster are alike powerless for evil. Necessity has caused the producers to watch for themselves the contingencies of the market; and the small dealer, by putting his own little house in order, has aided materially in averting the failure of some mammoth establishment, and thus saved himself from the danger of being crushed by its fall when it occurs.

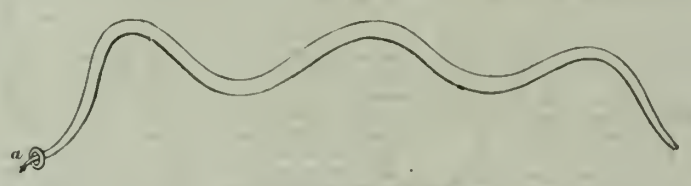
Like the majority of the press of the country, we have refrained from giving advice to the wheat growers in regard to selling, or holding on to their products; being aware that they are justly and judiciously suspicious of all such advice; and being also conscious of their ability to draw their own conclusions after having the facts placed before them, in order to assist in diffusing a broad and comprehensive view of the most important subject now before the people of California, we have prepared the accompanying table, exhibiting the fluctuations in the wheat market during the last ten years. This, we believe, will be both interesting and useful to our readers; it will be interesting to observe the regularity of the ebb and flow of the tide of prices at certain seasons; notwithstanding the diversified causes that each year has brought forth to put prices up or down. This point is an important one, and its proper consideration would, it would seem, fully justify us in depending on corresponding fluctuations in the same season of the coming year. Neither figures nor fancy can afford us any information in regard to the value of the wheat crop of 1865; but there is nothing in our present commercial surroundings—peculiar as they may appear to us—which should warrant us in expecting during the next five or six months a marked variation in the condition of the wheat market, from that of a corresponding season in the period which our table includes.

The prices given in the accompanying table, are so much per one hundred pounds. It will be seen that the widest range in prices is from $5.30 in February, 1865, to $1.05 in September, 1874.

BEE trees are very numerous in the woods near Freestone. A professional bee hunter says he has found over fifty bee trees this season within a radius of one mile. A few days ago a tree was felled which contained four swarms.

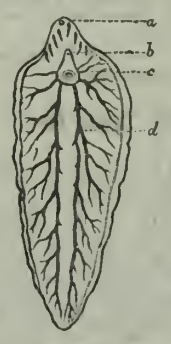
The American Turbine Wheel.

Since our general reference to water wheels, Messrs. Treadwell & Co. have placed on exhibition, at the Mechanics' Institute in this city, one of the American Turbines, for which they are sole agents on this coast. This is considered a very superior wheel, and has been largely introduced into use throughout the Eastern States, and to some extent on the Pacific coast. Turbine water wheels are rapidly coming into general use, and bid fair soon to almost supersede all other kinds.



THE KIDNEY WORM.

The advantages which these wheels possess over the best overshot or breast wheels are numerous and obvious. As a general thing their first cost is much less, and, owing to the small space they occupy, there is little or no excavation required for placing them in position for work, and no heavy nor expensive foundations are needed. Being made entirely of iron, they



THE FLUKE.

are not liable to get out of order. The great velocity at which they are run also adds to their efficiency, as there is but little if any necessity for complicated intervening shafts or gearing to obtain higher motion. The number of horse powers that a shaft will transmit largely depends on the velocity at which it runs. One that transmits 50-horse power when running 50 turns a minute, will give about 100-horse power when its speed is increased to 130 revolutions per minute. Much of this advantage is lost when that increased speed has to be obtained by complicated machinery.

It is supposed by many that turbines can be used to advantage only when very high heads are at command; but such is not the case. A much more economical use can be made of a 25-foot head than of one of 60 feet, or more. The friction encountered in passing a stream of water through a long pipe, in even a perpendicular descent, is much greater than is generally supposed, and must all be subtracted from the power as theoretically obtained.

HARD UP.—A farmer in Sonoma county says he is too poor to take the RURAL PRESS, and that he had to borrow the money to get into the circus the other night.

FROSTS have already begun to appear in the vicinity of Carson, and are having a decided effect on vegetation.

The Liver Fluke and Kidney Worm.

In our issue of the 12th, we copied a statement from the *Rural Alabamian* asserting that the kidney worm in hogs and fluke in sheep are identical and caused by a parasitic insect.

Upon looking into the matter farther we are satisfied that the *Alabamian* is mistaken as to the identity of the two parasites. While it is possible that a fluke might find its way into the kidney of an animal, that is not the organ which it usually attacks. It is chiefly found in the gall-bladder and bile ducts; but occurs also in the intestine, and sometimes in blood-vessels.

In the RURAL PRESS for Jan'y 27, '72, under the head "The Fluke Rot in Sheep," will be found an article that was written after much careful investigation on the subject of this pest and the disease which it produces.

There are Several Species of Flukes.

The species which is most common in sheep is known to naturalists under the name of *Fasciola hepatica*. We herewith give a cut which we have copied from a work on parasites by Prof. A. E. Verrill, of Yale College, showing the under side of the fluke. From the same source we condense the following description of the parasite. Its body is very flat, rather oval in form, and in color, a pale brownish or greenish yellow, with occasionally a faint rosy tint. The size is usually about three-fourths of an inch long by one-half of an inch wide. The fluke is very prolific. Prof. Leuckart estimates that the ovaries may at one time contain 45,000 eggs.

Remarkable Changes.

The eggs that are discharged pass out of the intestines of the sheep. Those that get into water or moist places hatch after several weeks. They do not, however, immediately assume the form of their parent, but pass through five or six changes, during two of which they are parasite in the bodies of snails living about fresh water pools and ditches. The rest of the time they are in the water itself. So that sheep feeding about these places are very likely to become infested with flukes, and have the "fluke rot."

To prevent this disease, keep the sheep away from stagnant fresh water. To cure, put on a dry pasture with clear running water and feed salt in doses of two or three drachms, morning and night, until signs of improvement appear, then a drachm or two of powdered gentian or ginger root may be added to the salt. Salt marshes and plains covered with salt-wort, are also considered good hospitals for "rotten" sheep.

The Kidney-Worm,

Estrongyles gigas, (see accompanying cut,) is certainly a very different animal from the fluke. We again go to Professor Verrill for information. This is the largest of all the nomatade worms, the females sometimes becoming three feet long and half an inch in diameter, though usually much less. The body is somewhat cylindrical, tapering somewhat to each end, and more or less deeply tinged with red. The head is simply obtuse. The male becomes ten or twelve inches long and one-fourth of an inch in diameter.

Habils.

This formidable parasite lives in the kidneys of man and various animals. It has been found in the dog, horse, cattle, hog, wolf, weasel, mink, otter, seal, etc. In this country it has been found quite frequently in the kidneys of the mink. When lodged in the kidney it gradually, but completely destroys the organ. It is probable that no remedy can be applied when the parasite is once lodged in the kidney.

The history or this worm is not fully known. According to Leuckart, a slender worm found coiled up in cysts in the mucles and peritonium of fishes is the young or larva of some species of *eustrongylus*. It is therefore, probable that the eggs or young embryos of *E. gigas* are swallowed by fishes, and in their bodies develop into the larval form and become encysted, and if these are swallowed by some animal, migrate into its kidneys to become sexually mature. The frequency of these parasites in those animals that feed chiefly on fish, such as otters, minks and seal, render this view very probable.

IT is said that the vineyards of Los Angeles county will yield a crop of unprecedented abundance this fall and that there will be a large surplus over what will be used in the wine-presses.

LARGE and destructive fires are raging in the woods in the vicinity of Trinidad, Humboldt county, occasioning great loss to the mill owners and lumbermen.

L. L. ROBINSON is having a lot of tenement houses erected on the New York ranch, which he intends to divide up and rent in parcels of 300 acres or less.

MORRIS BROS., of Sonoma valley make regular shipments of grapes to Omaha on Tuesday and Friday of each week.

HEAVY frosts last week in the Washoe region killed everything in the vegetable line.

THE crops in Inyo county, especially corn, are unusually promising.

Sonoma and Marin District Fair.

Following is a list of the premiums awarded at the Petaluma Fair, as reported in the *Morning Call* of Sept. 21st:

Second Department—Cereals, Fruits, Wines, Butter, etc.

CLASS I—AGRICULTURAL PRODUCTS.

Best exhibit grain, not less than four varieties of 100 lbs. each, $10, J. Purrington, Green Valley.
Best sack Australian wheat, not less than 100 lbs., $5, G. D. Green, Petaluma.
Best sack club wheat, not less than 100 lbs., $5, G. Peterson, Santa Rosa.
Best sack Chile wheat, not less than 100 lbs., $5, J. Purrington, Green Valley.
Best sack Smith wheat, not less than 100 lbs., $5, C. F. Munday, Petaluma.
Best sack of barley, not less than 100 lbs., $5, Robert Crane, Santa Rosa.
Best sack rye, not less than 100 lbs., $5, J. Kendall, Petaluma.
Best sack Surprise oats, not less than 100 lbs., $5, J. B. Gossage, Petaluma.
Best sack oats any other variety, not less than 100 lbs., $5, M. Gillem, Green Valley.
Best sack wheat flour, $5, A. McCune, Petaluma.
Best sack corn meal, $3, A. McCune, Petaluma.
Best sack shelled corn, not less than 100 lbs., $5, Robert Crane, Santa Rosa.
Best exhibit of leaf tobacco, $3, C. Tempel, Petaluma.
Best collection potatoes, $3, T. Ryan, Petaluma.
Best exhibit sweet potatoes, $2, T. Ryan, Petaluma.
Best exhibit onions, $2, J. Kendall, Petaluma.
Best exhibit squashes, $2, Wm. Cromwell, Petaluma.
Best exhibit pumpkins, $2, S. D. Towne, Petaluma.
Best exhibit peas, 10 pounds, $2, Dr. Farrer, Petaluma.
Best exhibit sugar beets, $2, W. Gibson, Petaluma.
Best exhibit mangel wurtzels, $2, Dr. Farrer, Petaluma.
Best six blood beets, $2, R. N. Crane, Santa Rosa.
Best exhibit corn on stalk, $2.50, G. Campbell, Petaluma.
Best exhibit broom corn, $2, R. Looney, Petaluma.
Best exhibit cabbage, not less than five heads, $2, H. Meacham, Petaluma.
Best exhibit watermelons, $2, W. H. Pepper, Petaluma.
Best exhibit muskmelon, $2, Robert Crane, Santa Rosa.
Best exhibit canteleup melon, $2, T. D. Morris, Sonoma.
Best exhibit pie plant, $2, W. H. Pepper, Petaluma.

CLASS II—FRUIT, GRAPES, NUTS, ETC.

Largest and best collection fruit raised in one orchard, $20, W. H. Pepper, Petaluma.
Second best collection do., do., $10, M. Gillem, Green Valley.
Best exhibit apples, $5, J. Harmon, Petaluma.
Best single variety six apples, $2.50, E. S. Lippitt, Petaluma.
Best six varieties apples, three each, Dr. Farrer.
Best collection pears, $5, J. Purriugton, Green Valley.
Best single variety six pears, $2.50, E. S. Lippitt, Petaluma.
Best six varieties pears, three each, $3, J. Purrington, Green Valley.
Best six quinces, $2.50, M. Gillem, Green Valley.
Best collection oranges, $5, Mrs. Fowler, Sonoma.
Best collection lemons, $3, Mrs. Fowler, Sonoma.
Best collection grapes, not less than six varieties, $15, Morris Bros., Sonoma.
Best exhibit foreign grapes, $5, Morris Bros., Sonoma.
Best exhibit California grapes, $2, Mrs. Fowler, Sonoma.
Largest bunch of grapes, of any variety, $3, Morris Bros., Sonoma.
Best collection figs, 100 pounds, Morris Bros., Sonoma.

CLASS III—PRESERVED FRUITS, ETC.

Best exhibit dried fruits, not less than five varieties, 3 pounds each, kiln dried, $5, J. Pennington, Green Valley.
Best exhibit do. do., sun dried, $5, Mrs. Warren, Petaluma.
Best exhibit dried apples, not less than 5 pounds, $3, W. H. Pepper, Petaluma.
Best exhibit dried peaches, not less than 5 pounds, $3, J. Purrington, Petaluma.
Best exhibit German prunes, do., $3, W. H. Pepper, Petaluma.
Best exhibit dried plums, do., $3, J. L. Mock, Petaluma.
Best exhibit raisins, do., $5, J. Purrington.
Best exhibit canned fruits, 5 varieties, $5, Mrs. N. M. Hedger, Petaluma.
Best exhibit jellies, do., $5, Mrs. S. D. Towne, Petaluma.
Best exhibit preserves, three varieties, $5, Mrs. N. M. Hedger, Petaluma.
Best exhibit pickles, five varieties, $2.50, Mrs. G. B. Pepper, Petaluma.
Best exhibit catsup, three bottles, $2.50, Mrs. Rowland, Santa Rosa.
Best exhibit side bacon, $3, Robert Crane, Santa Rosa.
Best hams, three or more, $3, Robert Crane, Santa Rosa.

CLASS IV—BUTTER AND CHEESE.

Best box fresh butter, $10, G. C. Campbell, Petaluma.
Best packed butter, $5, G. Watson, Marin Co.
Best exhibit cheese, not less than three, $5, J. E. Jewell, Petaluma.

CLASS V—WINE, CIDER, ALE, ETC.

Best exhibit currant wine, $5, Mrs. Gibbs, Petaluma.
Best exhibit beer, $2.50, Michele & Ereen, Petaluma.

Third Department—Domestic Manufactures.

CLASS I—MISCELLANEOUS.

Best exhibit furniture, $5, A. Kahn, Petaluma.
Best exhibit upholstery, $5, A. Kahn, Petaluma.
Best exhibit blacksmithing, $5, Zartman & Co., Petaluma.
Best exhibit horse shoes, $3, M. O'Brien, Petaluma.
Best exhibit boots, $5, P. Sullivan & Co., Petaluma.
Best exhibit brooms, $3, R. Looney, Petaluma.
Best washing machine, $3, P. Cowen, for Humboldt Washer.
Best exhibit marble work, diploma, Faher & Regan, Santa Rosa.
Best butter box, $3, B. Sartori, Duncan's Mills.
Best cane-work, $2, Eddie Lippitt, Petaluma.
Best set plans for farm house and stable, $5, T. R. Jacobs, Petaluma.

CLASS II—CARRIAGES, BUGGIES, WAGONS, ETC.

Best exhibit carriages, buggies, wagons, etc., $25, Zartman & Co., Petaluma.
Best family carriage, $12, Zartman & Co. Petaluma.
Best buggy, $10, Zartman & Co., Petaluma.
Best spring wagon, $10, Zartman & Co. Petaluma.
Best carriage painting, $8, H. Vinson, Petaluma.
Best carriage trimming, $8, Gwinn & Brainard, Petaluma.

CLASS III—SADDLERY AND HARNESS.

Best exhibit saddlery, diploma and $15, Gwinn & Brainard, Petaluma.
Best set double harness, $7.50, Gwinn & Brainard, Petaluma.
Best set single harness, $5, Gwinn & Brainard, Petaluma.
Best saddle, $4, Gwinn & Brainard, Petaluma.
Best exhibit apprentice work, $2.50, L. Ryan, Petaluma.

CLASS IV—AGRICULTURAL IMPLEMENTS.

Best Cultivator, $5, M. C. Hawley & Co., San Francisco.
Best fan mill, $5, recommended to Nash & Cutts, Sacramento.
Best fruit dryer, $10, Geo. Harris, Petaluma.

Fourth Department—The Fine Arts, Plants and Flowers.

CLASS I—PAINTING, ORNAMENTAL WORK, ETC.

Best exhibit in Classes I. and II., by one person, manufactured at any time, silver pitcher, $25, Mrs. McCurdy, Petaluma.
Best specimen of painting in oil on canvas, $5, Ed. Healey, Petaluma.
Best specimen painting in water colors, $3, J. L. Reed, Petaluma.
Best specimen portrait painting, in oil, $5, J. L. Reed, Petaluma.
Best collection photographs, $5, J. L. Reed, Petaluma.
Best specimen pencil drawing, $2.50, Miss R. A. Jewell, Petaluma.
Best specimen crayon drawing, $2.50, Miss R. A. Jewell, Petaluma.
Best specimen sketching from nature, $3, C. Healey, Petaluma,
Best specimen hair work, $3, Mrs. E. Ranard, Petaluma.
Best and largest variety wax work, $5, Miss Clara Schirs.
Best wax flowers, $3, Mrs. J. Campbell, Petaluma.
Best wax fruit, $3, Mrs. Rutherford, Petaluma.
Best specimen shell work, $3, Mrs. Rowland, Petaluma.
Best specimen bead work, $3, Mrs. Moore, Petaluma.
Best specimen cone work, $3, Mrs. Gibbs, Petaluma.
Best specimen moss work, $3, Miss Warren, Petaluma.
Best cabinet of minerals, petrifactions, etc., $5, R. A. Thompson, Santa Rosa.

CLAES II—EMBROIDERY, NEEDLEWORK, SEWING, KNITTING, ETC.

Best exhibit needlework, not less than 10 varieties, $15, Mrs. Hauhrick, Petaluma.
Best piece of worsted embroidery, $3, Mrs. McCurdy, Petaluma.
Best combed worsted flowers, $2.50, Miss Pinna, Petaluma.
Best woven worsted flowers, $2.50, Miss Tillie Lodge, Petaluma.
Best tufted worsted work, $2.50, Miss F. Lewis, Petaluma.
Best silk embroidery on silk or velvet, $3.50, Mrs. Moore, Petaluma.
Best silk embroidery on cotton or woolen, $2.50, Mrs. Moore, Petaluma.
Best cotton embroidery, $2, Mrs. McCurdy, Petaluma.
Best chenille work, $3, Miss L. Brown, Petaluma.
Best transferred work, $2, Mrs. Moore, Petaluma.
Best crotchet work, $2, Mrs. McCurdy, Petaluma.
Best tatting, $1, Mrs. Moore, Petaluma.
Best hem-stitching, $2, Mrs. Moore, Petaluma.
Best Portuguese lace, $3, Mrs. McCurdy, Petaluma.
Best Spanish lace, $2, Mrs. McCurdy, Petaluma.
Best pair woolen stockings, $2, Mrs. R. H. Payne, Petaluma.
Best piece knitting, $2, Mrs. R. H. Payne, Petaluma.
Best rag mat, $3, Miss Lulu Brown, Potaluma.
Best sewing machine for all purposes, diploma, Howe machine company.
Best sewing machine for fancy work, diploma, Florence machine company.
Best lady's dress, $3, Mrs. Thompson, Petaluma.
Best baby's dress, $2.50, Mrs. Elder, Petaluma.
Best boy's suit, $3, Mrs. Gwarson, Marin county.
Best patchwork, $3, Mrs. Moore, Petaluma.
Best quilting, $3, Mrs. R. H. Payne, Petaluma.
Best exhibit millinery, $7.50, Mrs. A. Kelly, Petaluma.
Best bonnet, $2, Mrs. A. Kelly, Petaluma.
Best washing and ironing, $3, Mrs. J. Campbell, Petaluma.

CLASS III—BREAD, CAKES, ETC.

Best wheat bread, $3, Mrs. C. P. Gibson, Novato.
Best corn bread, $2.50, Miss L. Haven, Petaluma.
Best fruit cake, $3.50, Mrs. N. M. Hedger, Petaluma.
Best pound cake, $3, Mrs. Watson, Marin county.
Best sponge cake, $2.50, Mrs. Hedger, Petaluma.
Best coffee cake, $2, Mrs. Campbell, Petaluma.
Best assortment tarts, $3, Mrs. Gibbe, Petaluma.

CLASS IV—PLANTS, BOUQUETS, ETC.

Best collection trees, shrubs and flowering plants, $10, G. B. Pepper, Petaluma.
Best exhibit ornamental foliage plants, $10, G. B. Pepper, Petaluma.
Best exhibit fuchsias, $2.50, E. S. Lippitt, Petaluma.
Best exhibit geraniums, $2.50, E. S. Lippitt, Petaluma.
Best exhibit pelargoniums, $2.50, G. B. Pepper, Petaluma.
Best exhibit hardy evergreen trees and shrubs for garden, $2.50, G. B. Pepper, Petaluma.
Best exhibit cactus and cereus, $2, E. S. Lippitt, Petaluma.
Best exhibit miniature garden, $5, C. Towne, Petaluma.
Best floral design, $5, Mrs. Towne, Petaluma.
Best exhibit cut roses, $2, G. B. Pepper, Petaluma.
Best exhibit cut dahlias, $2, G. B. Pepper, Petaluma.

Children's Department.

(For children under 16 years of age.)

Best exhibit needle work, 3 pieces, $5, Miss L. Brown, Petaluma.
Best piece worsted embroidery, $2.50, Kitty Weston.
Best piece silk embroidery, $2.50, Kitty Weston.
Best crochet work, $2, Miss Dalton.
Best tatting, $2, Agnes Humphreys.
Best braiding, $2, Kittie Weston.
Best knitting, $2, Carrie Kelley.
Best darning $2, Mary Thomson.
Best rag mat or rug, $2, Miss L. Brown.
Best pencil drawing, $2, Frankie Shuttuck.
Best crayon drawing, $2, Frankie Shuttuck.
Best specimen penmanship, $2, Mattie Thompson.
Best wheat bread, $2, Lucy Haven.
Best sponge cake, $2, Kate Button.

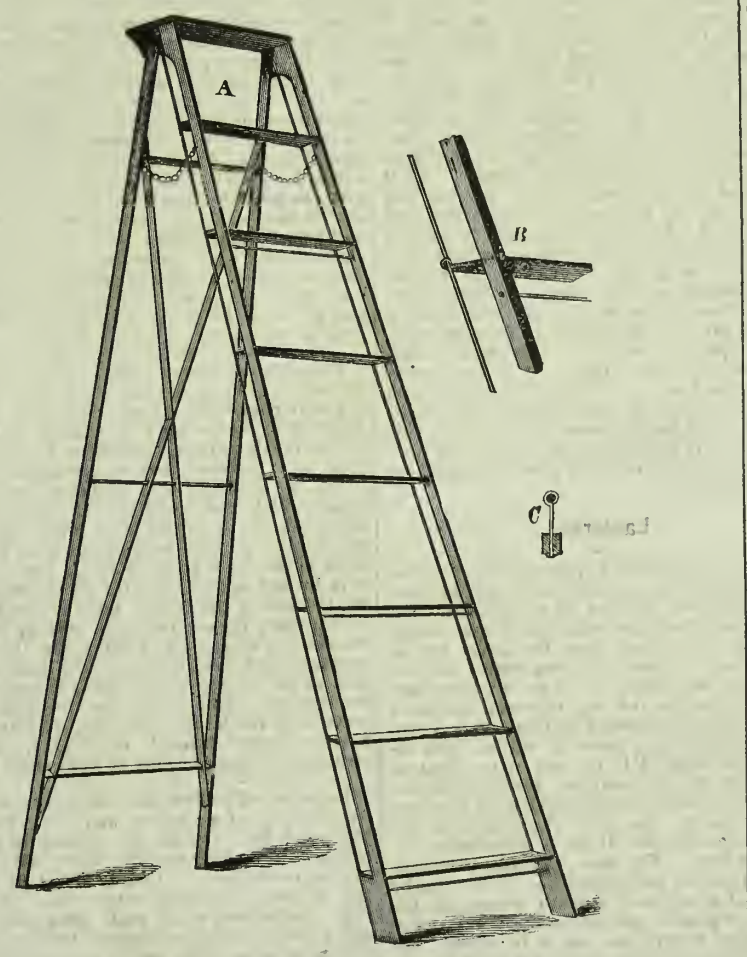
Sweepstakes.

(Free for all.)

Best exhibit agricultural implements, $10, M. C. Hawley & Co., San Francisco.

Smith's Patent Ladders.

At the north end of the Mechanics' Institute Pavilion may be seen six samples of ladders, invented by A. P. Smith, of Sacramento, patented Dec. 30th, 1873. Reference to the illustration will show that the results obtained by the invention are lightness and strength, and consequent safety. These ladders are not more than one-third the weight of the ordinary kinds in use, yet much stronger. The improvements consist mainly in strengtheniug the side rail by means of wires longitudinally placed and strained tight, and by transverse uniting rods, so that the material used may be greatly reduced in size and made so much lighter that very long ladders can be quite easily handled by two men.



SMITH'S PATENT LADDERS.

Two kinds are manufactured; one with steps of the same width as the side pieces, the other with the ordinary rounds strengthened by an iron rod running through them and securely tightened by means of nuts. This has the double advantage of making it possible to greatly reduce the size of the rods and of giving great strength. In the engraving A is the ladder, B shows a single step with details of construction, and C shows the manner in which the wire is fastened.

In small towns and country districts where there are no fire engines, the Smith ladder would be of great utility, being easily carried by one man, and, owing to their lightness, without fatigue, one twenty feet long weighing but forty pounds. They are manufactured of all lengths to forty feet. Although so frail-looking they are perfectly rigid under a heavy load, not bending or trembling as do ordinary ladders. The value of these important improvements, secured by the inventor, will be readily appreciated.

The Sutter *Banner* states that a farmer in Yuba county has been detected in placing about a dozen pounds of soil in each sack of his wheat, thereby gaining about a sack of wheat out of every eight or ten.

Now We Have It.

Among the recent arrivals at the Pavilion of the Mechanics' Institute Fair of the charming ladies who are there, "just to be looked at and admired," is our special favorite Pomona. It is only within the present week that she really made her debut; and according to present indications, her engagement will be a grand success in every respect, redounding to her own fame; putting money into the treasury, and affording the highest gratification to the patrons of the exposition. Her presence has already perceptibly turned the tide of visitors toward the conservatory, and people do not now enter it as though they were doing penance there.

To Mr. Young of Orange Lawn, Sonoma county, belongs the credit of this most excellent exhibit of fruit and nuts. He, we are informed, furnished it all; nearly all of it being of his own production. We failed to meet this worthy exhibitor on our visit at the conservatory; in fact, we never had the good fortune to meet Mr. Yong; but if a man, like a tree, may be known by its fruits, we would advise our readers to cultivate his acquaintance.

The space and facilities afforded for this fruit exhibit, are all that could be desired. The tables are of ample size, and their form and location are such as to allow of a thorough examination of their tastefully arranged contents. They contain something over

Four Hundred Plates of Fruit;

Each one containing something differing from all the rest. This, it will be seen, calls for an almost incredible variety; but in the first place the classes are quite numerous: apples, pears, peaches, plums, quinces, apricots, nectarines, oranges, lemons and olives; each class being represented by some varieties, and some of them numerously. Apples, pears and grapes are in great variety. The plum family is also fully represented. It is too late in the season to do justice to peaches; but there are here some splendid samples of the late varieties. The quinces on exhibition are particularly fine; some being of enormous size. Some of the apples and pears were also very large. Mr. Young, however, manifested good taste and judgement in not striving for startling effects, and it is plainly seen that the giants and lilliputians of fruit are exhibited, not to excite any special wonder, but to complete the programme in regard to variety. No visitor of proper judgement and candor will leave these tables without giving due credit to the fruit growers of California, for their labors in introducing a wide range of varieties in our fruit culture. Every variety here is properly labelled.

In this department, and interspersed with the fruits, are a variety of nuts grown in California, chestnuts, almonds, etc., which are also attracting a good deal of attention.

But we must tear ourselves away from this attractive spot, to visit the adjoining table, where Mr. E. D. Waters, of Stockton, has a very creditable display of dried, jellied and candied fruits, prepared by himself. He has here 12 varieties of dried fruit, 10 of jellies, and a few of candied fruits. We tasted only one of all these—the dried figs—and these were decidedly good. Mr. Waters has dried this fruit by a process inaugurated by himself during the present season. During the past summer while he was querying "what is our fruit going to do to be saved?" he alighted upon a description of a simple mode practiced by the Shaking Quakers of N.Y. a long time ago; and he, in company with another gentleman went to work at once to make it available in their present emergency. With the assistance of Mr. Swan of the Union box factory of this city, they constructed an apparatus, at a cost of less than $100, by which they are now drying fruit at the rate of 100 lbs. per 24 hours. A room 18x10 feet will contain the whole apparatus; the attention required is slight; and the amount of fuel consumed is no larger than is required to run a common kitchen during the same time. This mode of fruit drying can be expanded to a much larger capacity if desired, and it seems well adapted to the circumstances of individual fruit growers.

We would advise the readers of the PRESS who visit the pavilion, to appropriate a goodly portion of their time to the conservatory; and while there to interview our old friend Mr. Waters.

The Fruit Supply.—The adaptability of the red soils of the foothills for fruit-growing is exemplified in a remarkable degree by the statement of an El Dorado county paper, that within a radius of three miles from Placerville, there will this year be raised 662 tons of grapes. 30,000 boxes of apples, 6,700 boxes of peaches, 13,400 boxes of plums and 3,200 boxes of pears. The region of Coloma, in the same county, is as famous for its production. Some of the finest specimens on exhibition at the Fair, and which come to this market, are from the Coloma orchards.

The *Southern Californian* says: One great advantage in viniculture possessed by Anaheim over the northern and western portions of Los Angeles county, exist in the fact that grapes ripen here two or three weeks earlier than either at Los Angeles or San Gabriel. On this account, wine-makers receive full benefit of the warm days of September and the early part of October, a quality of temperature which is very necessary for fermentation.

Miscellaneous.

Science Reads an Oracle Relating to the Metallurgy of the Future.

One of the most interesting incidents of the visit of the American Society of Civil Engineers to the Stevens Institute of Technology, at Hoboken, suggested the above title for our article. After witnessing the beautiful experiments exhibited by Professor Morton, inspecting the multitude of interesting objects in the lecture room in the Department of Engineering, and spending a pleasant quarter of an hour with Dr. Mayer among the mysterious physical apparatus of his laboratory, the party crowded into the little lecture room of Professor Leeds. The Professor had thrown upon the screen the images of several contorted and rather uninteresting looking specimens of mineral. These, he states, were pieces of "fulgurite," or thunderbolt, as it is often called, sent him from North Carolina. When a heavy flash of lightning strikes the earth, it sometimes fuses the soil in its track, and, on solidification, it becomes a solid bar or rod, which may be, and often is, dug out of its bed. In this case, the lightning had penetrated a bed of pure white sand, melting the silex and forming a hollow shaft two or three inches in diameter and four feet long, filled within and surrounded without by the white sand of the locality. The shaft, however, was not white. Its color varied from a dark to a white pearly gray. Chemical analysis showed it to contain iron, and so accurate was the work that, on estimating it as usual, as oxide, the figures proved some error to have occurred. Estimating it as metallic iron, the figures were correct. Apparently, therefore, the fulgurite was discolored by finely divided metallic iron, and this deduction was confirmed by other and direct experiment. This would explain the peculiarity of color, since the oxide would have colored the silex green. But metallic iron does not exist in nature on the earth's surface, and the chemist was compelled to seek some explanation of its existence here by an examination of the peculiar conditions under which it was produced.

The final conclusion seemed necessarily to be that, at the immensely high temperature at which silica melts (the extreme limit attainable with the oxyhydrogen blowpipe), iron "dissociates" from oxygen, and that here, dissociation having occurred, the metallic iron, transported by the electric flash from some subterranean deposits, become encased in molten sand, and was preserved unoxidized within the fulgurite. The melting of that immensely refractory material, silex, the dissociation of iron from oxygen, and the transportation of such an amount by electrical action, were circumstances at once remarkable and interesting. Professor Leeds then gave his fellow members of the society and of his profession an outline of the possible bearing of this curious instance of natural metallurgy upon the future of the art. He stated that, while it could hardly yet be considered as probable, it certainly did not appear impossible that at some future time the processes of art might imitate what was here seen accomplished by nature, and that this interesting phenomenon might be a strong intimation of the direction in which metallurgical changes might lead. Could a material be obtained of which to build a furnace which should be capable of resisting the temperature at which silex melts, and could such a temperature be attained in the furnace, we need but throw our ore upon the bed of the furnace and allow it to reach the temperature of dissociation, when the oxygen would pass off up the chimney, without the use of carbon or other deoxidizing agent, and the metal would flow down upon the hearth. The requirement of a new refractory material may not improbably be fulfilled. Equally remarkable discoveries are frequently made. The attainment of so high a temperature necessitates probably the invention of a method of preventing the dissociation of oxygen and hydrogen by high temperature. As we also have stated, in an editorial article in our last issue, the limit of combination of these gases, or their temperature of dissociation, is stated by Deville at about 4,500 degs. Fah., and this is, therefore, the limit of temperature attainable by their combustion. Oxygen and carbon dissociate at a lower temperature.

The speaker referred to the possibility that this elevation of the limit may be attainable by carrying on combustion under pressure, as already proposed by Bessemer, and as probably illustrated in some slight degree by the elevation of pressure within the converter, and the extraordinary temperatures there observed. This interesting subject and the novel ideas suggested by it were evidently looked upon as important as well as entertaining by visitors, one of whom expressed the idea which is embodied in the title which we have assumed for our article, and nearly all of whom forgot professional dignity so far as to applaud heartily. Many of our readers, by the character of their pursuits, are also interested in this subject. We hope that some may be so fortunate as to be able to aid in securing the benefit here indicated as possibly attainable.—*Scientific Am.*

One of the oldest experiments made on a large scale to ascertain the amount of heat produced by the frictional resistance of a certain given power, was made by Benjamin Thompson, of Concord, N. H., known in Europe as Count Rumford.

The Hammer.

The following waif, relating to the favorite emblem of the mechanic, and beautifully illustrative of the power of word magic to add interest to the most common things, will well repay a perusal in connection with the great museum of art and industry which is just now so much engrossing public attention:

The hammer is the emblem of mechanics. With it are alike forged the sword of contention and the plow-share of peaceful agriculture, the press of the free and the shackle of the slave. The eloquence of the forum has moved the armies of Greece and Rome to a thousand battle fields. but the eloquence of the hammer has covered those fields with victory or defeat. The inspiration of song has kindled up high hopes and noble aspirations in the bosoms of brave knights and gentle dames, but the inspiration of the hammer has strewn the field with the tattered helm and shield deciding not only the fate of civil combat, but the fate of thrones, crowns and kingdoms. The forging of a thunderbolt was ascribed by the Greeks as the highest act of Jove's omnipotence, and their mythology beautifully ascribes to one of their gods the task of presiding at the labors of the forge. In ancient warfare the hammer was a powerful weapon, independent of the blade which it formed. Many a stout skull was broken through the cap and helm by a blow of Vulcan's weapon. The armies of the Crescent would have subduet Europe to the sway of Mahomet, but on the plains of France their progress was arrested, and the brave and simple warrior who saved Christendom from the sway of the Musselman, was named Martel—"the hammer." How simple, how appropriate, how grand—"the hammer." The hammer, the saviour and bulwark of Christendom. The hammer is the wealth of nations. By it are forged the ponderous engine and the tiny needle. It is an instrument of the savage and the civilized. Its merry clink points out the abodes of industry—it is a domestic deity presiding over the grandeur of the most wealthy and ambitious, as well as the most humble and impoverished. Not a stick is shaped, not a house is raised, a ship floats, or carriage rolls, a wheel spins, an engine moves, a press speaks, a viol sings, a spade delves, or a flag waves without the hammer. Without it civilization would be unknown, and the human species would become as defenseless as the brutes that perish; but in skillful hands, directed by wisdom, it is an instrument of power, of greatness and true glory.

Lanterns.

In many respects the principles involved in the old grater lanterns are the same as those now applied to lanterns of the present day. The former, it will be remembered, was simply an old tin can, swung from the hand by the aid of a wire or piece of strong twine, and was perforated with many holes to allow the light contained within the can to reach the outer world. The illumination in this case was generally supplied by a piece of candle. The objects to be attained in the use of this lantern were to shield the lamp or candle from the wind and weather, and allow the light to escape from its shield. We have abandoned the tallow candle, and for it have substituted the kerosene lamp. We have endeavored to supply the place of the perforation of the can by the use of glass, and thus to accomplish the double purpose of protecting the flame and of allowing its rays to pass out of the shield. We have substituted brass or nickel plate for tin, or have used the latter article in a more highly finished state; but, after all, but few essential principles are employed in the construction of the modern lantern that may be called new.

Davy's "Miner's" lamp, although very old, is nevertheless a novelty, because its use during the last sixty years has never been superseded and scarcely amended. In this lamp it is generally known that the globe or chimney is either wholly or partly composed of a wire net work, which may become red hot, but nevertheless constitutes an impassable barrier to the flame within the lantern, and thus may be burned with safety in the midst of combustible gas.—*Iron Age.*

Restoration of Burnt Steel.—On the destruction, not long ago by fire, of the house of a popular officer of high rank, several swords, valued not only for their workmanship and temper, but for the circumstances under which the owner had become possessed of them, had been reduced to the condition apparently of twisted pieces of hoop iron. They were sent to Birmingham, and some time afterward returned in a condition "differing but little from what they had been before their fiery ordeal." Supplementing this statement, Messrs. Wilkinson, the sword manufacturers in Pall Mall, say that it is often of great importance that the outer scale left by the fire should not be removed, nor any attempt at cleaning the surface be made unless by experienced hands. In the case of sword blades especially, they find that the minutest details of embossed ornament can generally be traced over the outer scale of burnt steel, and may be copied and restored unless obliterated by friction. Inlaid or damascened gold work on steel will stand a very high degree of heat without being destroyed, and the figure of the genuine Damascus blades, being a part of the structure of the metal, can be restored as long as any of the steel remains. —*Iron.*

Hints to Painters.

You are generally working in ill-ventilated shops, and handling poisonous pigments the year round, one of the most dangerous of which is white lead; therefore, it is imperatively necessary that you be cleanly in your habits and person. If you eat with unwashed hands, and wear clothing saturated with paint you must expect to absorb large quantities of poison, and suffer in consequence, and perhaps bring on paralysis or kidney disease, which will render you, if not entirely unable to work, so weak and prostrated in mental and physical power as to be but a shadow of your former self, and suffer always from general weakness. Once banish white lead from the shop, and one of our worst enemies will be got rid of, and it is coming to this soon. Different substances have been introduced of late years to take its place, some of which I know from experience to be equal if not superior to lead for carriage-work. Old fogy may poh-poh as much as he likes at such innovations, but these different substances have been used with an encouraging success.

All carriage painters should wash their hands before commencing or resuming work, and should do it as often as possible during the day. They should have a strong decoction of oak bark also to wash in, the tannin of which would not only harden the skin, but would protect it against the action of lead and other poisons. This is where the British coach painters are ahead of us; you will always find plenty of oak bark in their shops. You should also keep your hair cut short, and wear a light cloth or paper cap while at work. Be sure that your hands are well washed before partaking of food. I am very sorry to say it, but the truth must be told sometimes, you often eat your noonday meal with unwashed hands. The mouth should be well rinsed with water before eating food. The body should be sponged as often as possible with cold water, and the hair should be thoroughly washed every day; you will find it better than hair oil. Your food should contain a large proportion of fatty substances; avoid all strong drink; drink milk in large quantities; rest or sleep five or six hours, and my word for it you will have no painter's colic or cross wife.—*Carriage Monthly.*

Flood-proof Bridge.—The rise of water in our streams during the heavy rains in the coming winter months always results in the removal of a number of road bridges of the ordinary plank and timber kind, and as the accident is a frequent and widely extended one, it may be worth while to mention the form of bridge which has stood the test of this and other freshets, when the level bridge has been swept away, a description of which we first noticed in the New York *Tribune*. Let the timbers be laid so that when the planks are spiked on, the side of the bridge *down stream* will be considerably higher than the side up stream; then as the water rises it will strike the upper side first, and, before it can rise high enough to float the bridge, its buoyancy is opposed by its impetus acting upon the inclined plane formed by the bridge's surface, a return current is formed beneath the bridge, and the structure is fixed as firmly as if it were of stone.

Roofing.—Plastic slate roofing does not consist properly of asphaltum and slate flour, as suggested, but is made by uniting in proper proportions coal tar and slate flour, and spreading the mastic on the foundation of the tin or felt, as mortar is spread with a trowel on lathing. Asphaltum, sand, peat, street dust, clay and numerous other substances have been employed to make roofs; but, in numerous instances, the work has utterly failed to produce the desired results. Hence such roofs have come into extreme disrepute in certain localities. By producing the genuine slate flour, rolled finely and free from all sand and dirt, and applying it when of the proper consistency by spreading it on well with a trowel, there is no other roofing material that will subserve the purpose more satisfactorily, as far as economy and durability are concerned. If the materials are good, the plastic will become in a few weeks like real slate, and will then be as durable as that from the Vermont quarries.

Cleansing Bottles, etc.—A good mechanical method is that noted in the Press of last week—using wire clippings. This is not always sufficient. Bottles that have had medicine in them may be cleansed by putting ashes in each, immersing them in cold water, and then heating the water gradually till it boils. After boiling an hour let them remain in the water till it is cold. Wash them in soapsuds, and rinse them till clear in fair water. Pie-plates that have been long used for baking are apt to impart an unpleasant taste on account of the rancidity of the butter and lard imbibed. Put them in a brass kettle with ashes and cold water, and boil them an hour.

Prof. Tunner remarks that it is customary to attribute greater strength to cold rolled iron than to that which has been rolled hot. Although experiment has shown that such is the case with new iron, yet this is of little importance in practical use, because it does not last. The strength of such iron, says Prof. Tunner, decreases gradually with time. This is a question which it would be well to determine by experiment.

Calculating Horse-power.—The rule is to multiply mean effective pressure in pounds during stroke, by piston speed in feet per minute, and divide the product by 33,000.

Shrinking of Seasoned Timber.

The various kinds of oak, and some other kinds of valuable timber, will shrink more or less every time the surface is dressed off even a small fraction of an inch. Wheelwrights accustomed to work in oak are well aware of this fact, and a correct appreciation of it often enables them to turn out work of a superior character, even of ordinary materials, by first blocking out the pieces roughly, then allowing the timber to season, and afterwards working the various parts by degrees, as the seasoning process becomes more and more complete. White-oak spoke timber, for example, may be allowed to remain in the rough state for half a score of years, under shelter, without becoming seasoned so thoroughly that the timber will not shrink after the spokes have been dressed out.

Carriage-wheels have often been made of the choicest quality of oak timber after every spoke had been seasoned for several years, and to the great surprise of the wheelwright, every spoke would work in the joints before the vehicle had run three months. The defect in such instances could not be attributed to inferior timber, nor to perfunctory workmanship; but simply to this one circumstance—that the parts of the wheels were put together before the timber had ceased to shrink.

To prove that the best quality of oak will shrink, after a spoke has been dressed out, let a tenon be made on one end, and be driven immediately into a mortise; after a few days' exposure in a warm workshop, the spoke may be withdrawn with little difficulty. The same fact will hold good in the manufacture of woodwork of any kind where oak is employed for tenons. In order to make joints that will never start, the piece on which the tenons are to be made should be dressed over several times, until the shrinkage has ceased. Then let the tenons be made. After these have shrunk, while exposed to the drying influences of a warm workshop, the spokes, or other parts, may be driven into their respective places, with the assurance (especially if they are dipped in oil paint previous to driving) that the timber will shrink no more.

Many kinds of farming implements, in the manufacture of which oak and ash are employed, render very unsatisfactory service, simply because the seasoned timber was not allowed to shrink before the tenons were driven into the mortises. In like manner, oak chairs, and other oak furniture, will frequently shrink to such an extent that the pommels, rungs, dowelpins and banisters will all work loose, if the precaution we have described is not observed.—*Am. Homestead.*

Ocher and Umber.—Ocher is a variety of fine clay containing iron. The common colors are yellow and red, the latter being colored by sesquioxide of iron, and the yellow variety by the hydrated sesquioxide. Umber is an ocherous ore of iron, or a brown or blackish-brown color, consisting of oxide of iron, oxide of manganese, silica, alumina and water. They are found principally in Europe, although they are widely distributed. The ocher is found in beds some feet in thickness, which lie generally above the oolite, and are covered by sandstone or quartzose sands, more or less ferruginous, and are accompanied by gray plastic clays, of a yellow or brownish color; all of them substances which contribute more or less to its formation.—*Sc. Am.*

According to a French veterinary surgeon, a simple method of preventing flies from annoying horses consists in painting the inside of the ears, or any other part especially troubled, with a few drops of empyreumatic oil of juniper. It is said that the odor of this substance is unendurable to flies, and that they will keep at a distance from the parts so anointed. If this treatment should accomplish the alleged results, it may, perhaps, be applicable in repelling mosquitoes from the faces and hands of tourists and sportsmen, when passing through woods or meadows.

Sediment in Lake Water.—The following figures are given, as representing the number of grains of solid matter held in suspension and solution in the water of various lakes: Lake Hopatcong, 1.79; Bala lake, Walea, 1.63; Loch Katrine (supplies Glasgow), 1.63; Norwich, Conn., reservoir, 1.84; Cochituate lake, 3.11; Lough valley, Ireland (supplies Dublin), 3.11; Croton lake, 4.78; Geneva lake, Switzerland, 8.87; Lake Ontario, 6.01; Lake Erie, 6.49; Lake Michigan, 6.68.

To Stain Wood.—Take green walnut shucks; boil out the strength and boil the dye down a little. Then, to a gallon of dye add one spoonful of extract of logwood, and one-half teaspoonful of salts of tartar. It will stain wood a bright red. A little aquafortis added will make a dark brown. Make the dye in a large vessel, for the salts make it foam. The shucks must be green.

For a substitute for copper in the Daniells battery procure sheets of the ordinary sheet tin of commerce, brighten and plunge into a very weak copper plating solution, in connection with a voltaic battery of very low quantity. In 15 to 18 hours a tenacious film of copper will have been deposited upon the tin, and the plate can then be bent in shape for a Daniells battery.

Many of the railroads now have in use a valuable lamp, called the "quick signal railroad lamp," which is simply a red light and a white light combined in the same lantern.

The Dairy.

Dairy Maxims.

Milk will sour quicker if the cows are fed sour milk. This is not objectionable for butter soaking, bnt it is objectionable for cheese making.

Cream from a farrow cow's milk will not all come if churned with cream from new milch cows. The mixed cream will make more butter than the cream from new milch cows alone, but not as much as if the cream is churned separately.

If I were receiving milk from low, swampy ground, or from pasture filled with weeds from prairies, I would scald it. By heating to 150° I would drive away the taint, but the scalding would also drive away the aroma of the timothy, clover or June grass.

Cream can be raised by freezing, but this is not practiced in the country.

If milk is kept at a low temperature, the cream rises slowly.

The effect of a sudden change in milk or cream is to injure the keeping quality of butter.

Whey as it comes from the factory invariably has a bad effect when fed to cows. If fed while fresh and sweet, it is not objectionable.

Raising cream by freezing does not expel the animal odor. Neither does it destroy germ in milk.

The cream which rises first makes a better quality of butter than that which rises last.

The more aroma in butter, the less time it will keep. So with cheese.

In the spring I would work all the cream into the cheese, to ripen it sooner and make it better, and work it off at spring prices. Later in the season I would skim more.

The cream from an ordinary cow can nearly all be worked into cheese. It could not be done with milk from the Jerseys or other cows whose cream rises slowly.

To avoid greasy butter, churn with pressure instead of friction. The dash churn brings butter by pressure, and makes better butter than most other kinds of churns. Butter should also be worked by pressure instead of friction. The ladle or worker should not be drawn across the butter, but pressed down upon it.

Milk while being scalded for taint should be stirred.

Results favor shallow setting instead of deep setting. The amount of cream seems large sometimes from deep setting, but it is owing to the fact that in deep setting the large globules carry with them considerable milk. The amount of butter from deep setting will be less than from shallow setting.—*Prof. L. B. Arnold.*

Hemp Seed a Preventive of Abortion.—We recently referred to the fact that W. R. Duncan, a well known breeder of Short-Horns, had stated that hemp seed was a preventive of abortion in cows. In the May number of the National *Live Stock Journal*, Mr. Duncan repeats the statement, adding that he has not known a failure in twenty years. To cows in calf, where he thinks there may be danger, he feeds about a pint of the seed a week. He has broken up the habit and even prevented abortion when even very marked symptons were manifested. He thinks it equally beneficial in like cases with all females. If others should be equally successful, this preventive and remedy will prove of incalculable advantage.—*Western Farmer.*

Horticulture.

Nelumbium Luteum.

This plant belongs to the *nymphaceæ* or water lily family. It is rarely found in the Eastern States, there being but three localities yet discovered where it appears to be a native, viz: Sodus bay, N. Y., Lyme, Conn., and in one pond below Philadelphia. At the west and south it is quite common, where it is known as the water chinqnapin, probably because the seed resemble the dwarf chestnut or chinquapin (*castanea pumila*) of the Southern States. The large fleshy roots or tubers send up long leaf and flower stalks, their length depending entirely upon the depth of the water in which they grow. The leaves are one to two feet broad and slightly turned up at the edges. Flowers yellow, fragraut, five or more inches broad; sepals and petals many, gradually passing into each other; blossoms from June to September. Stamens numerous on the receptacle, which enlarges into a top-shaped body, bearing ten or more ovaries (seed), which are each separately immersed in as many hollows. The seed resemble small acorns, and are composed of a fleshy, farinaceous substance. The tubers or root stooks are also edible. As soon as the ovaries are fertilized, the seed vessel bends over and sinks below the surface, where the seeds mature and then fall to the bottom to germinate. *Nelumbium speciosum* is the celebrated lotus or sacred bean of India, so frequently referred to by historians and travelers in the east. Near to the *nelumbium* are the *nymphæ* or common pond lilies, of which we have two or three native species. They are beautiful plants, similar in hapit to the *nelumbiums*. *Nymphæa cærulea* is the well known blue water lily of Egypt.—*Trans. Am. Inst.*

Apple Twig Blight.

From personal observation in this section of of the State, and letters received from other sections, I learn that apple twig blight is unnsually prevalent this season. In some localities, where it has appeared for the first time, owners of orchards are quite anxious to learn something about its cause and nature, and the means of its prevention or remedy.

The malady is quite an old one, and like the blight in pear trees, and various diseases of the hnman system, it seems to come and go, when and where it listeth, and no one has been able to tell why it cometh or goeth. It differs somewhat from the pear blight, in its mode of attack, being commonly more generally distributed over the tree, and commencing on shoots of the current year's growth. It also, as a general rule, does not spread into the large limbs or trunk so as to destroy the tree, as is done by the pear blight. Still the mischief it does in destroying the foliage and young branches is often quite great.

At the recent horticultural meeting at Wilmington, an intelligent orchardist was quite sure he had discovered the cause of the twig blight, in an insect which eats into the shoot at the point where the disease begins. This theory is not a new one, but has been mostly abandoned, for the reason that no such work of an insect can be discovered in one-tenth of the twigs that are blighted. The question is still an open one. Who will assist in solving it?—*Ohio Farmer.*

A New Cherry.—A new cherry, similar to the Early Richmond, but much hardier and sweeter than that variety, has made its appearance in Iowa. The *Iowa Homestead* speaks of the tree as "a botanical curiosity, the twig and bud strongly indicating their origin from the Morello family, while the leaf as strongly resembles that of the Duke family." It is not strictly a new sort, the parent tree having been brought from Germany about 25 years ago, and at present it is in the possession of its introducer, Mr. Lieb, at Galena, Ill., after whom it is named.

The Pacific Saw Manufactory.

Prominent among the industrial enterprises of this city, and one whose products are tastily arranged for exhibition at the west end of the Pavilion, is that of the "Pacific Saw Manufacturing Company." They exhibit a splendid array of everything belonging to their business, affording a display highly gratifying to our local pride, and indicative of the large success which that company has attained in their difficult and important specialty. They present every description of saws, from the most delicately fashioned scroll saw to the mulcy saw of twelve feet in length, and circular saws of all sizes below six feet in diameter. Their collection is roughly estimated at $3,500 in value, and consists entirely of specimens of the ordinary styles manufactured by the company. The letters forming the words "Pacific Saw Company," are composed entirely of saw plates.

This company has now been in operation some eight years, and from small beginnings has gradually opened out to a most important mechanical enterprise.

California, from its first organization as a State, has led off in the nse of saws for the manufacture of lumber; and the extraordinary size of her forest productions, has naturally led to the employment of saws of unusually large dimensions to correspond to the necessities of her mammoth growths. As the saws increased in size, the care in their manufacture, necessary to secure a perfect run and rapid feed, has increased in a doubled ratio. To keep pace with this augmented demand both for quantity and quality in this line, this company has procured the most perfect machinery, and the best skilled workmen, to be found in the trade. The raw material is obtained from abroad, and consists of the very best cast steel that can be procured. That used for circular saws is imported in circular disks, corresponding to the sizes needed. The material for all other saws also comes in the rough, uneven, warped, and as unlike the beautifully polished surfaces exhibited as can well be imagined.

The art of truing and tempering these huge circular plates is a most difficult one, and one that can be attained by but very few of even our first-class mechanics. Great care is taken by this company in performing this difficult work to its utmost attainable perfection, and they have succeeded in this specialty to a degree not probably excelled by any other establishment in the world. Saws are made hy this company with both fixed and movable teeth. The process of the manufacture of the movable teeth, although carried on at this establishment, is quite a separate business from that of producing the plates, and belongs, we believe, exclusively to Mr. N. W. Spaulding, the inventor of the peculiar kind of tooth which he employs, and a prominent member of the company.

The advance in the cost of living in Germany has increased nearly four fold since 1853. Thus butter has increased from 8¾c. to 35c. per pound; beef from 7½c to 17½c. per pound; eggs from 5c. to 25c. per dozen; potatoes from 25c. to 75c. per 100 pounds; and other necessaries in like proportion. This constant increase not only necessitates an increase in the rates of wages, but is likely to greatly enhance the value of American produce in Europe.

Special Cultures.

Information to be of value should be explicit and full; partial or imperfectly told, ever so good a tale is apt to mislead. In the Department of Agriculture Report, a few months ago, we read that a Pennsylvania farmer, who has lived some years in New Zealand, believes that the New Zealand flax could be successfully cultivated in this country. Now, this country is of some considerable extent, and embraces climates both tropical and arctic, and he who reads a paragraph like that will naturally ask himself what part of this country is adapted to New Zealand flax-culture. As the Pennsylvanian's name is connected with this opinion, the reader would naturally suppose that the part of the country meant would be Pennsylvania; bnt if he invested any money on such a faith it would never make him whole. He would lose every cent. The New Zealand flax is now well-known to those who delight in gardening, as it is much used by amateurs in their highest styles of culture; or, as they say, tropical gardening. At least it is not uncommon about Philadelphia: and the gardeners tell us it is easily killed by two or three degrees of frost. A pretty plant for agricultural experiment in "this country" of Pennsylvania.

In the States where there is little or no frost it might do; but why use it there when we have already plants which will do quite as well, and which grow wild in immeuse quantities, bnt finding no one with any energy or "push" to make anything out of them? The Spanish bayonet or yucca—the Adam's needle of our gardens— is a native of the south, and the leaves, similar in appearance, yield as much fiber and as good fiber as any New Zealand flax would give. It would do for "linen, cordage, paper, stuffing chairs, mattresses, etc.," just as well as it is said of the New Zealander. This is all well-known, yet with all this knowledge no one does anything with it.

We hardly need any more foreign introductions of this kind. What we do want, as we have said, is a little more energy and push in some parts of our country to make use of advantages everywhere lying loose about. Virginia has to-be-sure taken up the sumac idea, and it is becoming one of the best semi-agricultural features of the State. There are lots of similar ones awaiting. The New Zealand flax can stay at home.

A French journal connected with the metal trade gives the following curious estimate of the value of a piece of iron costing in its rough state 1f., after being employed for different manufactures. Made into a horseshoe it is worth 3f.; into agricultural implements, 4f.; forged into ornaments, 45f.; converted into needles, 75f.; into steel buttons, 900 f.; employed as polished steel for decorative purposes, 2,000f.; and made into shirt studs, 6,000f.

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

To be obtained of Messrs. CROSS & CO., San Francisco.

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.

Works, King street, bet. Second and Third. fe15-eow

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,

Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, San Francisco.

21v2-1y

ANNUAL MEETING.

The annual meeting of the stockholders of the Grangers' Bank of California, for the election of Directors, will be held at the office of the Bank on Tuesday, the 13th day of October next, at 1 o'clock P. M.

C. J. CRESSEY, Vice-President.

415 California street

San Francisco, Sept. 8th, 1874. sep12-4t

Brittan, Holbrook & Co., Importers of Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

THE NEW WINCHESTER

REPEATING RIFLE,

(Model of 1873.)

San Francisco Agency.



The Winchester Repeating Arms Company, of New Haven, Conn., have recently made still further valuable improvements on the celebrated Henry Rifle, which now make it, beyond doubt, the most magnificent weapon in the world. They have just introduced this beautiful arm upon the market, and their San Francisco Agency is fully supplied with all the various styles, together with cartridges for the same.

In the manufacture of the new gun, iron mountings (blued or case-hardened) have been substituted for gun metal or brass, thus increasing the strength of the arm and decreasing its weight. It is also now so constructed as to carry a Central Fire Cartridge holding one-third more powder than used in the cartridge of the model of 1866, thereby greatly augmenting the power and accuracy of the weapon.

THE SPORTING RIFLE

Has a Set or Hair Trigger which can be used at will—set or not set, as preferred. All the arms have a sliding lid which covers the opening in which the Carrier Block moves up and down. This lid, by the action of the Carrier Lever, is always open when the gun is fired, and closed by hand when the firing ceases, thus protecting the lock and inner works of the gun from dust and rain.

Various other improvements, which it is not necessary to mention in detail, by which the strength of the several parts is increased and the general appearance of the gun improved, have also been made.

There is now a greater variety of the Sporting Rifle than heretofore. They can be had with a length of barrel (round or octagonal) ranging from 24 to 30 inches, fitted with Globe and Peep Sights, or any other kind in use.

The Carbine is now made with all the improvements above referred to, except the set trigger.

The Sporting Rifle and Carbine will also be made as Extra Arms, Gold, Silver or Nickel Plated, plain or beautifully engraved.

MILITARY ARMS.

Still further improvements have been accomplished which overcome all objections heretofore raised against the Repeating Rifle as an army gun. It is safe, certain and effective in fire, whether used with deliberation or during excitement in action, and no more motions are required than in operating the old model gun.

More extended and minute particulars concerning the new gun can be had by writing or applying to the San Francisco Agency for circular.

CARTRIDGES.

The trade is notified that the Shells of the Central Fire Cartridge for the new gun can be reloaded, and that the Winchester Repeating Arms Company are manufacturers of every description of Cartridge used for Carbine, Rifle and Pistol of any make, and that the Company have a full stock constantly on hand at their San Francisco Agency

JOHN SKINKER,

Sole Agent for Pacific Coast,

NO. 108 BATTERY STREET, SAN FRANCISCO.

Note.—Also Agent for the Dupont Powder Company and Eagle Safety Fuse Manufacturing Company.

eow-bp

TO WINE & BRANDY MANUFACTURERS.

Improved Grape Crusher and Stemmer.

In these machines the grapes are fed in at one end and the cleaned stems are discharged at the opposite end, the pomace falling into a tank placed below, crushing the grapes without bruising the seeds.

Run by steam, water, wind or horse-power. Guaranteed to crush and stem, in a satisfactory manner, from ten to sixty tons per day, according to size and power used, or no sale.

Send for Circular. Address,

GEORGE JOHNSTON,

Sacramento.

Or, W. F. JOHNSON, Folsom, Sacramento County, California. Refer to Lachman & Co., San Francisco, and Johnston Brandy and Wine Manufacturing Co., Sacramento and Marysville. 2v8-12w

H. E. CUMMINGS. 1858.

H. H. BALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the producer. 4v23-1y

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER, 22v6-1y President Board of Directors.

PEPPER'S NURSERIES,

PETALUMA, CAL.

Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

Address, W. H. & G. B. PEPPER, 21v6-1y Petaluma, Sonoma Co., Cal.

A. W. THOMPSON,

Attorney at Law,

No. 6 Leidesdorff street, - - San Francisco

sep12-tf

Davis & Suiton, Commission Merchants,

For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; U. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal. 3v8-1y

Agricultural Notes.

California.

AMADOR.

Cotton Plant.—*Ledger*, Sept. 19: There is a fine vigorous cotton stalk growing in a box in front of Folger & Kelly's, that attracts consid-erable attention. The plant is now in bloom, the seed having been planted too late to allow the balls to come to perfection, but from the vigorous and healthy growth of the plant, we see no reason why, in favorable localities, or where the plants can be irrigated, good cotton cannot be produced in the foot-hills.

The weather for the past week has been the warmest of the season.

Singular Egg.—We received an egg last week from Mr. Peter Denzer's heunery, that deserves more than a passing notice, the egg in fact being two in one, possessing two distinct and perfectly formed shells, one inclosed within the other.

COLUSA.

Wheat.—San Juan *Times*, Sept. 17: Colusa is the great wheat center for all that section of the country lying west of Sulter county. It is amazing snd surprising to see the vast quantity of wheat now in store in the warehouses at Colusa, and piled upon the river banks above and below the town. In two large warehouses standing on the banks of the river but a few rods west of the Colusa house, there is in store now over sixteen thonsand tons of wheat ready for shipment, as soon as the prices will warrant the owners to dispose of it—and there is yet room enongh in the warehouse aforesaid to store equally as much. Wagons loaded with wheat were constantly arriving and unloading at these and other smaller warehouses. The fact is there is not room in all the warehouses at Colusa in which to store the wheat that Colusa county alone has produced this season. The Grangers being aware of this fact have commenced the construction of a storehonse, a short distance from Colusa, which will be, when completed, 200 ft. long and over 100 ft. in width. It is an imuense structure and will have a capacity, as I am informed, of storing over fifty thousand tons of grain.

CONTRA COSTA.

Fine Onion.—*Gazette*, Sept. 19: Mr. Simon Blum has left on our table another fine specimen of San Mignel rancho products, from the garden of Mr. Antonio Bertola—a solid, bright, crimson-colored onion, weighing two pounds four and a half ounces, and measuring 18 inches around the larger circumference, and within an inch as much in the other direction; the shape being but slightly flattened.

An Auxiliary Method.—William Z. Stone, who is inspector of the Green Valley Sqnirrel district, and an inveterate warrior for destruction of the pests, has adopted a new auxiliary practice in warfare against the squirrels. Having poisoned all those on his own premises and filled up their holes so that predatory visitors from the hills cannot avail themselves of them for refuge, he puts ont poisoned wheat aronnd his fields every morning, then quietly lays back until the nimble scamps from the hills have begun to swarm his fields, when he monnts his horse, armed with a barbed spear, fixed on a staff five or six feet in length, and, accompanied by his dog, charges on them. Those not already fixed and laid out with the poison, scamper in haste and take refuge in the adobe cracks, fearing to come out while the dog is raiding and barking aronnd the field, leaving their enemy on horseback at liberty to ride along the conrse of the cracks and spear the fugitive depredators wherever he discovers them, often to the number of a dozen or twenty in a single capacious crevice.

KERN.

Tobacco.—*Southern Californian*, Sept. 17: Monday last a gentleman left three tobacco plants, taken from a field of about 40,000 plants now growing on Kern Island. The plants on exhibition in town were in boxes growing nicely, having been placed there several days before they were bronght to town. They were in the blossom and one plant measnred 45 inches in hight, and leaves on it which measured 25 inches in length. They were fine samples of the weed, and leaves no doubt in our mind about the adaptability of our valley for tobacco growing. If it can be cured properly in this climate, we will be able to discount Gilroy and Los Angeles in this particular production.

LAKE.

Early Frost.—*Bee*, Sept. 16: We learn that quite a heavy frost fell in portions of Scott's valley last week.

Prices of Grain.—The harvest in this county has been abundant and the prices of grain are ruling very low—about $1 per hnndred for wheat and $1.25 for barley. The area sown to barley was small compared to that of former years, while the demsnd and consumption has been largely increased. There is not now on hand enough to supply the demand for home consumption. We advise our Granger friends to hold to their barley, for it will bring in this market $2.50 per hundred before spring.

MENDOCINO.

Wool.—*Independent Dispatch*, Sept. 19: The first of the fall clip of wool came into Covelo on last Monday on its way to market. It was from the flocks of Martin Corbit, of Round Valley.

MONTEREY.

Forwarding of Grain.—*Democrat*, *Sept.* 19: Fifty cars loaded with grain are forwarded by the S. P. R. R. every dsy—being 3,000 tons per week. At Monterey the second warehouse of the Narrow Gsnge was to he commenced this week, and, as its timbers are all fitted, it will take but a little time to complete it. The warehouse of the N. G. here is abont full and the intention is, soon as that at Monterey is ready, to transfer to that point the grain now stored here. It is apparent that all of the grain produced by the valley is assured of shelter against the rains, in face too ot the fact that the qnantity harvested is considerably larger than the estimates heretofore given. The yield of wheat, barley and oats will sum up 75,000 tons, or 1,400,000 centals instead of 1,200,000.

MODOC.

Cedarville.—Cor Yreka *Union*, Sept. 19: The grain crop of this valley is turning out much better than was expected. Four threshing machines are constantly employed in various parts of this valley threshing out the grain. The grain crop was never better and the yield is beyond the most sanguine anticipations. Farmers and stock-men are making extensive preparations in putting up hay for another hard winter. Hay is now worth only six dollars in the stack.

NAPA.

The Vintage. — *Reportor*, Sept. 19: Grape crushing has commenced in earnest in Napa valley. All the white grapes are crushed, and so far have yielded more pomace than was expected.

NEVADA.

Fruit.—*Tidings*, Sept. 19: Fruit shipments from this place over the mountains, by Wm. George, during the past two weeks have amounted to 225 boxes, as follows: 40 of peaches, 43 of grapes, 32 of pears, 31 of plums, 73 of apples, 2 of tomatoes and four mixed. Fifteen sacks of dried fruit and a bsrrel of vinegar were also sent over. With proper railroad facilities and no discrimination in favor of through shipments from San Francisco and Sacramento, Nevada county might find a profitable market for all her surplus fruit in her namesake State.

Bartletts.—Mr. James Campbell had an old pear tree in his yard, down on Mill street, which bore only poor, bitter fruit. Four years ago he grafted the whole head with Bartlett scions, and this year has gathered over two hundred pounds of this luscious fruit.

John Montgomery, of Penn valley, is hauling splendid hsy into Grass Valley. The farm of the Montgomery Bros. produces good hay and other good and large crops.

SANTA BARBARA.

Tobacco—*Press*, Sept. 19: Mr. B. C. Longdon's 30-acre crop of tobacco in La Patera is all cut, and proves a good yield, although the worms were so troublesome at one time as to necessitate the employment of a dozen men for their destruction. Samples of his Kentucky and Havana tobacco have been bronght to this office, and we can testify to its excellent quality.

Large Quinces.—Mr. Russel Hesth, of Carpinteria, brought in two fine, fair quinces today, that weigh 20 ounces apiece. He picked one the other day that was begiuning to decay, that weighed two pounds and one ounce.

SAN BENITO.

Statistics —*Enterprise*, Sept. 19: Of farm products and other personal property we find hogs, 3,162, average value, $2.54; horses (thoroughbred), 13, valued in the aggregate at $3,675; horses (American), 1,055, aggregate value, $75,480; horses (Spanish), 1,845, value $17,577; colts, 842, value, $14,626; stock cattle, 8,593, value, $105,317; beef cattle, 374, value, $5,893; sheep (imported), 340, value, $12,460; sheep (common), 71,609, value, $176,841; lambs, 33,175, value, $30,019; mules, 211, value, $9,915; cows (thoronghbred), 6, value, $600; cows (American), 3,172, value, $83,125; cows, (Spanish), 162, value, $2,720; oalves, 2,532, value, $13,341; wagons and other vehicles, 714, value, $56,127; grain, 212 tons, value, $6,300; hay, 413 tons, value, $2,315. (This does not include the present harvest). Wool, 20,000 pounds, value, $3,000.

SANTA CLARA.

Grain.—*Advocate*, Sept. 17th: The roads leading to that city are constantly lined with teams bringing in grain. The large warehonses at the depot in that place are fast filling np, and will soon be full to overflowing. Up to last Thursday night, there were in them 35,707 sacks of wheat, amonnting to 4,713,836 ponnds; also 5,569 sacks of barley, amounting to 603,795 pounds, in store. All hut about 1,000 sacks of this amount is on storage, and but little is being offered for sale at this time. The market is not very firm, and the ruling prices for wheat is $1.30@1.32½; for harley, 95c. But little of the new grain has been sold as yet, the low price offered causing the farmer to hold on for a rise.

Butter.—*Mercury*, Sept. 20th: At the Farmer's Union they have a novelty in sweet butter made without a particle of salt in it, and which some people use in tea and coffee, instead of cream. They have the finest quality of butter in the market, and an immense new butterchest that will hold half a ton, with ice to keep it cold.

SISKIYOU.

Alfalfa.—*Union*, Sept. 19: The object in raising alfalfa is chiefly, thongh not exclusively, to obtain hay on which to feed the sheep during the winter. It could be used profitably for pasturage, also, to a limited extent. But there are extensive areas of country in both Northern California and Southern Oregon which might be made available for summer ranges for sheep, if the owners of the sheep could have places in the vicinity where they could subsist them during the remainder of the year. The cultivation of a portion of the lands of the valleys in alfalfa would supply the desiderstum. Lands that can be irrigated will yield from five to ten tons annually of alfalfa hay. No other known grass is at all comparable to it in prolificness. It is said, also, that sheep do unusnally well on it. Between the mountain ranges, for summer nse, and the alfalfa that could be grown for winter feed, what number of sheep could not the farmers of our valleys support? It does seem to us that in this course there may he found a remedy for the over-production and consequent low price of grain, which has already overtaken the farmers of Rogue river valley, and of which the farmers of this county live in constant apprehension. We shall have more to say on this snbject from time to time.

SONOMA.

Cloverdale Items.—Cor. Lake Co. *Bee*, Sept. 17: Large quantities of hops are now coming into our town from our sister county of Mendocino. The crop in Europe is said to be short, consequently producers here will receive good prices. By experiments in this vicinity this summer, it is thought that the best time to prune peach trees is late in the spring when they are far advanced in blossom. Such pruning has been successful. Several large herds of sheep have recently been driven to our town from that paradise of stock-men, Mendocino county. They were mostly taken to the San Francisco market.

An Untimely Frost.—*Democrat*, Sept. 19: A gentleman just from Clear lake informs us that there were three nights of heavy frost in Upper lake and Scott's valley on the 7th, 8th and 9th inst. Corn in tassel was killed outright; potato and pumpkin vines were cut to the ground. Ice formed one night during the cold snap. The oldest inhabitant was for once lost for a precedent, and did not say, "I told you so." Some fields escaped injury, while others, perhaps adjoining, were badly damaged.

STANISLAUS.

Wheat.—*News*, Sept. 18: The following is the amount of wheat shipped from Turlock during the months of July, August and to the 15th of September: For July, 2,226,426 pounds; August, 3,937,368 pounds; September, 1,968,684 pounds; total, 9,122,774.

SUTTER.

Meridian.—*Banner*, Sept. 19: Ira Woods cut from 75 acres 80 tons of hay and threshed 2,500 bushels of barley. From 75 acres A. Davis got 3,400 bnshels; from 120 acres of volunteer L. Summy got 5,460 bushels; from 65 acres "Old Ned" got 2,880 bnshels. There was a heavy loss in cutting. The north wind ripened all at once, and there were not headers enough to save it in time. In some fields as much as 20 bushels were shelled ont to the acre.

Lay in an eight monlhs' supply of wood now while the roads are good. It is much cheaper than it will he after the rains set in.

TRINITY.

Curiosity.—*Journal*, Sept. 20: Frank W. Young has a curiosity in the shape of seven full ears of corn, united and grown in one husk. Wm. Todd raised them.

TUOLUMNE.

Sheep.—*Independent*, Sept. 19: Sheep are working their way to the stubble-fields from the monntains early this season; several large bands have already passed by town.

Oregon Items.

The banks of the Upper Columbia river are covered with dead sturgeon. No cause for this strange fatality is known.

At a meeting of the Pentleton Grange, Sept. 5th, W. H. Barnhart was elected Master in place of T. H. Story, resigned.

One hundred and fifty Masters of subordinate Granges are in attendance upon the State Grange now in session at Salem.

Hop-picking has commenced in Lane county. Quite a large nnmber of Indians are employed.

The harvest in eastern Oregon is entirely over. The yield in that section is less than last yesr.

Articles of incorporation of the Oregon Central Pacific Railroad Co. were filed on Thursday.

The Grangers of Yolo County propose to construct a narrow-gauge railroad to connect the wheat-growing plains of the western portion of the county with the Sacramento River. The points to be united are Capay Valley and Ellhorn Lsnding.

The Indians of the White Esrth reservation, Minn., although their own crops were not the best, contributed $56 for the relief of people in the sonthwest part of the State, who lost all their crops.

The late sown wheat in Bennett Valley tnrned off a heavy yield. That sown early did not produce more than half a crop. This result is just the reverse of ordinary experience.

Farm Laborers, Engineers, Teamsters, Blacksmiths, Milkers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery steeet, corner New Montgomery Avonne and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

We guarantee satisfactton, ag22-tf

The State Agricultural Fair.

The State Fair at Sacramento opened on Monday under extremely favorable auspices, and at present gives assurance of being the most successful Fair ever held in this State. The grand stand at the Park is greatly admired. The arrangements have been conducted with good judgment and taste, thongh the inevitable hurry and flurry of fair openings were not wanting on this occasion. Notwithstanding a large number of new stalls had been erected the number was not sufficient to accomodate the entries.

We copy from the San Francisco *Call* the following report of the first day of the Fair:

The Cattle Show.

The entire back portion of the Park is filled with thoronghbred and graded cattle. Every stall is filled. There are 250 head of cattle in all, many of them brought here from the East. A herd of thirteen head of Alderneys arrived on the train last night. It would require too much room to mention them all by name.

Sheep and Goals.

There is the finest display of fine-wool sheep and Angora goats that we have ever seen in the State.

Severance & Peet, Alameda county, have a pen of five ewes, Spanish merinos, 2 years. Pen of 5 ewes, 1 year. Pen of 5 ewes, under 1 year. Also Spanish merino rams. Altogether 60 head—10 pens. Same lot that took premium at Bay District Fair.

Murray & Watt have 5 pens of French and Spanish merinos, from Sacramento county.

G. H Barney has 1 Spanish merino ram.

Fred. Cox has 3 Spanish merino ram lambs. Pen of 5 Spanish merino ewes. Pen 1 ram. Pen ewe lambs.

J. C. Connor has 3 Spanish merino ram lambs. Two pens ewes.

Hammond & Co. have a pen of Spanish merino bucks; 1 pen ewes. They have just brought 200 fine ewes from Vermont.

Wm. Placer, pen of 5 ewes; pen of 5 lambs and 1 ram, Spanish merinos.

Wm. Blacow, pen of 5 ewes, pen of 3 ram lambs and 5 rams, French merinos.

S. B. Emerson, pen of Cotswold graded ewes.

R. A. Branton has a pen of 5 graded ewes, pen 5 graded two-year-old ewes, pen of graded lambs, pen of French merino ewes and 1 French merino ram, pen of 5 graded lambs.

S. Treat has 4 pens. One of graded ewes, 1 graded buck, 3 merino ram lambs, Sicilian buck, 5 ewe lambs.

E. P. Wetzel has a pen of Angora goats.

Landrum & Rodgers have 7 pens of Angora goats and 3 of Cotswold sheep.

T. Pierce, from Suisun, has 4 pens of sheep. Two pens of graded and 2 of Shropshires. Their graded sheep are a cross between Shropshires and Spanish merino.

Murray & Watt have entered 2 new pens, 1 of Sillcian lambs and 1 of French ram lambs.

Gilmore has 7 stalls Angoras, from El Dorado county.

E. P. Bailey has 3 pens of Angoras.

G. W. Hancock has 3 stalls of graded sheep.

Poultry.

There is also a fine display of poultry, which are exhibited at the rear portions of the Park. In all there are 60 coops.

Swine.

Heretofore the exhibition in this department has been very meager. There are about 45 pens of swine, all fine blood and brought from different portions of the State.

Machinery, Etc.

The Society has constructed a partition at the Park in which to exhibit all stationary machinery. The Pavilion is already over full, and a large number of threshers, reapers, mowers, plows, engines and other agricultural implements are ranged on the ground outside of the Pavilion. This will allow more room in the basement of the Pavilion in the city.

The attendance at the race-track and at the Pavilion on the opening day gives promise of a very successful Fair. The new grand stand, toward the erection of which the last Legislature appropriated $15,000, came into use for the first time, and was universally praised. Although there was an unusual number present at the races for the opening day, the capacity of the new erection was in no way taxed, and everybody had a comfortable seat, with a good view of the races. The accommodation for the press at the race-track also is all that can be desired. A strict surveillance is kept so that no intruder can incommode the regular reporters. The Western Union Telegraph have a temporary office improvised near the reporters' table, from whence dispatches can be sent and the result known in San Francisco or in New York within a few seconds after the close of a race.

The Pavilion

By gaslight has a most picturesque appearance; several hundred gas jets lend their aid to shed rays of luster on the scene. To visitors from the Bay, however, accustomed to the tin light reflectors at the Mechanics' Fair, the difference in effect is patent, and much in favor of the sun-light reflector. The exhibitors are getting on well in placing their several wares in the places assigned to them. The applicants for space have so increased that it has been found necessary to cut off portions assigned to various exhibitors at the early stage, in order to make room for later comers. It would be well if intending exhibitors could make up their minds earlier, and make the first of the Fair as attractive as the last; but as custom makes precedent, so the present system will probably continue until the Directors interfere with a positive law, from which there shall be no appeal. Still, matters are progressing rapidly, and by to-morrow it is expected that the Pavilion will have donned its full holiday attire.

The Sewing Machine Men

Are always early on the ground, and the Wheeler & Wilson, Florence, Davis, Secor, and Remington have had their agents busily engaged all the afternoon in explaining the peculiar beauties of the machines they specially represent. The Wheeler & Wilson people take care to place in a conspicuous position the diplomas they received at the recent Solano and Stanislaus county fairs.

When the doors were opened shortly before eight o'clock to-night, visitors flocked in quite rapidly, and at this writing both stories of the Pavilion are tolerably well filled.

The Agricu'lural Implements and Machinery

This year disappear from the Pavilion, and have a place assigned them at Agricultural Park. The wing devoted to this class of exhibits in 1873, this year is assigned to the Horticultural display, after the style of the Mechanics' Fair in San Francisco. Sacramento makes a good and creditable showing at the Pavilion, and San Francisco is equally well represented.

The Receipts

At the door of the Pavilion up to 5 P. M. reached $2,100, and with the receipts at the race-track and the takings at the Pavilion in the evening, the receipts for the first day, it is confidently anticipated, will foot up something like $4,000. Assuming that the first day's receipts this year will bear a corresponding ratio to those of previous State Fairs, the total amount of receipts for the current Fair may be expected to reach $25,000—a larger sum than the customary average.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Sept. 23d, 1874.

The Produce msrket is pretty evenly bslanced. The slight decline in Wbeat has been compeusated for by the improvement in Dsiry Produce, Potatoes and s few other articles; though it cau hardly be supposed that the same persons are holders of both kiuds of Produce. Chsnges during the week have ss a rule not been important, and there has been no particular excitement among deslers, sales not having reached very high smounts.

The impression geuerslly prevslls that Grain will advance, in spite of late news unfavorable for a rise. Holders are generally quite firm, and the Grain now going forward has been largely contracted for in advsnce, or at best shipped to meet freight contrscts. Present prices are not unremunerative, though producers canuot be said to be well satisfied with them.

At the worst, this crop year will be deservedly remembered as a profitable one. More money is in circulation, snd more in the hsnds of farmers, than has ever been the case, to our recollection, in California. Interest has ruled very low during the past few months, and those of our friends who are csrrying mortgages (snd they unfortunately comprise a majority, we fear) should avail themselves of the opportunity to make better terms by judicious change of indebtedness.

Barley—Prices have not changed since last week. Receipts have been lsrge. A cargo of 26,000 centsls cleared for New York.

Beans—Market unchanged.

Broom Corn—Is held firmly at the usual rates.

Buckwheat—Quotations merely nominal. A small shipment was received during the week, but no sales made.

Corn—Is weaker. Quotations are 5c ₱ cental lower.

Dairy Produce—Still suother advance in Butter has taken place. Choice Fresh sells readily at 50c ₱ lb., and fancy samples will perhaps go higher. Pickled Roll has touched 40c; Firkin is unchanged. California Cheese is again higher, though the improvement is but slight. Eastern Cheese is also held more firmly.

Eggs—Are steady and strong.

Feed—Is in good request at unchsnged figures, with the exception of Oil Cake Meal, wbich is $2.50 lower.

Flour—Exports are going forward rapidly. More business was done in Flour thsn anything else this week.

Fresh Meat.—No change.

Honey—Market dull. Considerable is going East in scarch of a better market.

Hops—Are very stroug. The yield of this State is placed at 4,000 bales, of which about 1,000 bales have already been forwarded Eastward. The crop is superior in quality and fair in yield. Reports still show large deficiencies in the Atlantic Ststes and Bavaria.

Oats—Market steady.

Onions—The range in quotations is large. Prices are a little stiffer.

Potatoes—A rise of 10c ₱ cental is noted. The Ss' linas Potatoes sre of unusually poor quslity.

Poultry—For an exception, there has been no change for a week in the Poultry market.

Rye—Has declined.

Seeds—The demand is improving.

Wheat—Is considerably lower in quotations, but holders do not despair of making up the difference, and but little is changing bands. The Liverpool market has fallen. An Associated Press telegram, dated London, Sept. 22d, says: The Mark Lane *Express* says the fine summer-like westher of tbe past week was favorsble for the crops, though it could have been more favorable with regard to Wbest. The *Express* says the sutumnal sowings are certain of favorable comment. We estimate that Hungary has one million quarters to spare. Prices in Germany and France have declined heavily.

Wool—The market is unaffected, though receipts of fall c ip are coming in steadily. The new clip is said by dealers to be very burry.

METALS.

WEDNESDAY M., Sept. 23, 1874.

Contrary to expectations the price of Quicksilver has not yet advanced. Advices from New York and Europe would have seemed to warrant such a movement, but tbe market has no doubt been influenced by the very favorable prospects now held out by newly developed mines.

American Pig Iron, ₱ ton	—	@	42 00
Scoton Pig Iron, ₱ ton	45 00	@	47 50
White Pig, ₱ ton	—	@	42 00
Oregon Pig, ₱ ton	—	@	45 00
Refined Bar, bad assortment, ₱ lb	—	@	3½
Refined Bar, good assortment, ₱ lb	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5½
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	— 08	@	09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	—	9½	@ —
Norway Iron	—	8	@ —
Rolled Iron	—	6	@ —
Other Irons for Blacksmiths, Miners, etc.	—	@	4½
COPPER.—			
Braziers'	—	31	@ — 32
Copper Tin'd	—	45	@ — —
O.Niel's Pat.	—	50	@ — —
Sheathing, ₱ lb	—	—	@ — 24
Sheathing, Yellow	—	—	@ — 25
Sheathing, Old Yellow	—	—	@ — 12½
Composition Nails	—	24	@ — —
Composition Bolts	—	24	@ — —
TIN PLATES.—			
Plates, Charcoal, IX ₱ box	13 00	@	14 50
Plates, I C Charcoal	12 75	@	14 50
Roofing Plates	11 50	@	14 00
Banca Tin, Slabs, ₱ lb	—	31	@ — 33
STEEL.—English Cast, ₱ lb	—	20	@ — 25
Anderson & Woods' American Cast	—	10	@ — 17
Drill	—	18	@ — 22
Flat Bar	—	18	@ — 22
Plough Points	—	16	@ — 17
ZINC	—	—	@ — 11
Zinc, Sheet	—	—	@ — 11½
NAILS—Assorted sizes	—	5¾	@ — 8
QUICKSILVER, per lb	—	—	@ 1 45

DOMESTIC PRODUCE.

WEDNESDAY M., Sept. 23, 1874.

BEANS.			
Beans, sm'l wh. ₱ lb	3¼	@	3½
do. bntter	—	@	2
do, large, do	—	@	—
do, bayo	2	@	2¼
oo, pink	1½	@	2
do, pea	3	@	3¼
BROOM CORN.			
Per ton	$100	@	175
COTTON.			
Cal. 1873. ₱ lb	—	@	20
DAIRY PRODUCE			
Butter, Cal. choice			
lb	45	@	50
do, good	37½	@	45
do, inferior	32½	@	37½
do, firkin	30	@	33
do, pickled	35	@	40
Cheese, Cal. new	10	@	16
do. Eastern	12½	@	16
EGGS.			
Eggs, Cal. fresh	37½	@	40
do, Oregon	30	@	35
do, Eastern	25	@	30
do, Ducks	40	@	42½
FEED.			
Bran, per ton	17 00	@	18 00
Middlings	27 50	@	30 00
Hay	10 00	@	14 50
Straw, ₱ oale	—55	@	— 60
Oil cake meal	—	@	30 00
Corn Meal	40 00	@	42 00
FLOUR.			
Extra	4 50	@	5 25
Superfine	4 00	@	4 50
FRESH MEAT.			
Beef, fr quality	8	@	8½
oo, second do	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lsmb	5½	@	6
Pork, undressed	6½	@	6½
do, dressed	9	@	9¼
GRAIN, ETC.			
Wheat, coast	1 30	@	1 40
do shipping	1 40	@	1 50
do milling	1 45½	@	1 52½
Barley, coast	95	@	1 05
do brewing	1 05	@	1 20
Oats, choice	1 45	@	1 60
do common	1 40	@	1 45
Corn, White	—	@	1 75
do, Yellow	—	@	1 80
Buckwheat	2 75	@	3 00
Rye	1 00	@	1 05
HOPS.			
California, 1874	30	@	32½
East'rn '73 ch'ice	30	@	40
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey in comb	20	@	25
do Strained	7½	@	10
Pulu	9	@	10½
Onions	60	@	1 00
NUTS—JOBBING.			
Cal. Walnuts	14	@	15
Peanuts per lb	8	@	9
Chile Walnuts	10	@	11
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds h'rd shell	10	@	12½
do, soft	20	@	25
Filberts	18	@	—
POTATOES.			
Sweet, per cwt	1 50	@	62½
Cuffee Covel	05	@	15
H. M. Bay	1 05	@	15
Pigeon Pt	1 05	@	15
Humboldt	—	@	—
Petaluma	—	@	—
Mission	90	@	1 05
Salinas	50	@	70
Bodega	—	@	—
St Barbara	—	@	—
Sac. River	—	@	—
POULTRY & GAME.			
Live Turkeys,			
hens per lb	17	@	19
do gobblers	17	@	19
Hens, per dz	5 50	@	7 00
Roosters, young,			
large	4 50	@	6 00
Broilers, small	2 00	@	3 00
do large	3 00	@	4 00
Ducks, tame, doz	5 00	@	7 50
Geese, per pair	2 00	@	2 25
Hare, per doz	2 50	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	2 00
Mallard Ducks	—	@	—
do small	—	@	—
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	00	@	1 25
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 25	@	1 50
do tame	5 00	@	6 00
Venison, per lb	6	@	10
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medium	—	@	13
do Heavy	—	@	12½
Eastern do	13½	@	14
Hams, Cal	15	@	15½
do Whittakers	—	@	17
do Duffield, clr	—	@	16
do Plankton & Armour	—	@	15
do Boyd's	—	@	15½
do Stewart's	—	@	15½
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard	13	@	14
SEEDS.			
Alfalfa, Cbili	—	@	11
oo Californta	—	@	14
Canary	4	@	4½
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	3	@	4
do. Brown	2	@	2½
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	—	@	11
Timothy	11	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Mesquit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Alsike	—	@	60
WOOL, ETC.			
Spring, short, lb	22½	@	25
do cnoice Nort	25	@	31½
Medium gdes	18	@	22
Fall clip	18	@	20
Burry	14	@	18
Hides, dry	19	@	20
do wet salted	6½	@	9½
Tallow, Crude	5	@	6
do Refined	6	@	7

FRUITS AND VEGETABLES.

WEDNESDAY M., Sept. 23, 1874.

Changes in Fruits and Vegetables have been naturally upward. Pineapples are now held at an advance of $2 ₱ dozen. The wholesale price for Strawherries is 25c ₱ lb. Peaches are much higher: quotable by the basket at $1 25 @2 and by the box at $2 50@2 75. Pears have also advanced; the finest specimens of eating varieties now commanding as high a figure as $2 50 per box. Morocco Grapes have been added to the list since our last, selling at 5@6c per lb. Dried Fruits are unchanged in price. In Vegetables we note an advance of 15c in Asparagns and 2cin Green Okra per lb.

FRUIT MARKET.			
Tahati, Or. ₱ M	35 00	@	40 00
Lorita, do	—	—	@ — —
Cal. do	—	—	@ — —
Limes, ₱ M	12 50	@	5 00
Cal. Lemons, ₱ M	—	@	— —
Australian do	4 00	@	5 00
do per box	4 50	@	5 00
do Sicily ₱ h'x	—	—	@ — —
Bananas, ₱ bnch	3 00	@	4 00
Cocoanuts, ₱ 100	6 00	@	8 00
Pineapples, ₱ dz	6 00	@	8 00
Apples, ₱ box	40	@	1 00
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries ₱ lb	—	@	25
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	1	@	5
Peaches, bskt	1 25	@	2 00
do, ₱ box	2 50	@	2 75
do ext Mountain, lb	8	@	10
Pears, eating, bx	2 00	@	2 50
do Cooking	40	@	50
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel's ₱ 100	12 50	@	20 00
Muskm'l's ₱ 100	12 50	@	20 00
Pomegran's ₱ 100	6 00	@	7 00
Figs	6	@	8
Grapes, Bl'k Hg	2	@	4
do Muscat	4	@	6
do Malavo's	4	@	5
do Sweetw'r	1½	@	2½
do Mission	1	@	2
do Rose of Peru	4	@	5
do Tokay	4	@	5
do Morocco	5	@	6
do St. Peter	—	@	—
DRIED FRUIT.			
Apples, ₱ lb	6	@	7½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	3	@	9
Apricots, ₱ lb	10	@	12½
Plums, ₱ lb	8	@	10
Pitted, do ₱ lb	14	@	16
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	8	@	10
White, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	30	@	35
Zante Currants	8¼	@	8½
Dates	12½	@	14
VEGETABLES.			
Asparagus	15	@	20
Beets	—	@	1
Cabbage, ₱ 100 lbs	—	@	2 00
do new, doz	50	@	60
Carrots, ₱ 100 lbs	1 00	@	1 25
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	5	@	6
Green Peas	3½	@	4
Green Corn ₱ doz	15	@	18
Sum'rSquash, lb	4	@	5
Marro'fat Sq'sh, tn	60	00	@ —
Artichokes, ₱ doz	15	@	25
String Beans, ₱ lb	—	@	5
Lima Beans	4	@	5
Parsnips	12½	@	15
Shell Beans	3½	@	7
Peppers, ₱ lb	12½	@	20
Okra ₱ lb	25	@	40
Okra, Green	6	@	8
Cucumbers, doz	6	@	8
Tomatoes	3	@	5
Egg Plant ₱ lb	6	@	8
Rhubarb	—	@	—
Lettuce	10	@	—

LEATHER.

WEDNESDAY M., Sept. 23, 1874.

Leather is firm and quiet. Transactions for the week bave been small.

City Tanned Leather, ₱ lb			25@2
Santa Cruz Leather, ₱ lb			25@2
Conntry Leather, ₱ lb			24@28
Stockton Leather, ₱ lb			25@29
Jodot, 8 Kil., per doz		$50	00@ 54 00
Jodot, 11 to 19 Kil., per doz		66	00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz		55	00@ 72 00
Cornellian, 12 to 16 Ko		57	00@ 67 00
Cornellian Females, 12 to 13		60	00@ 64 00
Cornellian Females, 14 to 16 Kil		66	00@ 74 00
Beaumcrville, 15 Kil		60	00@ — —
Simon, 18 Kil., ₱ doz		61	00@ 63 00
Simon, 20 Kil. ₱ doz		65	00@ 67 00
Simon, 24 Kil. ₱ doz		72	00@ 74 00
Robert Calf, 7 and 9 Kil		35	00@ 40 00
French Kips, ₱ lb		1	00@ 1 15
California Kip, ₱ doz		40	00@ 60 00
Frenob Sheep, all colors, ₱ doz		8	00@ 15 00
Eastern Calf for Backs, ₱ lb		1	00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz		9	00@ 13 00
Sheep Roans for Linings, ₱ doz		5	50@ 10 50
California Russett Sheep Linings		1	75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair		5	00@ 5 25
Good French Calf Boot Legs, ₱ pair		4	00@ 4 75
French Calf Boot Legs, ₱ pair		4	00@ — —
Harness Leather, ₱ lb			30@ 37½
Fair Bridle Leather, ₱ doz		48	00@ 72 00
Skirting Leather, ₱ lb			34@ 37½
Welt Leather, ₱ doz		30	00@ 50 00
Buff Leather, ₱ foot			18@ 29
Wax Side Leather, ₱ foot			17@ 1
Eastern Wax Leather			—@— —

GENERAL MERCHANDISE.

WEDNESDAY M., Sept. 23, 1874.

Bags are still depressed. Coal is stronger. Coffees continue weak. In Oils an advance is noted in Linseed and China Nut. Rice shows an upward tendency. Among Spices, Cloves, Cassia and Allspice have adva ced. Tobaccos are firm.

BAGS.			
Eng. Stand Wht.	12¼	@	12½
Detrick's Machine Sewed, 22x36 F	—	—	@13
do 22x36, do E W	—	—	@13¼
do 20x40, do A	—	—	@14½
Flour Sacks ½s	9½	—	@11½
" " ¼s	6	—	@ 7
Stand. Gunnies, double seam	15	@	—
single seam	13¾	@	14
" Wool Sacks,	65	@	—
Bariey Bags 24x36	—	@	14
do 23x40	—	@	14½
do 24x40	—	@	15
do 28x36	—	@	16
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in.gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ ₱ cans	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies 3 ₱	75	@	4 25
Pickles ½ gl	—	@	3 50
Sardines, qr hoxl	80	@	— —
do bf boxes	3 20	@	— —
COAL—Jobbing.			
Australian, ₱ ton	10 00	@	— —
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11—
Cumberl'd, cks	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	19 00
Liverpool	11 00	@	12—
West Hartley	12 50	@	— —
Scotch	9 50	@	10 00
Scranton	15 00	@	17 50
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	19	@	20
Costa Rica per lb	21	@	22
Guatemala	19	@	20½
Java	—	@	28
Manilla	20	@	21½
Ground in cs	—	@	30
Chicory	9	@	10
FISH.			
Pac. Dry Cod, new	5	@	6
cases	6	@	—
do boneless	11	@	12
Eastern Cod	7	@	8
Salmon in bbls	9 00	@	9 25
do ½ bbls	4 50	@	4 75
do 2½ ₱ cans	2	@	3 00
do 2lb cans	2 65	@	2 75
do 1lb cans	1 75	@	—
Do Col. R. ½h	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l. No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mess	3 00	@	3 50
" Ex mess, ½ bs	—	@	12 00
Sm'k Herr'g, bx	50	@	60
NAILS.			
Assorted size, lb	5 00	@	7 25
OILS.			
Pacific Glue Co. Neat F't No. 1	—	@	1 00
Pure	1 25	@	—
Castor Oil, No. 1	—	@	1 75
do do No. 2	—	@	1 60
Cocoanut	45	@	50
Olive Plagniol	5 00	@	—
do Possel	4	45	@ —
Palm	9	@	—
do Bagicalupi	—	@	—
Linseed, raw	—	@	105
do holled	—	@	1 10
China nut in cs	82½	@	90
do hulk	75	@	80
Sperm, crude	—	@	1 40
do bleached	—	@	2 20
Coast Whales	35	@	40
Polar, refined	50	@	55
Sperm	1 40	@	1 50
Lard	1 00	@	1 10
Coal, rehued Pet	37½	@	40
Oleophine	—	@	34
Devoe's Bril't	25	@	28
Long Island	—	@	34
Eureka	37½	@	40
Devoe's Petro'm	26	@	29
Barrel kerosene	20	@	25
Olive	4 00	@	9 50
Downer Kerose'e	35	@	40
Gas Light Oil	—	@	34
PAINTS.			
Atlan. W. Lead	7½	@	12½
Whiting	—	@	2
Putty	4	@	4½
Chalk	—	@	2½
Paris White	2¾	@	—
Ochre	4	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@	2 10
RICE.			
China No. 1, ₱ lb	6½	@	6⅞
do 2, do.	5½	@	5¾
Japan	—	@	6½
Siam Cleaned	7	@	—
Patna	5½	@	5¾
Hawaiian	7¼	@	8
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@	11 00
do Coumon	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	20 00	@	23 00
do coarse	15 00	@	20 00
SOAP.			
Castile ₱ lb	10	@	11
Local. brands	5	@	8
SPICES.			
Allspice, per lb	15	@	16
Cloves	55	@	60
Cassia	32½	@	35
Citron	—	@	30
Nutmeg	1 20	@	1 25
Whole Pepper	20	@	22
Pimento	—	@	15½
Gr'nd Allsp'ce	—	@	12½
do Cassia do	—	@	50
do Cloves do	—	@	50
do Mustard do	—	@	25
do Ginger do	—	@	00
do Pepper do	—	@	00
do Mace do	—	@	2 00
SUGAR, ETC.			
Cal. Cube per lb	11½	@	—
Partz' Pro. Cuhe bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12½
Circle A crushed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	11½
Golden C	—	@	10½
do Rey'g grade	—	@	6½
Cal. Syrup in bls	—	@	5½
do in ½ bls	—	@	55
do in kegs	—	@	60
Hawaiian Molasses	25	@	27½
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@	00
Gunpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@	1 25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ cbests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'nbx, 4½ lb	35	@	65
do ½, 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	45	@	55
Dwarf Twist	57	@	62½
12 inch do	57	@	62½
Light Pressed	65	@	75
Hard do	60	@	70
Conn. Wrap'r	40	@	50
Penn. Wrappr	20	@	30
Ohio do	7	@	15
Virgi'a Smok'g	60	@	95
Fine ct che'g, gr	8 50	@	9 25
Fine cut, chewing, buc'ts	75	@	90
Banner frac cut	—	@	9 00
Eureka Cala	8 75	@	9 00
TURPENTINE.			
Eastern	60	@	65

LUMBER.

WEDNESDAY M., Sept. 23, 1874.

There is nothing new to report of the Lumber trade. More building is going on in this city than ever before known.

CARGO PRICES OF PUGET SOUND PINE

REDWOOD.			
Rough, ₱ M	$16	00	
Rough refuse, ₱ M	12	00	
Rough clear, ₱ M	32	50	
Rough clear refuse, M	22	50	
Rustic, ₱ M	30	00	
Rustic, refuse, ₱ M	24	00	
Surfaced, ₱ M	26	00	
Surfaced refuse, ₱ M	16	00	
Flooring, ₱ M	30	00	
Flooring, refuse, ₱ M	20	00	
Beaded flooring, ₱ M	32	50	
Beaded floor, refuse, M	22	50	
Half-inch Siding, M	22	50	
Half-inch siding, ref. M	16	00	
Half-inch, Surfaced, M	25	00	
Half-inch Surf. ref., M	18	00	
Half-inch Battens, M	22	50	
Pickets, rough, ₱ M	13	00	
Pickets, rough, p'ntd	16	00	
Pickets, fancy, p'ntd	25	00	
Shingles, ₱ M	2	25	

—Retail Price.

Rough, ₱ M			20 00
Fencing and Stepping, M	37	50	
Fencing, 2d quality, ₱ M	30	00	
Fencing, ₱ lineal foot			1c
Flooring and Step, ₱ M	30	00	
Flooring, narrow, ₱ M	32	50	
Flooring, 2d quality, M	25	00	
Laths, ₱ M	3	25	
Furring, ₱ lineal ft			¾
REDWOOD—Retail.			
Rough, ₱ M			20 00
Rough refusc, ₱ M			16 00
Rough Pickets, ₱ M			18 00
Rough Pickets, p'd, M			20 00
Fancy Pickets, ₱ M			30 00
Siding, ₱ M			25 00
Tongued and Grooved, surfaced, ₱ M			32 50
Do do refuse, ₱ M			22 50
Half-inch surfaced, M			40 00
Rustic, ₱ M			35 00
Battens, ₱ lineal foot			¾
Shingles ₱ M			2 50

RETAIL GROCERIES, ETC.

WEDNESDAY M., Sept. 23, 1874.

Groceries remain without change. Butter alone has moved, following the course of the Produce market.

Butter, Cal. ch'ice	45	@	55
do common	30	@	45
Cbeese, Cal., ₱ lb	12½	@	17½
Lard, Cal., ₱ lb	12½	@	15
Flour, ex. fam, bl	5 00	@	5 50
Corn Meal, ₱ lb	2¼	@	3½
Sugar, wn. crsh'd	—	@	12
do lt. brown, lb	7	@	9
Coffee, Sbarboro's family gr'nd, lb	32½	@	—
Coffee, green, lb	24	@	32½
Tea, fine blk, 50, 65, 75		@	1 00
Tea, finst Jap, 55, 75, 90		@	1 00
Candles, Admant'el	7	@	25
Soap, Cal., lb		@	10
Can'd Oysters, dz	2	0	@2 50
Syrup, S F. Gol'n	35		@ 40
Dried Apples	8		@ 10
Dr'd Oer. Prunes	15		@ 17
Dr'd Figs, Cal	9		@ 10
Dr'd Peacbes	10		@ —
Oils. Kerosene	30		@ 35
Wines, Old Port	3 50		@5 00
do Fr. Claret	1 00		@1 25
do Cal., dz. bot	3 00		@4 50
Whisky, O.B, gal	3 50		@5 00
Fr. Brandy	4 00		@10 00
Rice, lb	10		@ 12¾
Yeast Powders, dz	1 50	@2	00

Mining and Scientific Press,

(Established in 1860.)

The oldest, largest and best Mining Journal. Devoted, also, to Science, Invention, Mechanio Arts and Industry on the Pacific Cosst.

Subscription to the above, $4 a year; Sample Copies, post paid, 10 cts.—four for 25 cts. Address,

DEWEY & CO., Publishers,
No. 224 Sansome st., S. F.

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Sept. 23, 1874.

The supply of Poultry and Eggs is fair. Quail are coming in plentifully, but the weather is almost too warm for tbem. Venisou is ratber scarce, and not at all in demsnd. Fish and Meats are unchanged in price.

POULTRY, GAME.			
Spring Chickens	50	@	75
Hens	75	@	1 00
Eggs	—	@	45
do Ducks	45	@	0
do Eastern	30	@	35
Turkeys, ₱ lb	—	@	25
Ducks, Can Bk, pr	—	@	—
do Mallard, pr	—	@	—
Tame, do	1 50	@	2 00
Teal, ₱ doz	—	@	—
Geese, wild, palr	—	@	—
Tame, ₱ pair	3 00	@	4 00
Snipe, ₱ doz	—	@	—
Quail, per dozen	2 00	@	2 75
Prairie Ch'k's, ea	—	@

Stock Notices.



300 Head Pure Blooded French Merino Rams and Ewes.

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

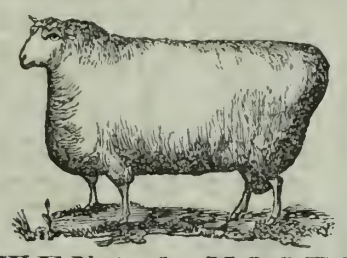


SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,
eow El Dorado, El Dorado County, Cal.

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,
13v7-eow-tf Watsonville, Cal.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

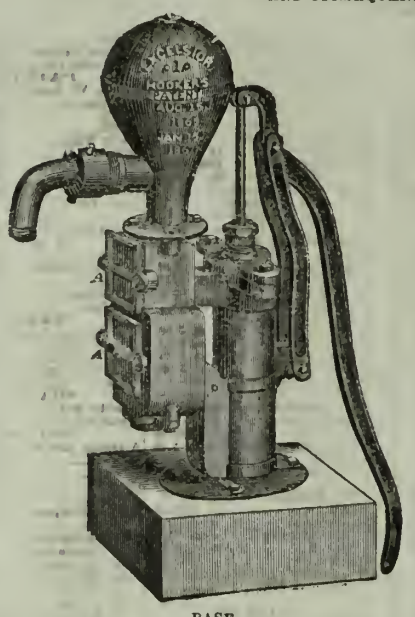
P. S.—*Special rates to members of the Grange.*

THE "EXCELSIOR" FARMERS' PUMP.

After Seven Years use proving itself the

BEST PUMP ON THIS COAST,

AND CONSEQUENTLY THE CHEAPEST.



BASE.

We can advise all parties to buy the Pump to be

Worked by Hand, Windmill or Horse Power.

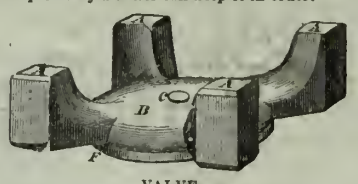
ALL SIZES FOR SALE.

REMEMBER,

Every Pump is tested to 125 pounds hydraulic pressure per square inch.

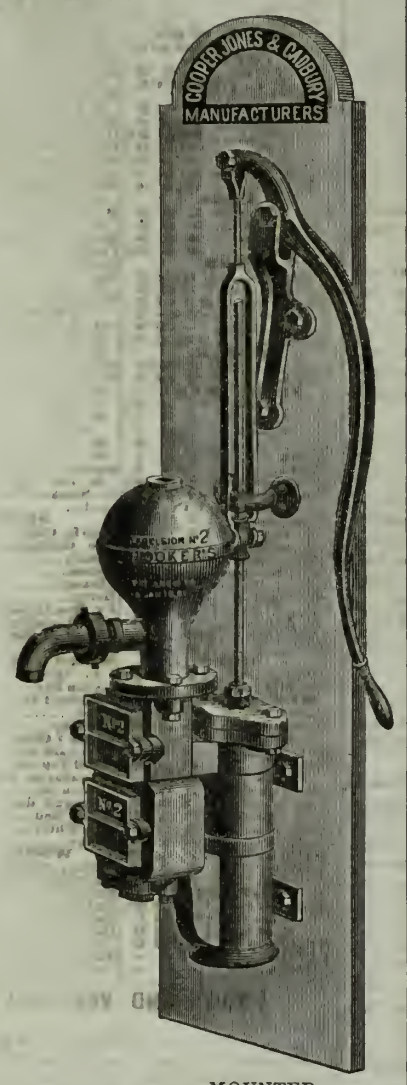
Will pump water 250 feet high.

So simple every Farmer can keep it in order.



VALVE.

EVERY PUMP WARRANTED.



MOUNTED.

BRITTAN, HOLBROOK & CO.,

General Agents, 111 and 113 California St.,

Send for Circular. SAN FRANCISCO, (And also Sacramento.)

ALFRED S. MOORE. W. L. THWING.

ALFRED S. MOORE & CO.,

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Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.

7v8-3m

Cotswold Bucks For Sale.

About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

REFERENCES:

MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

EUREKA WAREHOUSE.

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY, 1874.

First m'th 50 cts ₮ ton } If delivered on Eureka wharf.
Afterwards, 30 cts ₮ ton }

Season Rates, fixed at time of storing, $1.50 per ton.

If hauled with teams, first month 25 cts per ton.

Afterwards, 30 cts per ton. Second Weighing, 10 cts.

Grain received on Dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to E. E. Morgan's Sons, S. F.

sep19 A. J. GOVE, Manager.

PEACHES.

An enormous stock of trees, exceedingly cheap, embracing the BLOOD-LEAVED RIVERS', and other new varieties. Our assortment of FRUIT and ORNAMENTAL TREES is unusually complete. New Trade List sent free.

HOOPES, BRO. & THOMAS,
Cherry Hill Nurseries,
10v8-6t Westchester, Pa.

SATISFACTION GUARANTEED IN ALL CASES.



BROWN LEGHORN COCKS, $5 Each.

Wilson's Brown Leghorn Cock, "Eureka."

Fowls of all varieties for sale in pairs, trios or singly. Adult fowls, $5 each. Young fowls, $3 and upwards. Write for further particulars to

C. W. WILSON,
East Oakland, Cal.,
Breeder of Land and Water Fowls in variety. 10v8-1m

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, Etc.

For Sale, wholesale or retail, by

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FARMERS write for your paper.

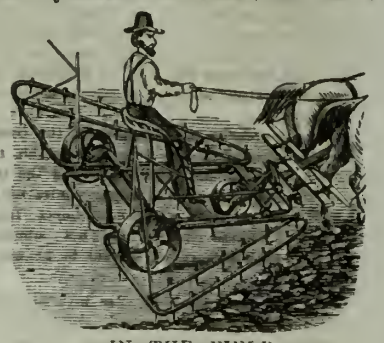
Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

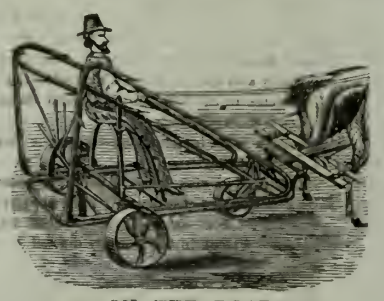
FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.

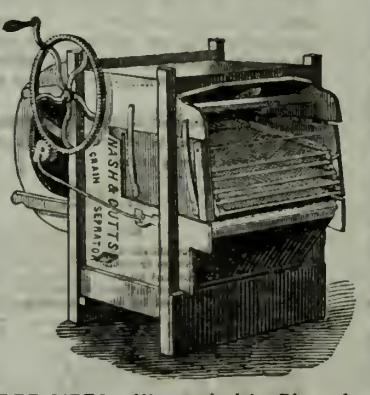


ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

THE BEST IS THE CHEAPEST.

NASH & CUTTS' PATENT GRAIN SEPARATOR AND FAN MILL.



THREE SIZES—Warranted to Clean from 60 to 200 Bushels per Hour, Perfectly.

PRICES—$40, $50 AND $75.

The Nash & Cutts' Machine is the only machine that has taken the First Premium at California State Fairs in 1870, 1871, 1872 and 1873.

Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

The Nash & Cutts' machine is the only one that will clean Alfalfa Seed. All we ask of any one in want of a Grain Separator is to give the Nash & Cutts' a trial.

EVERY MACHINE FULLY WARRANTED.

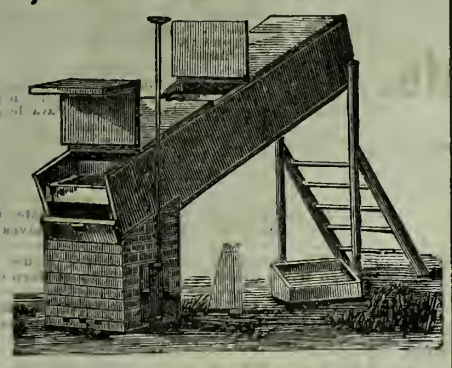
The Nash & Cutts' Machine is for sale by all Agricultural Implement Dealers in California.

For further particulars addr ess

NASH, MILLER & CO.,
No. 264 K street, Sacramento, Cal.

Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

Ryder's American Fruit Drier.



It is claimed no Drier can equal, and it is guaranteed no Drier can excel the AMERICAN in the excellence of its work. We suit this Drier to the wants of Farm and Factory. We make one series, Nos. 1, 2 and 3; one line of trays, capacity, say of apples, 8, 12 and 20 bushels per day of 12 hours; prices, $100, $125, $150. Factory Series, Nos, 1, 2 and 3; capacity, 25, 40 and 60 bushels per day. Again we make a Double Factory over one Furnace with capacity over 100 bushels per day. Two of these Driers should turn off at least 1,200 pounds, or over half a ton per day. The prices given include the right and every item of expense to commence work, and are all constructed to be portable. Every variety of Fruits, Vegetables, Cereals or Meats can be cured on this Drier for the home or foreign markets. The company have established depots in all the principal Eastern cities for the sale of Fruits, etc., prepared for the market on this Drier, and prices will from time to time be given to parties interested. This Drier took the first premium and silver medal at the Fair of the Maryland Institute, held at Baltimore in 1873. Send for Circulars. Farm, County and State Rights, and Driers complete with Heaters, sold by

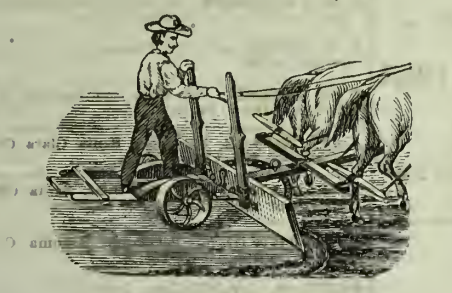
J. M. KEELER, General Agent,
306 California street, San Francisco

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

O. CREGO. S. O. BOWLEY.

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET..... .....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
24v5-3m San Francisco.

THE

CELEBRATED MITCHELL WAGON



15v7-3m

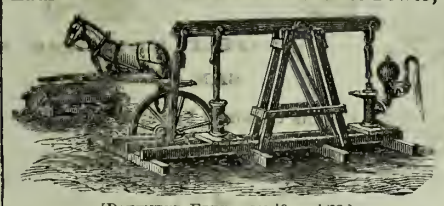
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

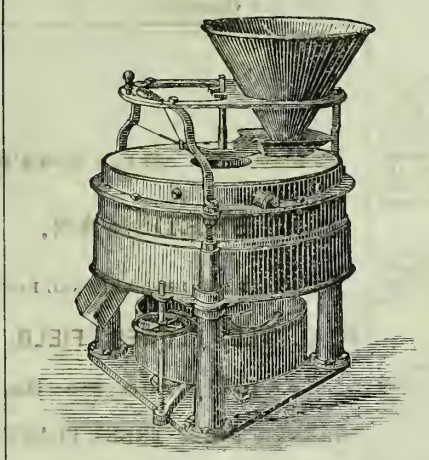
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AMERICAN CHIEF GANG PLOW.



Took the Preminm over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rate. Storage taken at lowest current rates. 4v8-tf

POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

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WOOL,
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Office, 320 California Street, - - - San Francisco.

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This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

HELP FOR TOWN OR COUNTRY.

The long established and well-known Intelligence House of Crossett & Co. is now receiving numerous applications from the rural districts for supplying help of various kinds for Domestic, Farm, Mechanical work, etc., and are thus supplying a want that has long been felt in all parts of the interior of the State.

A long residence in the interior, preceded by a ten year's experience in this city, in the business of supplying help for both city and country, has given the undersigned such a general knowledge of the wants of the community in relation to help of every kind, and the sources of supply for the same, that we feel abundantly confident of our ability to give the best satisfaction to both those in search of, and those who are in need of help—whether for the chamber, the kitchen, the farm, the mine, the factory or for general work.

Send in your orders trustingly, and you can depend upon having them promptly and satisfactorily filled in accordance with the character of the labor called for—male or female, skilled or unskilled, and of any nationality that may be specified, and on the most satisfactory terms. Address, CROSSETT & CO., Agents, San Francisco, 606 Clay street. aul-tf



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ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 44 Cal. Market, S.F

Italian Bees,

For sale in Harbison Hives, in quantities to suit. Also young tested Queens, bred from imported mothers. Safe arrival and satisfaction guaranteed. Terms low. Address,

A. LOVETT,
sep12-tf Sacramento, Cal.

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FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STRLET,
sp25-tf N. E. Cor. Montgomery.

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Near San Luis Obispo, well stocked and fenced, with fine improvements. Plenty of wood and water.

Apply to T. H. HATCH & CO.,
320 Front street, San Francisco.

Or, R. M. PRESTON, Old Creek, San Luis Obispo.
20v7-3m

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FARMERS' LINE.

THE SPLENDID IRON SHIP,



CITY OF YORK,
1255 Tons. A 1.
AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,
1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co. RODGERS, MEYER & CO.,
aug15-tf 212 Battery street.

IMPORTANT TO FARMERS!

X Line to Liverpool.

DIRECT.

The New A 1 Clipper Ship

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Is intended to sail with dispatch.

Freight taken in lots to suit shippers.

Apply to E. E. MORGAN'S SONS,

320 California Street,
San Francisco.

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—AND—

Business College.

The Twenty-Fifth Session commences July 20th, 1874.

A day and Boarding School for both sexes; the only Institute on the Pacific Coast where a thorough Academic and business education can be obtained.

The Business College Department

Is under the supervision of James Vinsonhaller, who for many years was at the head of Business Colleges of San Francisco.

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26v7-3m JAMES VINSONHALLER.

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

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G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIEROE & CO., 627 Sacramento St.,
14v7-3m bet. Montgomery and Kearny Sts., S. F

PATENTS & INVENTIONS.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[FROM OFFICIAL REPORTS FOR THE MINING AND SCIENTIFIC PRESS, DEWEY & CO., PUBLISHERS AND U. S. AND FOREIGN PATENT AGENTS.]

By Special Dispatch, Dated Washington, D. C., Sept. 22d, 1874.

FOR WEEK ENDING SEPT. 8TH, 1874.*

ARTIFICIAL FLOWERS.—Mary Barnes, Truckee, Cal.

TIE-LINK FOR CHAINS.—Wm. Quialan, Mayfield, Cal.

MINING LANTERN.—Coolidge B. Brown, Placerville, Cal.

TRADE MARK.

FOR CANNED SALMON.—Cutting & Co., S. F., Cal.

*The pateuts are not ready for dellvery by the Patent Office until aome 14 days after the date of issue.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & CO., In the shortest time possihle (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect securlty and in the shortest time possihle.

Hints to be Remembered.

A note dated on Sunday is vold.
A note obtained by fraud, or even from one intoxicated, can not be collected.
If a note he stolen it does not release the maker—he must pay it.
An indorser of a note is exempt from lisbility, if not served with notice of its dishonor within twenty-four hours of its non-payment.
A note by a minor is void.
Notes bear Interest only when so stated.
Principals are responsible for their agents.
Each individual in partnership is responsible for the whole amount of the debts of the firm.
Ignorance of the law excuses no one.
It is a fraud to conceal a fraud.
The law compels no one to do impossibilities.
An agreement without consideratiou is void.
Signatures in lead pencil are good in law.
A reccipt for money is not legally conclusive.
The acts of one partner bind all the others.
Contracts made on Sunday can not be enforced.
A contract made with a minor is void.

Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

L. P. MCCARTY—General Agent.
W. H. RATTENBERRY—California.
CHAS. W. OTIS—Contra Costa County.
CHAS. T. BELL—Alameda, Santa Clara and Santa Cruz Counties.
J. W. ANDERSON—Orange and Santa Ana, in Los Angeles County, Cal.
HOON ALSTON—San Luis Obispo, San Bernardino and San Diego Counties.
JAS. KEARNEY—Amador, Calaveras, Tuolumne and Mariposa Counties.
B. GOONWIN—Sacramento County.
S. G. CRAWFORD—Nevada, Sierra and Plumas Counties.
J. G. KELLEY—For Washington Territory.

A Good Binder for $1.50.

Subscribers for this journal can obtain our Patent Elastic Newspaper File Holder and Binder for $1.50—containing gilt title of the paper on the cover. It preserves the papers completely and in such shape that they may be quickly fastened and retained in book form at the end of the volume, and the binder (which is very durable) used continuously for subsequent volumes. Post paid, 25 cts. extra. It can be used for Harper's Weekly and other papers of similar size. If not entirely pleased, purchasers may return them within 30 days. Just the thing for libraries and reading rooms, and all who wish to file the PRESS. lambp

CAMPO, SAN DIEGO CO., CAL., July 3d, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* To-day I received the patent and other papers of my aoimal trap, that you so successfully worked through the patent office for me, for which please accept my best wishes. The chances are that I will have another application for you to make for me before long: I am well satisfied with your manner of doing business, and I think inventors of this coast stand in their own light when they do not put their business into your hands.

I remain yours truly, A. M. GASS.

CALIFORNIA is admirably supplied with periodical agricultural literature. The RURAL PRESS, with which we are most familiar, gives a weekly compendium of information, theoretical and practical, relating to husbandry, which we sincerely hope is appreciated to the extent of an ample support of that paper. If there are others equally meritorious we hope they are also well sustained.—*Benicia Tribune.*

SCIENTIFIC PRESS.—The attention of our readers is called to an interestiug article on the Mining Interests of Northern Sierra, on the first page of this issue, from the SCIENTIFIC PRESS, San Francisco. This is the ablest, most instructive and influential Mining Journal published in the Great West, and should be liberally patronized by all our mining friends.—*Mountain Messenger*, April 25.

FOR STATE OF NEVADA.—We have appointed Mr. F. B. Alderson our special agent and correspondent for the State of Nevada. He will visit our friends and patrons there soon.

WEDNESDAY AFTERNOON is the latest we can insert any notice in the RURAL PRESS. Communications should be received during the week previous to publication.

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator-429 Montgomery street, San Francisco. 2v7-6m

More than double the number of Farmers and their families read the PACIFIC RURAL PRESS than any other journal on this Coast.

Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The RURAL PRESS—established Jan., 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulatiou has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfinities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *heir time* by *our labor.*

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Gardon,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast; that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation, might never be placed on record or reach the eyo of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligeut and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the RURAL has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than have been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the RURAL PRESS.

The S. F. Market Reports

Will receive greater attention in the department of DOMESTIC PRODUCE than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the PACIFIC RURAL PRESS. We commence the new year with a regular circulation of

Over 5,000 Copies,

A far greater issue than that of any weekly on this Coast, independent of a daily publication. If our friends will continue to "help us help ourselves," we hope to reach a circulation of 8,000 this year, and do a correspondingly greater service of good. While we have the greatest advantages and can make by far the best weekly for

Agriculturists on This Side of the Continent.

We cannot expect one-half so large a circulation as journals in older and more populous districts. Consequently readers cannot rightly expect such a paper here at Eastern rates.

No Premiums But a Good Paper

Do we offer. A flashy chromo (or cheap map), with an ill suited paper, will hardly satisfy the farmers of this Coast, whose time is too precious for trifling. To many of you the benefit of a reliable and valuable paper should reach a hundred fold its cost, while to all a poor journal would be dear at any price.

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On receipt of stamp for postage.

Agents are Wanted

Who will do more or less active canvassing. To such we will furnish free samples and pay liberally for their services.

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Between Battery and Front.

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IMPROVE YOUR POULTRY.

IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.

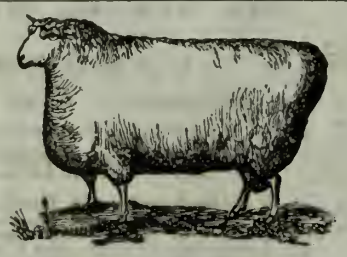


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Cor. 16th & Castro Streets, Oakland, Cal.

A fine assortment of imported Rouen and Aylesbury Ducks just received; price, $8 per pair. Warranted of the best strains in the country. Send stamp for circular to

GEO. B. BAYLEY,
4v8-tf P. O. Box 659, San Francisco.



Cotswold Rams,

Half, three-quarter and seven-eighths (⅞) from imported sires. Lambs—yearlings and upwards—for sale by LEWIS & McCRACKEN,
sep12-1m San Jose, Cal.

MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillary; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to

B. F. CLAYTON, San Jose.
Or C. J. CLAYTON,
10v7-6m Clayton, Contra Costa Co., Cal.

FINE FARM FOR SALE.

160 acres good farming land adjoining the town of Petaluma, well watered, fenced and improved, with a comfortable house, barn and outbuildings, orchard, vineyard and garden. Title U. S. patent. Price $8,000. Apply to

BERRY & CAPP, 418 Montgomey St.,
sep-26 Real Estate Agents and House Brokers.

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

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GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

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A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petaluma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Nilas, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alamada Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

PACIFIC RURAL PRESS

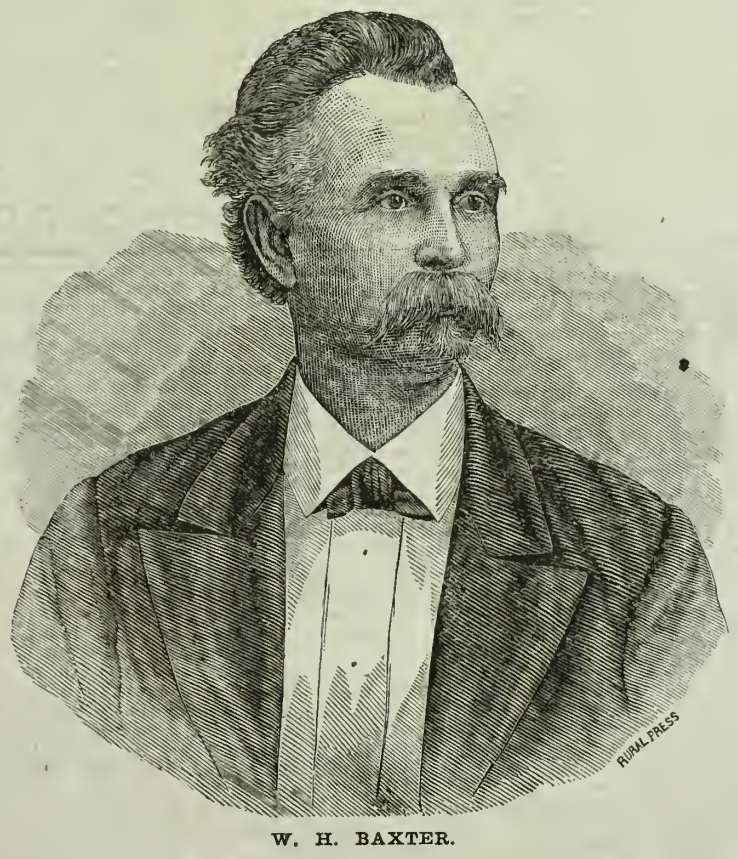
Volume VIII.] SAN FRANCISCO, SATURDAY, OCTOBER 3, 1874. [Number 14.

W. H. Baxter, Secretary of State Grange.

We give in this issue a likeness of W. H. Baxter, Secretary of the State Grange of California, whose zealous and successful labors in behalf of the Grange on this coast make him deserving of more than a passing notice. He was born in New York city, A.D. 1825, and at an early age with his widowed mother moved to New Jersey, where with relatives and friends he lived, availing himself of such educational advantages as could be afforded in the high schools of that section, and at the same time being educated in practical agriculture. At the age of 16 influential friends interposed and obtained a position to either a cadetship at West Point, or as midshipman in the naval school, but on reflection of the nature of the profession and the necessary separation, his widowed mother could not reconcile herself to the idea of parting with her only son, and his being surrounded with the dangers consequent upon either arm of the service; she, therefore, declined to permit him to enter upon that course of life, and at 17 after having decided upon, and in full accordance with his own desire, apprenticed himself, and entered upon a course of instruction in mechanic arts, perfecting himself and starting in business on his own responsibility, taking as well to himself a partner in life, Sister Baxter (now "Pomona," the highest lady officer of the State Grange), before he was 21 years of age.

In 1849, he became a victim of *el epidemico de oro*, and early in the spring of 1850 started for California, and while delayed at the Isthmus and in Panama witnessed and came near being a victim of the massacre by Panamanians of that year—but Providence intended him for better use than being massacred—and he arrived in San Francisco the 1st of June, 1850, engaging in active business at once. To him the people of California are indebted for the first news of its admission to the Union as a State. As indicative of the enterprise of the man we give the circumstances. Being agent of A. B. Miller & Co.'s express, on the morning of Oct. 19th, 1850, having an eye to business, he went up on Telegraph hill and with the glass took an observation, and discovered an inward bound steamer covered with flags from stem to stern. It being several days in advance of the regular arrival day of the Panama steamer, all was conjecture as to the gaudy visitor, and as it passed Fort Point it let loose the dogs of war. It was at once settled that some brave Fillibustero had come upon us, to capture, plunder and devastate our city, and subject our country to Mexican rule again; and as the steaming monster came steadily on, to think was to act. Determined to know the worst and if by any means prevent such a calamity by learning the cause of such demonstration by the strange visitor, he with a single companion made a rapid descent upon some boatmen (whalers) lying at North Beach, who for a fee of $25 consented to take them out to overhaul the steamer, after abundant assurance of safety—when away they flew, and with a red handkerchief tied to his cane made straight for the steamer's track. And as they neared the steamer, standing in the bow of the boat, cane and flag in one hand, and hat in the other—a flash, a deafening roar; could it be, did they intend it for him? No shot came; on on he went, and under her bow, with "ship ahoy," came a reply from all on board. Three cheers for the State of California, and over came the documents to the boat. Now for shore, my brave boys, pull; while the steamer, enveloped in its bunting and the smoke of its cannon from both ports, went steaming up and down in front of the city several times before coming to the wharf. The express messengers of Adams & Co. and Gregory & Co. tried in their boats to overhanl her and see what in the world cansed such a demonstration; and when at last she came to, and they got their documents, they came to their offices on shore to find extras printed and scattered all over the city with the glad news of the admission of California as a State into the Union,

From that time until 1869, he was engaged in mercantile and mechanical pursuits, when he purchased a farm in Napa Valley, about two miles from the city; and, as he relates, his first experience satisfied him that there was something radically wrong in the system of business as conducted by the commission men and bnyers, with producers, and set himself to work devising some plan by which the farmers might inaugurate a system of business that would enable them to realize the legitimate profits, instead of its going into the pockets of speculators and middle men. After consulting with many prominent farmers, and getting such ideas as seemed to be correct, a plan was fully digested and matured, embodying the principle of self protection by combination. Just at this time, without previous knowledge, he accidentally obtained a paper containing a notice



W. H. BAXTER.

of the Order of Patrons of Husbandry; but being totally ignorant of the priuciples of its organization, and desiring to know, put himself in communication with the proper officers, who gave all the needed information; and in due course of time, with satisfactory references, he was in August, 1871, commissioned as a General Deputy of the National Grange P. of H. for California; and on presenting the subject to the many prominent men as opportunity offered, he was unanimously assured that it would be an excellent thing "if it would only work; but you can't get the farmers to stick to any thing, they all want to do as they think, they won't cohere, they will say 'yes,' and then go and do as they think;" and then the farmers' clubs can do all that they require, and they have them already in operation, and they won't change the organization; it's of no use trying to get them to do it. And for two years working, talking and writing, not a step could be made towards organizing a Grange, until the 1st of March, 1873, when the Napa Co. Farmers' Club decided to change their organization to the Grange, which was done, and Napa Grange was the first he organized in California. The result of his work is before you; it needs no eulogy from us.

Mr. Baxter was unanimously elected Secretary of the State Grange at its organization in Napa, and re-elected at its first annual meeting in San José. He is also Secretary of the State Executive Committee, the Grangers' Bank of California, and the Farmers' Mutual Insurance Co.

SUPERPHOSPHATE OF LIME.—Dr. Anderson gives the following proportion of bones and acids to be nsed in making superphosphate on the small scale: One ton of inch bones, one quarter-ton of sulphuric acid, sixty gallons of boiling water. Utensils requisite, a cistern of lead and a watering-can of the same metal. A small quantity of the bones should be spread upon the bottom of the cistern, and the sulphuric acid poured in from the leaden watering-can, at the same time that a proportionate quantity of the water is added from another can. More bones should then be thrown in, then more acid and water, in short, the process should be managed so as to intermix the bones and acid as uniformly as possible. The mixture should be allowed to stand for some days before it is employed, and it should then be mixed with some dry peat or soil in order to render it sufficiently dry for use. The mixture thus made should be kept under cover.

THE PRESS AND AGRICULTURAL FAIRS.—In some important matters farmers have justly complained that their calling has not received the attention and consideration which its dignity and importance demands; but they have no cause of complaint against the Press of California for the treatment received at its hands. Especially is this case in connection with the fairs of the season. While the press of the smaller cities and villages deserve credit for doing all that could have been desired of them in this matter, the prominent dailies of San Francisco shall receive the thanks of the farming community and of the country at large for the spirit and efficienoy which they have manifested in working for the success of our various fairs.

THE wheat crop of Southern Dakota was but little injured by grasshoppers. The oat and corn crop suffered more from their ravages, but the pests have long since departed southward without depositing their eggs; hence they expect no trouble from them in that section next spring.

GRANGERS' BANK MEETING. — The annual meeting of the stockholders of the Grangers' Bank of California will be held at the bank, No. 415 California street, San Francisco, on Tuesday, October 13th. We mention this more particularly because an advertisement appeared with a wrong date at first.

Pure Milk Wanted.

Among the necessary articles for the preservation of life and comfort in a modern civilized community, there are few that are equal in importance to milk. To secure it pure and fresh, and at reasonable cost, to the inhabitants of a city like San Francisco, is worthy of the best efforts of her public spirited citizens. It is of vital consequence to children of all classes, a cheap and healthy diet for the poor, and enters into a thousand luxuries of the rich. We think that San Francisco is favored above many other large towns in her milk supply, but there is room for vast improvement. Although it cannot be said that her babies die as they do in New York of "Croton milk," there is little doubt that a similar disease commits terrible ravages among the juvenile population.

Swill-milk Dairies.

That there are hundreds of cows kept in the suburbs of the city on distillery swill, is a fact but too well known. But it may be news to some of our readers that a bill was introduced in the Legislature last winter to abate this nuisance, and that it came very near passing. Sad to relate, however, several of its avowed supporters, "reformers," "farmers' friends," etc., were convinced at the last moment by the solid arguments of the distillers and their customers, the swill-milkmen, and cast their votes against the measure.

At the next meeting of our law-makers, we hope that this measure will be pushed by the following classes: First, all inhabitants of the city who wish pure milk for themselves and their children; second, all honest dairymen who wish to drive a spurious article from their legitimate field of business; and finally all temperance people who wish to diminish the profits of the whisky business.

City Ordinances.

The following are the ordinances on this subject now in force in San Francisco:

Order 697—Chapter XI., Sec. 21. "No person shall offer or have for sale, in the city, any unwholesome, watered or adulterated milk, or milk known as swill milk, or milk from cows (or other animals) that are fed on swill, garbage or other like substance, nor any butter or cheese made from such milk."

Order 730—Sec. 1. "No person shall feed, or cause to be fed to any milch cow, any still slops or other food calculated to render the milk of such cow unwholesome, or unsuitable for human food."

Sec. 2. "No person shall sell, deliver, supply or furnish to any person any milk from any cow fed in whole or in part upon still slops, or other food calculated to render the milk of such cow unwholesome or unsuitable for human food. And no person shall sell, deliver, or supply to any person any milk from any sick or diseased cow."

Penalties.

Any violation of these wholesome regulations is punished by heavy fines or imprisonment, and we can hardly understand why they are not enforced.

We have heard of a milkman who owned that he watered his milk, and said that he was obliged to in order to compete with others, for they all did it. The case of the swill-milkmen is notorious. A committee of determined men, with good legal counsel, and the assistance of the police, certainly ought to be able to collect the necessary evidence and break up this nefarious trade.

If the consumers are too indifferent to their interests and the health of their children to attend to this matter, the honest producers should take it up in self-defence.

The following section from the Code could be applied to those who adulterate or dilute milk; but we believe there is as yet no State law on the swill-milk question:

Sec. 382 of Penal Code. "Every person who adulterates or dilutes any article of food, drink, drug, medicine, spirituous or malt liquors, or wine, or any article useful in compounding them, with a fraudulent intent to offer the same or cause or permit it to be offered for sale as unadulterated or undiluted, and every person who fraudulently sells, or keeps or offers for sale the same, as unadulterated or undiluted, is guilty of a misdemeanor.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

New York State Fair.

EDITORS PRESS:—The N. Y. State Fair was held at Rochester, on the grounds of the new Driving Park Association. They have spared no expense in arrangiug the buildings and fitting up their gronnds, baving expended $250,000 this season, completing all their buildings in a substantial manner. Tbe exhibition lasted from the 14th to the 18th, inclusive; the entries were larger in all departments, except fruit and flowers, where the quality was unexcelled, but not as full as wonld have been desired; doubtless exhibitors thought the competition would be great and so did not exhibit at all. Our local fruit and flower growers were out in fnll force, but found no competition from other parts of the state. Seth Green's tent filled with aquarinms, contaiuing fish of all sizes and varieties known to our waters, attracted more attention than any other feature. As a whole the show was fine and the attcudance good, but owing to some rainy weather the receipts were not quite as large as they have been some seasons.

The Western New York Fair was held at Rochester, alao, at the same time and consequently caused considerable strife. Its managers put their entrance fee 15 ceuts loss than usual and advertised races for each day Their attendance was therefore fully equal to the State fair, and their show of poultry, frnit and flowers quite as large as the oue at the State fair, but the other departments were not nearly so full uor of so good a quality; still it was a very creditable exhibition and the two brought a large number of people from all parts of the United States and Canada. Evening meetings were held by the State society, which were well attended and very interesting. At the last oue, September 17th, a speech was read by Hon. H. R. Williams, of Penn farm, on Experimental Farms; he was sent out by tbe N. Y. Farmers' Club to consult with the farmers of New York on the subject. The main features of his discourse was, however, an attack ou the Cornell University and its management. He did not believe that students taking a four years' course in a University could be induced to take hold of the practical duties of farm life, and without it the education would not fit them for farmers. He believed in an experimental farm supported by tho Goverument, with an able, practical man to superintend, to take the the students into the field and superintend their labor experimeuts, which should be carried out for generations and recorded for the benefit of the public.

President Wbite, of Cornell, and Professors Caldwell and Robbius of the same, were present and explained wbat they had done and were doing then. They claimed that it had beon very difficult to fiud men educated and fitted for sucb professors and teachers, that they had after six years succeeded in securing good men for the places named, and that they had experiments beiug made on a large scale, carefully recording each operation; that students were required to, and willingly did, aid and perform parts of all the work done on the farm until they were competent to do anything needed to be done, and tbat other students respected them as much as though they did not perform tbese operatious; in fact, that both students and professors generally sold for wbat they were worth. They offer froe scholarships to 500 students from the state, in any department they choose, and besides have this year spent $1,000 in advertising that all agricultural students will be admitted free. They reqnire all students to take a course of agricnltural lectures before graduating and receiving a diploma.

They claimed that the whole country was not prepared for a liberal agricultural education, and tbe most that could be doue for many yoars, would be to educate teachers. They do not have very large classes in agriculture, notwithstanding their efforts, other professions being more attractive to young men. Land is too cheap, and so productive tbat crops are grown and sold below cost of production in many cases—hence young men sought business that seemed to promise better returns; in time markets will be made nearer at bome and then farming will be more attractive. They were annually sending out great numbers of young men who had takeu otner conrses, but who had studied sciences bearing directly on agricultnre and this mnst exert great influence on this interest. Several gentlemen spoke of the advantage that the dairy interest had received from experiments made at Cornell, and thought it of course all tbat could be desired—only give them time, and they hoped for great results.

J B. JONES.

Rochester, N. Y., September 19th, 1874.

How shall we Dispose of our Surplus Fruit.

EDITORS PRESS:—Jndging from the amount of discussion which has been called up by the heading I have prefixed to this communication, the question as to how we shall dispose of our surplus fruit is, indeed, an important one. Without being more prolix than is demanded by the intricacy and bearing of the subject, I should like to trespass on your space far enough to throw out a few somewhat crnde suggestions to fruit growers.

This fruit question is becoming the paramount one to many of our farmers. Those who bave orchards and patches of small fruits already under cultivation are year by year growing more and more perplexed. While their own yields are more than satisfactory, both in quality and quantity of the product, their neighbors and competitors are no less favored; and, as the supply annually increases, so do the profits diminish. Witb cherries, plums, apricots, peaches and apples selling at one or two cents per pound, the margiu for profit is entirely removed, and, at the best, is so much cut down that only extremely early or choice varieties pay to raise for this market. Great quantities of really choice fruit have beeu allowed to go to rot this year, simply because prices realized would not cover the cost of picking, packing and transportation. When we look forward to the future we see no escape from the evil, for the increase in the production of fruit has always more than kept pace witb the growth of population; so that, if anything, the fruit bnsiness, as at present conducted, bids fair to grow more unprofitable year by year.

Let us see how we staud as a fruit-growing State. I think it may be safely said that California is, without exception, the true paradise of the fruit raiser, so far as a bounteous and perfect yield is concerued. As to the prolificacy of our soil, there can be no question; and if our peaches and other fruits grown on irrigated lands are considered watery, that is a fault which may be corrected, and, at all events, is in a measure offset by their unrivaled size, texture and general appearance. Our fruit is at least as perfect as our cereals, and the latter are shown to be unsurpassed by the the prices they command abroad. Bnt grain and wool growers have this advantage over fruit growers: From the comparatively imperishable nature of their products they are enabled to hold them for favorable terms, and, if these be not obtainable on the spot, to ship to the Eastern States or to Europe in search of a better market. It is true that, owing to improved facilities, California fruit in limited amounts is occasionally sent by rail eastward; but this course is a hazardous one, to say the least, and when we consider that from $1,500 to $3,000, according to destination, must be deducted as freightage per car load, little room for profit remains.

The remedy is obvious, aud has been put before our people so many times that it hardly needs repeating. We must dry our fruit in order to market it. Everyone thoroughly believes this, but how few act upon it. In some way or another, by some one of the many processes now offered, we must put our fruit in a condition which will enable it to be kept for an indefinite time, and sent on long voyages if necessary, so as to relieve ourselves of the overplus which now deadens the local trade, and obtain prices which shall prove remunerative to the producer. California fruit is admitted to be peculiarly adapted to dryiug. It is free from worms and blight and all the innumerablo drawbacks which injure fruit in the Atlautic States. But there is no occasion to waste words in proving this. Pecuniary success is the only test, and through that California fruit has come out triumphant.

Now what I wish to dwell upon is the method in which this fruit growers' millennium is to be brought about. It is evident that for the individual farmer to attempt to conduct a manufacturing busiuess would be poor policy. Such things can only be successfully accomplished by combination, centralization and division of labor. Even if each person attempting to carry on the business of drying fruit were for a brief period successful, there would soon be such a disparity in the quality of the product and so much of a poorly prepared article thrown on the market that the reputation of California dried fruit would be anything but enviable. And if for no other reason than that the general good in this case would be the only snre profit to the individual, the co-operative plan recommends itself. The dairymen of New York and other States were forced to it, and the result was the establishment of large factories on the co-operative plan, which now turn out cheese of a standard, uniform and excellent quality. Suppose that each of the fruit growers of a certain district were to carry their fruit, on specified contract terms, to a central factory of a size proportionate to the resources of tbe section in which it was located, and conducted by a skillful superintendent, of business capacity, whose attention should be solely devoted to this specialty. The consequence would be that the manufactured article would be of standard excellence, the farmers would be relieved of personal embarrassment and responsibility, and the profits would be vastly increased. Tne plan has been already tried, aud with success.

Further than this the State would evidently need a central depot and forwarding establishment, which should properly be located in San Francisco. This would act as a regulator to the whole business, and would afford a means of selecting and grading the products, and from which the manufactured article could be shipped East or elsewhere. By it prices would be regulated, or at least be made uniform, and to it merchants could send their orders for supplies in confidence that their purchases would turn out as represented. Such a house would have the power of controlling the trade so as to obtain the most favorable terms.

But this is not all. In addition to the dried fruit business, a profitable trade in fresh fruits might be established. Having factories here or in the country to rely upon, this fruit commission agency would be independent of the disadvantages attendant upon the bnsiness as we now find it. I will briefly sketch the plan I have in mind, believing thoroughly that it is the best mode which offers as a way out of our difficulties. Let the Grange Fruit Association or some such combination of responsible farmers start an agency in San Francisco, similar to the Grange Dairy Produce Agency, which has so well proved the merits of the system, though imperfectly developed. Shippers, having a direct pecuniary interest in the success of the undertaking, would reap whatever benefits accrued; for, in addition to the usnal profit on the sale of their frnit, they would receive all the profits of the business. To commence with, commissions, as in the Dairy Agency, would be less. Then there would be no danger of having false returns given, nor of having their fruit dnmped in the bay or sold to canners at a ruinous figure when the limited demand of the city was snpplied; for, if the state of the market did not warrant the sale of the fruit as fresh fruit, it could be turned over to the factories and would then be certain to bring good rates. As for the commission side of the business, prospects are equally promising. A large fruit house, snch as I have described, could make much better terms with jobbers and retailers, and so command the fruit trade. Tbe fruit would be sold to dealers on these conditions: They could take it and sell at a paying advance, or return it to the drying factories, if unsold, at a nominal disconnt. Any part which remained on their hands would thus be disposed of without the loss of a single bushel which was in good condition at the time of purchase. As tbe case now stands, retailers are forced to demand an enormous advance to cover the risk of having fruit decay on their stands. Under the proposed system, both parties, as well as consumers, would be gainers.

If the enterprise I have roughly sketched should be put into operation, it must be inaugnrated with caution and with every possible safeguard. None but thoroughly responsibble reliable men, those who are farmers and as such wholly and sincerely in the farmers' interest, should be in charge. Everything should be so bedged in that no injurious monopoly could ever grow out of the business, and so that the rights of each individual interested should be absolutely guaranteed in advance. Let our frnit raisers discnss this question in order that the plan may receive definite shape. With apologies for the large portion of your valuable space wbich I have occupied, I remain yours sincerely, A. W.

September 23d, 1874.

All About Coffee.

In the following we find some very useful hints on coffee. Only one thing we will add: Never use "ground, browned or prepared coffee," for there is room for deception.

Java coffee has a large, full yellow berry, but that of the Rio is smaller and of a greenish tinge. The differeuce in essential properties is derived from the difference in climate, that of Java retaining tho bean to ripen more perfectly than it is left to do in Brazil, where it is raised chiefly by unskilled slave labor. The best coffee for farmers is made by mixing the two—Java affords the most fragrance, and Rio the most stimulant and protection against chilliness and damps. Very much depends upon the parching of coffee. This should be done slowly at first to expel all the moisture, and rapidly at last, stirring it constantly so that it will he browned, and not burned in the least. When it has an oily appearance, and is of a light brown color, it should be removed at once from the fire and put in a close vessel.

We have tried a great many ways of making coffee pots; bnt for family use we have never found anything better than a good block tin pot, and the white of an egg to cleanse the beverage. We grind two tablespoonfuls to a person, put it into the pot, add the white of an egg and snfficient cold water to moisten the whole; stir it together and let it warm on the stove, and then ponr on boiling water and let it boil two or three minutes only, unless those who drink it have been exposed to cold or damp, or are anticipating snch exposnre. In that case it should remain over the fire fifteen or twenty minutes, long enongh to extract some of the bitter principle, which is of the nature of quinine in its effects on the system.

Coffee grounds should never be allowed to remain in tin, but should be poured out and the pot carefnlly cleansed as soon as it is used, else the flavor of the next beverage prepared in it will be impaired. Soft water is very much preferable to hard for making coffee, as the mineral salts in the latter often combine unpleasantly with the constituents of coffee, and give it an acrid taste. There is no good reason why our tables should be so frequently disgraced with mnddy, bitter, roily coffee, when a little care and skill can furnish a beverage aromatic, exhilarating and delightful.—*Ex.*

HORTICULTURE.

Flesh Diet for Plants.

The pretty little plant called *Drosera*, or sundew, says the Providence *Journal*, develops some strange animal instincts. It is a charming plant, with its lovely pink blossoms, while the dew-like substance issning from its glands gives it a most cool and refreshing appearance on a snmmer's day. But thongh it looks the very pictnre of innocence and gentleness, it has a strange taste for seizing, killing and snckiug the blood of insects, and for grasping and eating raw beef. Mrs. Mary Treat has contribnted to the *American Naturalist* some very curious observation made upon this remarkable point.

She found the specimens upon which she experimented in New Jersey. The plant was in fnll bloom, and growing very thickly on either side of an extensive cranberry plantation. The first experiment was made with the best known species, the *Drosera filiformis*. Some living flies wore pinned half an inch from the leaves, near the apex, about 10 o'clock in the morning. In forty minutes the leaves had bent perceptibly toward the flies. In two hours the leaves had reached the flies, and their legs were entangled among the bristles and hold fast. The flies were then removed three-qnarters of an inch further from the leaves. The leaves still remained bent toward the flies, but could not reach them at this distance. The observer thinks that the action of the flies' wings may have created sufficient force to briug tbe leaves near enough to entangle the flies, for dead flies failed to produce the same result as living ones.

On the same day bits of raw beef were placed on some of the most vigorous leaves of anotber species of the plant, the *Drosera longifolia*. In two hours two of tbe leaves had folded around the beef, hiding it from sight. Living flies were also placed upon the same species of the plant. In a little more than an hour one of the leaves had folded entirely around its victim, the other leaves had practically folded, and the flies had ceased to strnggle. Two houra later four leaves had each folded around a fly. The *Drosera* manifests a very decided choice in regard to its gustatory fancies. Experiments were made witb bits of dry chalk, magnesia and pebbles, but the plant would have nothing to do with them, and after twenty-four hours neither leaves nor bristles had made the slightest movement toward clasping these articles.

A similar result was produced upon the *Drosera rotundifolia*. This variety has longer bristles arounnd the edge of the leaf, and simply curls its bristles around its victims, the glands on the ends of the bristles tonching the substance like so many mouths receiving nourishment. Some bits of raw beef were placed upon the leaves about 10 o'clock in the morning. In two hours the inner bristles were curving about it, and the longer bristles at the edge of the leaf were curving upward. At nine o'clock in the evening the bristles of the three most vigorous leaves were clasping the beef, almost concealing it from sight.

Nor is this ferocious plant contented with small insects. Flies of the largest size, moths without number, aud butterflies, many of them measuring two inches across, were held captive till tbey died, the treacherons flowers and shining dew lnring them to destruction. The larger insects, after death, fell around the roots of the plants, as if to fertilize them, while the smaller flies remained adhering to the leaves. These curious plants thus seem to manifest a decided preference for meat diet, absorbing the animal substances through their leaves. Mr. Darwin says that by pricking a point in the leaf of *Drosera*, he can paralyze half of it, and this indicates the existence of nerves.

A CURIOUS PEACH TREE. — The *Rural Sun* says: John Coufman, living near the Narrows of Harpeth, Cheatham Co., Tenn., has a most singular peach tree. It bears three different kinds of peaches—soft, plnm and intermediate. This tree has never been grafted, but was procured from Ohio several years ago. It is a curiosity in ita way, and we can give no reason for its singnlarity. The tree, when set out, was a mere switch, and is now a large, thrifty tree, every limb of which bears the three kinds. We are assured by many gentlemen that the facts as stated are true.

SPEAKING of the celebration of the Fourth of July in Philadelphia, the correspondent of the *Iron Age* says: The Girard Avenne bridge, the widest bridge in the world, and probably as well built as any, was formally tnrned over to the city authorities and opened to the public. You have had several descriptions of this bridge, but I add again dimensions and cost: Total length, 1,000 ft.; total width, 100 ft.; nnmber and size of spans, two of 137 and three of 197 ft.; length of sidewalk, 865 ft.; number of piers, 4; abutments, 2; width of roadway, 67½ ft.; width of each sidewalk, 16½ ft.; greatest hight from roadway to rock foundation, 85 ft.; number of sqnare feet of surface, 100,000; cost per foot, $4.86. The total cost was $1,404,445, and, although less than a quarter of a mile long, the bridge contains as mnch material as is in a mile and a half of single-track railroad bridge of similar spans. A very attractive feature of the work is that each kind of material used is allowed to show what it is, iron not being treated to resemble stone, and color being applied only to distinguish parts.

Useful Information.

Treatment of Furs.

Mr. Jos. Tussaud communicates to the New York *Tribune* an original and effective plan devised by him for the preservation of furs. The attention of Mr. Tussaud was first called to the subject by his desire to transfer the hairs of fur-bearing or other animals to wax-figures without including the skin in which they grew. After numerous experiments he succeeded in accomplishing this and developing a new industry. The great object which he aimed to secure was the removal of the hair or fur from the natural to an artificial skin, obtaining thus a more perfect degree of preservation for any purpose whatever, while retaining the hairs in their original and natural relationship. For this purpose the piece of fur to be treated may be soaked in lime water or other suitable liquid, as practiced by tanners, for the purpose of loosening the adhesion of the hair. It is then to be washed in water, and hung up for a time to dry off the excess of moisture. It is then laid on a board, with the hair side up, and a solution of glue applied by means of a brush, taking care not to disturb the natural position and relation of the hairs. The size or glue is then allowed to harden, when it will hold the fibers very firmly. The natural skin may then be pulled entirely off from the hairs, leaving their ends exposed, which may then be washed by some substance to free them entirely from adherent fat, bulbs, etc., and properly poisoned. An artificial skin is next to be affixed, by applying India rubber, gutta percha, boiled drying oils, or other water-proof substances, over the roots of the hairs, and allowed to dry, so as to form a continuous membranc; after which, all that is necessary is to again soak the skins in warm water for a time, to dissolve out all the glue, and the new fabric is produced in its completed condition. To render the rubber or gutta percha more lasting, it may be combined with sulphur, so as to vulcanize it, for which purpose a solution of chloride or hypochloride of sulphur in bisulphuret of carbon may be employed. In using hisulphuret of carbon, 40 parts of the same are to be added to one part of chloride or hypochloride of sulphur, prepared as neutral as possible, and the solution is then allowed to remain in contact with the artificial skin of rubber or gutta percha for a longer or shorter time, a minute being sufficient for a thin sheet. This operation must be completed, of course, before immersing in warm water to remove the glue which produces the adhesion of the hairs. One great advantage of this process consists in the fact that fabrics thus prepared are moth-proof, and it is suggested that for many purposes, such as the construction of rugs, mats, etc., they must be superior to the natural skin. In the case of heavy skins, the artificial preparation is much lighter, more pliable, and better in every respect. Several of these artificial skins may be combined so as to form one, or they may be modified in any manner desirable. When properly made, the preparation is entirely free from any smell, and especially the animal odor, which is so offensive in many furs.

Back Yards.

The *Rural New Yorker* has a very sensible article on the general untidiness of the rear of the average American houses: Take the prettiest and best kept village of New England, and we doubt if a tenth part of even the most pretentious mansions and the most ornate cottages will bear examination in the rear. Instead of being nicely finished in all their petty domestic details and conveniences, and kept snug and trig, with trim grass-plots, with all the subordinate aveuues and garden approaches well-graveled, clean-swept and free of refuse, and everything wholesome and orderly, there is apt to be a look of general untidiness, as if all the residual rubbish of years had been dumped therein. Not unfrequently a railroad runs its track in such a manner as to expose the rear of plenty of houses to the eye of the traveler over it—whose sense of neatness is offended by sqnare rods of back-yard lumbered up with every conceivable variety of second-hand, damaged and invalid articles known to domestic use, from a horse-cart disabled by broken thills and wrecked wheels, to the ghost of the baby-carriage which survives two generations of children; interspersed with smashed crockery, rnsty and condemned tinware, old boots, sardine boxes, disabled junk bottles, hoop skirts which would have outlived all usefulness if they had ever had any, chips, burdock, mullein, ashes, half-burned lumps of wasted coal, and all imaginable litter, trash, debris and dirt. On the other hand, nothing is prettier than a cottage which is thoroughly well-kept in the rear as well as its more public portion. It seems inevitably redolent of a purer, sweeter, happier domestic life than one with heaps of festering rubbish crowding hard upon it.

A company has been formed to work the sulphur deposits at White Island, a marine volcano 140 miles from Auckland, a description of which, communicated by M. Morhange, appeared in the Press some time since. It is estimated that 100,000 tons of sulphur in an almost pnre state are lying on the island ready for shipment. The *Journal of the Society of Arts* says that chemical works are likely to be established soon, and the island leased.

Professor Bache, in his coast survey reports, mentioned that the tides of the United States are divisible into three distinct classes. Those on the Atlantic coast are of the ordinary type, ebbing and flowing twice in 24 hours, and having but moderate differences in hight between two successive high or low waters, one occurring before and the other after noon. Those on the Pacific coast also ebb and flow twice in 24 hours, but the morning and the evening tides vary considerable in hight. The intervals also between successive high and low waters may be very unequal. The irregularities are due to the moon's declination, as, when the moon travels to the north of the equator, the vertex of the tide wave follows her, giving the highest point of one tide in the northern, and the highest point of the opposite tide in the southern hemisphere. Hence, when the moon is in northern declination, the tide at any place in the northern hemisphere caused by her upper transit will be higher than that caused by her lower transit. This variation in the hights is called the diurnal irregularity, and has a period of one lunar day.

Silvering and Gilding Iron.—S. L. Delatot, of Paris, has taken a patent for plating iron with silver and gold without previously copper plating. The iron is fused with 1.2 per cent. nickel and 1.20 per cent. manganese. Such iron is immersed in water containing 1 per cent. slaked lime, and is immediately, without drying, put into the silver or gold solution. The former is prepared by dissolving ⅓ part of nitrate or chloride of silver, 2 parts bicarbonate of soda, and ⅜ part cyanide of potassium o sod um, in 100 parts of water, and adding ar few drops of prussic acid solution. The gold solution is made up of 100 parts of water, 1-64 part chloride of gold, 4½ parts bicarbonate of soda, 1½ parts pyrophosphate of soda, 1-16 part cyanide of soda, and a very little prussic acid. The ordinary electro-galvanic process is employed.

An extraordinary account has appeared in a French agricultural journal, to the effect that straw forms admirable lightning conductors. It had been observed that straw had the property of discharging Leyden jars without spark or explosion, and some one in the neighborhood of Tarbes had the idea of constructing straw lightning conductors, which were formed by fastening a wisp or rope of straw to a deal stick by means of brass wire, and capping the conductor with a copper point. It is asserted that the experiment has been tried on a large scale around Tarbes, 18 communes having been provided with such straw conductors, only one being erected for every 60 arpeuts, or 750 acres, and that the whole neighborhood has thus been preserved from the effects, not only of lightning, but of hail also.

The curators of the Anatomical Museum of the *Jardin des Plantes*, in Paris, have found that spirits of turpentine is very efficacious in removing the disagreeable odour and fatty emanations of bones or ivory, while it leaves them beautifully bleached. The articles should be exposed in the fluid for three or four days in the sun, or a little longer, if in the shade. They should rest npon strips of zinc, so as to be a fraction of an inch above the oottom of the glass vessel employed. The turpentine acts as an oxidizing agent, and the product of the combination is an acid liquor which sinks to the bottom, and strongly attacks the bones, if they be allowed to touch it. The action of the turpentine is not confined to bones and ivory, but extends to wood of various varieties, especially beech, maple, elm and cork.

Heat of the Sun.—Father Secchi has published in Rome the result of his investigations in the solar temperature, made during last summer, and states that his efforts were directed toward the determination of the relation of the solar radiation with that of the electric light. The instrument used was a thermoheliometer of the investigator's own invention, and the conclusion reached was that the radiation of the sun would be 96½ times that of the carbon points. If, therefore, the temperature of the surface of the latter is fixed at 5,432 degrees of Fahrenheit, a number not exaggerated, and supposing the radiation proportional to the temperature, we obtain for the potential temperature of the sun 540,848 degrees Fahrenheit.

Spontaneous Combustion of Wool.—The Press recently contalned an item clipped from an English exchange, which might he likely to mislead readers if left uncorrected. We are now informed by Mr. J. R. Woods that the ship "Red Jacket," of the Liverpool and Melbourne line, was set on fire from this cause, and that the "King of Italy," formerly the "Augusta Wattenbach," while on the voyage from Australia to England, was entirely destroyed by spontaneous combustion of wool on board. Our correspondent adds that other cases could be cited.

Testing Dampness.—The editor of the *Scientific American*, in answer to a correspondent, says: The easiest way to test for moisture in a cellar will be to provide yourself with a thermometer, a glass tumbler filled with water, and a piece of ice; then notice how low the thermometer, when placed in the tumbler, has to sink before any moistnre begins to show itself on the outside of the vessel of cold water. The lower the temperature to which the thermometer has to sink before moisture is precipitated, the less there is of it in the moistnre of the cellar.

The Dairy.

Forage in Drought.

From Kingston westward we have had the usual summer drought, so trying to stock of all kinds, but especially to milk cows. In some places the pastures have been completely burned up, losing all tinge of green. The county of Wellington has suffered to a greater extent than usual. In the vicinity of Guelph the commons have worn a yellowish, rusty look, and the short, withered grass has cracked and rustled under foot, so crisp had it become with the combined action of heat and drought.

And yet, though this condition of things has become periodical if not chronic, the mass of our farmers make no provision against it, and are annually taken short, and astonished that their fields yield no forage. Are they ignorant of the fact that nature has provided a plant well suited to this climate, and exactly adapted to carry the herds through the emergency created by the dry season? Have they never heard of the high merits of Indian corn as a summer forage crop? Able to hold its own, and to flourish when other forest plants wilt down and die, full of succulent juices, yielding enormously to the acre, what more or better could be desired as a resource when all other green things fail? It is, we fear, less ignorance than prejudice which deters multitudes from the cultivation of this valuable crop. Farmers in the Ould Country never grew it. Moreover, it is a Yankee affair. Not a few who have got over all prejudice against "Yankee notions" in the shape of reapers and mowers, hoes and hay rakes, still stand in their own light as to the valuable product under consideration.

We have traveled for miles and milos the present summer through districts utterly parched with drought, without seeing a single acre, half or quarter acre of green corn waving its dignified defiance to the brazen sky and the burning sun. Now that the effects of the hard "dry spell" are fresh in memory, is a good time for us to urge and for our readers to feel the importance of having a patch of corn another year. We beg every farmer to try it, even on ever so small a scale. Choose a bit of the richest land on the farm. Sow it broadcast, after danger of spring frost is over, or, still better, drill it with Indian corn of the horse-tooth variety. Then when in August next the pastures are dry and withered, the milk-pail deficient, and the cattle hollow-sided, fancy what a treasure a corn-patch covered eight or ten feet high with sweet, rich, jucy feed will be. This forage crop is easily raised. It wants no attention. The dense shade it makes will smother down all weeds. It draws largely on the atmosphere for sustenance, and therefore does not impoverish the land, which it leaves moist and mellow, fit for any subsequent tillage and succeeding crop. We say to all, do not let another drought catch you without a good plot of green corn in reserve for such a time of need as has just been experienced.—*Canada Farmer.*

Caked Udder in Cows.—Cows coming in at this season of the year are very liable to be troubled with caked udder unless milked before the calf is dropped and receiving the best of care after. We have found washing the bag with warm soap suds, and then giving it a good dressing with raw linseed oil, an excellent remedy for inflamed udder, indeed the best we have ever tried. After bathing and rubbing thoroughly, wipe the bag dry before applying the oil. Milk three or four times a day if convenient, all that can be obtained.—*Ohio Farmer.*

Calves.—Dairymen are more and more adopting the plan of raising their own heifers to supply the place of the cows turned off yearly. These heifer calves should be well kept that they may be fitted to take their place in the dairy at two years old. We believe that a majority of dairymen prefer a cow, at four years old, that comes in at two years, to one that comes in at three. But when calves are kept scantily they cannot develop sufficiently to become milkers at two years; and then a year's time and a year's feed are lost to make up for this deficient early feeding. Keep your calves on full feed; do not depend on scanty grass. Give one pound of ground oats or barley with one-half pound of oil-meal to each calf per day, with skim milk or whey.—*Live Stock Journal.*

A new enterprise in gun-making is in progress at the Springfield armory, Mr. James Lee, of Milwaukee, having secured from Congress at appropriation of $10,000 for the manufacture of guns upon his model, for experiment in the field. Mr. Lee's gun was before the small arms examiners in Springfield a year and a half ago, and stood all the tests to the one of excessive charges, when a piece of mechanicism broke. Mr. Lee promptly remedied the difficulty, however, and taking his gun to Congress last winter so satisfied the Military Committee upon its merits as to secure from them an appropriation of $10,000 for its trial. The gun in question is of extraordinary simplicity in construction, having ouly fourteen pieces in its make-up. These few pieces are so novel in arrangement that seventeen patentable claims are made upon them. There are only one screw and two springs in the gun, which can be fired thirty-one times a minnte. Mr. Lee considers it the strongest, simplest and safest gun in the world, and intends to patent it in England for competition with the Martini-Henry rifle.

Bees.

How to Secure Bees from Trees.

Having saved many a swarm from trees without the loss of one, I would say leave your bees in the tree until the bees get well at work in the spring. Then take a movable comb hive, start soon enough to get through before the middle of the afternoon, on a pleasant day, cut the tree. If the bees are in the body of the tree, and it breaks up, save all brood comb; cut them in square pieces to fit in frames close; tie them in with twine wrapped around frames and combs; put in the pieces all right side up; save all good worker combs. When the combs are all in the hive with honey enough to feed the bees while they can work for themselves, place the hive over the bees, wherever they they cluster, or if they should collect on a tree, proceed same as to hive a natural swarm. The bees will soon go into the hive. If they are near home, leave them over night. They will be all in by dark. If they are far from home, they will be mostly in by the time the hive can be got ready to move. There will not be much loss by the bees absent from the tree after honey, as they are rarely gone over thirty to sixty minutes.

If bees are in the limb of a tree, as it is often the case, the limb can be sawed off and lowered carefully down to the ground with ropes, and moved without damage to the swarm. In this case it is best to take a time when the bees are all on the hive, either in winter or in summer. Place them in the same position as they were attached to the tree and transfer at leisure. They will go to work as well as ever.—*Cor. National Bee Journal.*

Robbing.

Just before going to press we received the following:

"My bees are robbing now, right in the hight of fruit bloom; have tried several methods given in the *Magazine*, but failed to stop them. Is it common for them to rob at this season?"

J. C. N.

It is an unusual occurrence, and we think you must have been opening your stocks when honey was scarce, or exposed sweets which started robbing before the bees began to gather from fruit blossoms.

Sprinkle a little flour on the robbers to learn their home, and if in your own apiary, open their hive and trim some of the combs containing sealed honey, letting the capping drop down among the bees. Contract the entrance of the stock that is troubled with robbers, and fit a board to the entrance half an inch above the alighting board. If the bees are made to pass several inches through a dark passage, robbers will not enter, unless they have been in that hive before. It is sometimes necessary to remove a hive to the cellar for a day or two, and set a clean empty hive with entrance open, in its place, so that the robbers will suppose their spoil is gone, and not notice the weak stock when returned.—*Bee Keeper's Magazine.*

Mice Cleaning Combs.—The practice of giving combs, to be cleared of dead bees by mice, has been practiced in frame for more than 50 years. It is good only for those who own the old gums or boxes. As the owner of these immovable hives cannot take out combs, if he wants to preserve some hives full of combs, he has to clean them, to prevent moulding, and mice can do that work for him. But the cleanliness of this process is doubtful; wherever mice have access, they impregnate the things around with their special scent, which is far from being agreeable; besides, they eat not only the dead bees but the combs also. There is for us, owners of movable comb hives, a better way to clean our combs; it is to introduce them in a May colony, between two combs full of brood. The next day all dead bees are removed, and the comb is scented anew with the odor of living bees.—*Cor. Am. Bee Jour.*

Extracted Honey.—Extracted honey possesses a delicious flavor, and can be eaten without fear of sickness. Eating the comb will produce sickness; bees never eat it, and physicians say there would be as much propriety in drinking ale from a bottle and then eating the bottle, as to eat honey and comb also.—*J. Carroll, in Queenslander.*

Pollen Deposits.—Watching the operation of a swarm has proven that the bees do not deposit in the cells all the pollen they gather. Many of the pellets are taken from the gatherers as they return with laden thighs, and are at once consumed by the greedy workers, to qualify themselves for secreting wax or preparing food for the older larvæ.

Temperature of the Earth.—Most of the observations have been made with self-registering thermometers, protected from pressure in the borings by being each enclosed in a hermetically sealed glass tube. The average result thus far is that the temperature increased at the rate of 1° Fah. in every 50 ft. or 60 ft. in depth, but in one or two instances in different countries a considerably slower rate was obtained.

The engraved cylinders for calico printing are required to be of pure copper, and their unsoundness, when cast in the usual way, was found to be so serious an evil that it gave rise to casting the metal under pressure.

Patrons of Husbandry.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well as Treasurer's reports.

J. M. Hamilton.

State Grange Agency.

Patrons will please take notice that Bro. I. G. Gardner, State Grange Agent, the Farmers' Mutual Fire Insurance Company and the State Grange Secretary, Bro. W. H. Baxter, have removed to No. 6 Leidesdorff street, south side California street, next to Merchants' Exchange—rear of Grangers' Bank of California (415 California street). sep5-tf

To Wool and Potato Growers.

All Subordinate Granges which are interested in raising Potatoes and Wool, are requested to elect two delegates to meet in convention, October 14th, at 10 o'clock A. M., in San Francisco, for the purpose of organizing Associations in the above interests.

W. H. Baxter,
sep26-td Sec'y State Grange.

List of Organizing Deputies.

County.	Deputy.	Post Office.
Alameda.	A. T. Dewey.	Oakland or San F'co.
Butte.	Wm. M. Thorpe.	Chico.
Butte.	G. W. Colby.	Nord.
Colusa.	J. J. Hicok.	Grand Island.
Contra Costa.	R. G. Dean.	Antioch.
Inyo.	T. J. Furbee.	Bishop's Creek, Inyo.
Lake.	H. A. Oliver.	Gucnoc.
Los Angeles.	Thos. A. Garey.	Los Angeles.
Merced.	H. B. Jolley.	Merced City.
Mono.	T. J. Furbee.	Bishop's Creek, Inyo.
Monterey.	J. D. Fowler.	Hollister.
Modoc.	I. S. Mathews.	Fort Jones.
Placer.	A. D. Neher.	Roseville.
Sacramento.	W. S. Manlove.	Sacramento.
San Francisco.	I. G. Gardner.	
San Joaquin.	A. Wolf.	Stockton.
San Luis Obispo.	A. J. Mothershead.	Moro.
Santa Clara.	G. W. Henning.	San Jose.
Shasta.	J. T. Dinsmore.	Reading.
Siskiyou.	I. S. Mathews.	Fort Jones.
Solano.	R. C. Haile.	Suisun.
Solano.	J. C. Merryfield.	Dixon.
Sonoma.	Geo. W. Davis.	Santa Rosa.
Sonoma.	A. B. Nally.	Windsor.
Sonoma.	T. H. Merry.	Healdsburg
Stanislaus.	J. D. Spencer.	Modesto.
Tulare.	M. S. Babcock.	Kingston, Fresno Co.
Santa Barbara.	O. L. Abbott.	Santa Barbara.
General Deputies.		
Lake.	J. M. Hamilton, (W. M.)	Guenoc.
Fresno.	J. W. A. Wright, (W. L.)	Borden.
San Francisco.	W. H. Baxter, (W. S.)	6 Liedesdorff St.
Solano.	John B Carrington,	Denverton.
San Francisco.	John H. Hegler.	
NEVADA.		
.....	A. J. Hatch,	Reno.

Farmers desiring to organize Granges, can apply to J. M. Hamilton, (W. Master), Guenoc, Lake Co.; W. H. Baxter, (W. Sec'y), No. 6 Leidesdorff St., S. F.; J. W. A. Wright, (W. Lecturer), Borden, Fresno Co.; or to the nearest Deputy to their locality.

California District and County Councils.

ALAMEDA COUNTY—Joel Russell, Haywood, M.; T. Hellar, S.
LOS ANGELES AND SAN BERNARDINO DISTRICT—T. A. Garey, Los Angeles, M.; J. F. Marquis, Anaheim, S.
MONTEREY AND SANTA CRUZ DISTRICT—J. R. Hebbron, M.; A. F. Richardson, S.
NAPA DISTRICT—J. D. Blanchar, M.; H. W. Haskell, S.
SACRAMENTO, EL DORADO AND PLACER DISTRICT—Officers not reported.
SAN LUIS OBISPO COUNTY—A. J. Mothershead, M.; J. M Mannon, S.
SANTA CLARA COUNTY—H. M. Leonard, M.; I. A. Wilcox, S. Regular meetings every three months, alternately at Santa Clara and San Jose.
SANTA BARBARA AND SAN LUIS OBISPO DISTRICT—Officers not reported.
SOLANO COUNTY—J. B. Carbington, M.; J. M. Jones, S.
SONOMA COUNTY— McPherson, M.; J. A. O'Brien, S.
STANISLAUS COUNTY—R. R. Warder, M.; Vital E. Bangs, S.
TULARE COUNTY—J. M. Graves, M.; F. L. Jeffedds, S.
VENTURA COUNTY COUNCIL.—Milton Wason, M.; E. B. Higgins, Saticoy, Sec'y.
WEST SAN JOAQUIN DISTRICT, (Merced, San Joaquin and Stanislaus counties).—W. J. Miller Oristimba, M.; Thomas A. Chapman, Oristimba, S.

California State Grange.

OFFICERS:

Master—J. M. HAMILTON, Guenoc, Lake Co.
Overseer—O. L. ABBOTT, Santa Barbara.
Lecturer—J. W. A. WRIGHT, Borden, Fresno Co.
Steward—N. L. ALLEN, Salinas, Monterey Co.
Assistant Steward—WM. M. JACKSON, Woodland, Yolo Co
Chaplain—I. G. GARDNER, Grayson.
Treasurer—W. A. FISHER, Napa City, Napa Co.
Secretary—W. H. BAXTER, 320 California street, S. F.
Gate Keeper—R. K. WARDER, Waterford, Stanislaus Co
Ceres—MRS. G. W. DAVIS, Santa Rosa, Sonoma Co.
Pomona—MRS. S. C. BAXTER, Napa City, Napa Co,
Flora—MRS. R. S. HEGLER, Bodega, Soooma Co.
Lady Assistant Steward—Mrs. S. M. GARDNER, Grayson Stanislaus Co.

Executive Committee:

J. M. HAMILTON, W. M., Chairman, of Guenoc, Lake Co
I. G. GARDNER, Grayson, Stanislaus Co.
J. C. MERRYFIELD, Dixon, Solano Co.
H. B. JOLLEY, Merced, Merced Co.
THOS. A. GAREY, Los Angeles, Los Angeles Co.
G. W. COLBY, Nord, Butte Co.
A. B. NALLY, Windsor, Sonoma Co.

California Subordinate Granges.

[This list contains the names of Masters and Secretaries so far as reported to us, elected to serve during the year 1874. Secretaries and others will greatly oblige us by making needful corrections:]

ALAMEDA COUNTY.

CENTERVILLE, Cent.: Jas. Shinn, M.; J. L. Beard, S.
EDEN, Hayward's: Thos. Hellar, M.; Wm. Pearce, S.
HAMILTON, Biggs' Station: H. L. Lasselle-M. A. Randall.
LIVERMORE, Liv. Valley: D. Inman-F. R. Fassett.
SUNOL, Sunol Stat'n: E. M. Carr, M.; S. W. Millard, S.
TEMESCAL, Oakland: E. S. Carr, M.; John Collins, S.

BUTTE COUNTY.

CHICO, Chico: E. Hallett, M.; H. W. Barnes, S.
EVENING STAR, Bigg's Station: E. W. S Woods, M.; C. F. Butler, S.
NORD, P. O. Nord: G. W. Colby, M.; Peter Kern, S.

CALAVERAS COUNTY.

CALAVERAS, Jenny Lind: M. F. Gregory-A. Miles.

COLUSA COUNTY.

ANTELOPE VALLEY: H. A. Logan-A. T. Welton.
CENTER, Colusa: J. P. Kimbrell-W. G. Saunders.
COLUSA, Colusa: W. K. Estell, M.; R. Jones, S.
FRESHWATER, Colusa: P. S. Pendle-R. A. Wilsey.
FUNK SLOUGH, Colusa: E. C. Hunter-J. G. Wolfe.
GRAND ISLAND: Wm. Ogden, M.; J. H. Duffield, S.
NEWVILLE: B. N. Scribner, M.; S. Osborne, S.
PLAZA, Jacinto: F. C. Graves, M.; M. Kendrick, S.
PRINCETON, Princeton: A. D. Logan, M.; R. R. Rush, S.
SPRING VALLEY: D. H. Arnold, M.; L. T. Hayman, S.
UNION, Princeton: J. F. Gage, M.; W. W. Dollings, S.
WILLOWS, Princeton: J. W. Zumwalt-G. T. Hicklin.

CONTRA COSTA COUNTY.

ALHAMBRA, Martinos: John Strenzell-W. A. Frazer
ANTIOCH, Antioch: M. A. Walton, M.; J. D. Darby, S.
DANVILLE, Danville: C. Wood, M.; John B. Sydnor, S
POINT OF TIMBER: R. G. Dean, M.; J. E. W. Carey, S.
WALNUT CREEK, Walnut Creek: Nathaniel Jones, M.; Wm. K. Daly, S.

EL DORADO COUNTY.

CLARKSVILLE, Clarksville: K. T. Mills-I. Maltby.
EL DORADO, El Dorado: C. G. Carpenter, M.; J. M B. Weatherway, S.
PILOT HILL, Pilot Hill: P. D Brown-A. J. Bayley.
SUTTER MILL, Coloma: A. J. Christie-Henry Mahler

FRESNO COUNTY.

ADAMS, Big Dry Creek: T. P. Nelson, M.; T. Wyatt, S.
BORDEN, B'den: J. W. A. Wright, M.; J. Fontaine, S.
FRESNO, Fresno City: D. C. Libby, M.; F. Dusy, S.
GARRETSON, King's River: W. J. Hutchinson, M.; W. W. Phillips, S.
RISING STAR, Panochi: Caloni Valpez-W. M. Pouge.
SYCAMORE: A. C. Bradford, M.; J. A. Allen, S.

HUMBOLDT COUNTY.

ELK RIVER, Eureka: Theodore Meyer, M.; D. A. De-Merritt, S.
FERNDALE, F'ndale: F. Z. Boynton-J. A. Davenpobt.
KIWELAITAH, Arcata: H. W. Arbogast, M.; C. Daniels, S.
MATTOLE, Petrolia; S. Goff, M.; D. J. Johnson, S.
ROHNERVILLE, R'nerville: H. S Case-S. Strong.
TABLE BLUFF: J. Sawyer, M.; B. H. C. Pollard, S.

INYO COUNTY.

BISHOP'S CREEK: T. J. Furbee, M.; W. T. Wiswall, S.
INDEPENDENCE: Josiah Earl, M.; J. B. White, S.
LONE PINE: C. L. Jackson, M.; R. A. Loomis, S.

KERN COUNTY.

BAKERSFIELD: S Jewett, M.; Jerome Troy, S.
CUMMINGS' VALLEY, Tehaichipa: Geo. W. Thompson, M.; T. M. Yates, S.
LINN'S VALLEY, Glenville: A. B. Du Bbutz, M.; S. E. Reed, S.
NEW RIVER, Bakersfield: J. G. Dawes, M.; J. Dixon, S.
PANAMA, Bakersfield: H. D. Robb, M.; J. F. Gordon, S.
RISING STAR, Panoche: O. Valpey-J. W. Craycroft.
TEHAICHIPA, Tehach'pa: J. Norboe, M.; J. Prewett, S.
WELDON, Weldon: R. T. Melvin, M.; J. T. H. Gray, S.

LAKE COUNTY.

GUENOC, Guenoc: H. A. Oliver, M.; A. A. Ritchie, S.
KELSEYVILLE: D. P. Shattuck, M.; T. Ormiston, S.
LAKEPORT, Lakeport: C. Cutler, M.; N. Phelan, S.
LOWER LAKE, Lower Lake: A. E. Noel-G. H. Snow.
UPPER LAKE: D. V. Thompson, M.; D. Q. McCarty, S.

LOS ANGELES COUNTY.

ALLIANCE, El Monte: S. S. Reeves-J. W. Marshall.
AZUSA, El Monte: W. W. Maxey, M.; J. C. Preston, S.
COMPTON, C'pton: C. W. Cottren, M.; A. F. Cottren, S.
EL MONTE, Los Angeles: G. C. Gibbs-J. H. Gray.
ENTERPRISE, Los Angeles: A. M. Southworth, M.; W. T. Henderson, S.
EUREKA, Spadra: C. Burdick, M.; P. G. Tonner, S.
FAIRVIEW, Anaheim: E. Evey, M.; J. M. Guinn, S.
FLORENCE, Los Angeles: J. Russell, M.; W. Porter, S.
FRUITLAND, S'ta. Ana: N. O Stafford-G. L. Russell.
LOS ANGELES: T. A. Garey, M.; T. D. Hancock, S.
LOS NIETOS: J. F. Marquis, M.; W. S. Reavis, S.
NEW RIVER, L. Nietos: W. Newton, M.; S. G. Baker, S.
ORANGE, Orange: J. Beach, M.; J W. Anderson, S.
SILVER, Los Nietos: H. L. Montoomery, M.; W. P. McDonald, S.
SPADRA, Spadra: A. T. Currier, M.; Jos. Wright, S.
VINELAND, Tustin City: Dr. A. B. Haywood, M.; R. L. Freeman, S.
WESTMINISTER, Anah'm: M. B. Craig-W. F. Poor.

MARIN COUNTY.

NICASIO, Nicasio: H. F. Taft, M.; J. W. Noble, S.
POINT REYES: N. H. Stinson, M.; A. H. Stinson, S.
TOMALES: Wm Vandebbilt, M.; R. H. Prince, S.

MENDOCINO COUNTY.

CAHTO, Cahto: R. M. Wilson, M.; J. P. Simpson, S.
LITTLE LAKE: B. G. Mast, M.; W. A. Wright, S.
MANCHESTER: Joseph Wooden, M.; B. F. McClube, S.
POMO, Pomo: J. Mewhinney, M.; Geo. B. Nichols, S.
POTTER VALLEY: L. A. Preston, M.; Mrs. A. H. Slingerland, S.
ROUND VALLEY, Covelo: P. Handy-J. A. Crawford.
SANEL, Sanel: Alex. Marshall, M.; Jos. A. Knox, S.
UKIAH: W. D. White, M.; G. McCowen, S.

MERCED COUNTY.

BADGER FLAT, Kreyenhagen's: A. P. Merritt, M.; A. F. Fowler, S.
COTTONWOOD: J. L. Crittenden, M.; J. M Daley, S.
HOPETON, Hopeton: John Ruddle, M.; T. Eagleson, S.
LOS BANOS, Kreyenhagen's: Wm. M. Viney, M.; A. McGlashan, S.
MERCED: W. E. Elliot, M.; F. E. Tadlock, Jr., S.
PLAINSBURG: P. Y. Welch, M.; T. J. P. Wilcox, S.
SNELLING, Snelling: D. Yeiser. M.; W. L. Hamlin, S

MONTEREY COUNTY.

HOLLISTER: M. Pomeroy, M.; Wm. H. Oliver, S.
MORNING STAR, Castroville: C. E. Williams, M.; F. Blakie, S.
PALARO, P. O. Watsonville, Santa Cruz Co.: D. M. Clough, M.; G. W. Roadhouse, S.
SALINAS: O. S. Abbott, M; Clara Westlake, S.

NAPA COUNTY.

BERRYESSA, Monticello: J. W. Smittle-O. Schetter.
CALISTOGA, Calistoga: J. N. Bennett-L. H. Hopkins.
NAPA, Napa City: J. M. Thompson, M.; Manuel Eyre, S.
POPE VALLEY: J. A. Van Absdale, M.; O. A. Booth, S.
RUTHERFORD, Yountville: G. S. Bubrege-H. W. Crabb.
ST. HELENA: J. Llewellyn, M.; J. L. Edwards, S.
YOUNTVILLE: J. M. Mayfield, M.; Frank Griffin, S.

PLACER COUNTY.

LINCOLN: M. Waldron, M.; J. S. Marriner, S.
ROSEVILLE, Roseville: A. D. Nehr, M.; I. N. Nehr, S.
SHERIDAN, Sheridan: D. H. Long, M.; S. J. Lewis, S.

SACRAMENTO COUNTY.

AMERICAN RIVER, Patterson: E. G. Morton, Sr., M.; Cyrus Wilson, S.
COSUMNES, Shaldon: J. A. Elder, M.; J. H. Atkins, S.
ELK GROVE: Obadiah S. Freeman, M.; Delos Gage, S.
ENTERPRISE, Brighton: J. M. Bell, M.; M. Toomey, S.
FLORIN: Caleb Arnold, M.; Wm Scholefield, S.
FRANKLIN: Amos Adams, M.; P. R. Beckley, S.
GALT, Galt: J. C. Sawyer, M.; J. L. Fifield, S.
GEORGIANA, Rio Vista: F. M. Kittrell-G. A. Knott.
SACRAMENTO: W. S. Manlove, M.; A. S. Greenlaw, S.
SHERMAN ISLAND, Emmaton: J. M. Upham, M.; W. M. Robbins, S.
WALNUT GROVE: Solomon Runyon-J. V. Prather.

SAN BENITO COUNTY.

MOUNTAIN, San Benito: S. Kennedy-J. W. Mathews

SAN BERNARDINO COUNTY.

RINCON, Rincon: F. M. Slaughter-John Taylor.
RIVERSIDE, Riverside: E. G. Brown-G. W. Garcelon.
SAN BERNARDINO, San Bernardino: R. Shelton, M.; J. Brodhurst, S.

SAN JOAQUIN COUNTY.

ATLANTA, Morano: W. J. Campbell-Mrs. J. W. Moore.
CASTORIA, Lathrop: H. W. Cowell, M.; J. Strahan, S.
COLLEGEVILLE, Col'ville: A. Mayberry-J. C. McIntosh.
ELLIOT, Elliot: Henry H. West, M.; N. S. Misener, S.
FARMINGTON, Farmington: J. M. Groves-E. O. Long.
LIBERTY, Acampo: Justus Schomp, M.; J. J. Emslie, S.
LINDEN, Linden: John Wasley, M.; James Wasley, S.
LOCKEFORD, Lockeford: G. C. Holman-S. S. Stewart.
LODI, Lodi: J. W. Kearny, M.; Mrs. N. Obouch, S.
RUSTIC, Lathrop: J. A. Shepherd, M.; H. Moore, S.
STOCKTON, Stockton: W. L. Overhiser-W. G. Phelps.
WASHINGTON: W. B. Stamper, M., Comanche, Calaveras Co.; M. L. Cook, S.
WEST SAN JOAQUIN, Ellis: M. Lammers-G. E. McStay.
WILDWOOD, Wildwood School House: Jos. Leighton, M.; A. B. Munson, S.
WOODBRIDGE, Woodbri'ge: J. L. Hutson-A. S. Thomas

SAN LUIS OBISPO COUNTY.

ARROYO GRANDE, Arroyo Grande: W. H. Nelson, M.; D. F. Newsom, S.
CAMBRIA, Cambria: C. H. Ivins, M.; H. Olmstead, S.
MORO CITY, Moro: A. J. Mothershead-H. Y. Stanley.
OLD CREEK, Old Creek: Isaac Flood-R. M. Preston.
PASO ROBLES, Paso Robles: H. W. Rhyne-J. P. Moody
SAN LUIS OBISPO, San Luis Obispo: Wm. Jackson, M.; E. L. Reed, S.
SUMMIT, San Miscos: J. V. N. Young-A. T. Foster.

SAN MATEO COUNTY.

CRESCENT: H. M. Jewell, M.; James Compton, S. Half Moon Bay.
LA HONDA, La Honda: M. Woodhams, M.; W. A. Saundebs, S.
OCEAN VIEW, Ocean View: I. G. Knowles-E. Robson.
PESCADERO, Pescadero: B. V. Weeks-H. B. Sprague.
SAN MATEO: A. F. Green, M.; W. H. Lawrence, S.

SANTA BARBARA COUNTY.

CARPENTERIA, Carpenteria: O. N. Cadwell, M.; G. E. Thurmand, S.
CONFIDENCE, Guadalonpe, A. Copeland-J. T. Austin.
SANTA BARBARA, S'taBarb'a: O.L. Abbott, M.; Virginia F. Russell, S.
SANTA MARIA, Suey Station: J. Miller-M. D. Miller.

SANTA CLARA COUNTY.

GILROY, Gilroy: W. Z. Angeney, M.; H. Coffin, S.
MAYFIELD, Mayfield: F. W. Weisshaar-J. W. Pitman.
SAN JOSE, San Jose: Wm. Erkson, M.; Miss Jettora Watkins, S.
SANTA CLARA: H. M. Leonard, M.; I. A. Wilcox, S.
SARATOGA: F. Dresser, M.; Miss Jennie Fabwell, S.

SANTA CRUZ COUNTY.

BEN LOMOND, S'ta Cruz: H. H. Buckles-C. Craghill.
SANTA CRUZ: G. C. Wardwell, M.; J. W. Morgan, S.
WATSONVILLE: J. McCollin-A. F. Richardson.

SHASTA COUNTY

COTTONWOOD: G. G. Kimball, M.; John Barry, S.
MILLVILLE, Millville: E. Wagoner-G. W. Welch.
READING: J. F. Dinsmore, M.; S. J. R. Gilbert, S.
ÆTNA: John McBride-J. McConaughty.

FORT JONES, Fort Jones: J. S. Matthews-J. W. Tuttle.
MOUNT BOLIVAR, Callahan's Ranch: R. M Hayden-J. A. Cole.

SOLANO COUNTY.

BINGHAMPTON: A. Bennett, M.; E. A. Beardsley, S.
DENVERTON: J. B. Carrinoton M.; G. C. Arnold, S.
DIXON: J. C. Merryfield, M.; B. F. Kelly, S.
ELMIRA: J. A. Clark, M.; M. D. Cooper, S.
MONTEZUMA, Collinsville: T. Hooper, M.; C. K. Marshall, S.
RIO VISTA: A B. Alsip, M.; J. H. Gardner, S.
ROCKVILLE, Cordelia: W. A. Lattin-J. R. Morris.
SUISUN VALLEY: J. M. Lemmon, M.; A. T. Hatch, S.
VACAVILLE: E. R. Thurber, M.; Oscar Dobbins, S.
VALLEJO: G. C. Pearson, M.; Chas. B. Deming, S.

SONOMA COUNTY.

BENNETT VALLEY, S'ta Rosa: I. De Tubk-J. H. Plank.
BLOOMFIELD: Wm. H. White, M.; A. B. Glover, S.
BODEGA, Bodega: E. S. Pirne, M.; J. Wilkinson, S.
CLOVERDALE: Chas. H. Cooley, M.; J. B. Cooley, S.
GEYSERVILLE: C. M. Bosworth, M.; R. R. Leigh, S.
HEALDSBURG: C. Alexander, M.; W. N. Gladden, S.
PETALUMA: L. W. Walker, M.; D. G. Healo, S.
SANTA ROSA: Geo. W. Davis, M.; J. A. Obbeen, S.
SEBASTOPOL: M. C. Hicks, M.; W. J Hunt, S.
SONOMA: Wm. McP. Hill, M.; W. A. Berry, S.
TWO ROCK: S. Q. Barlow, M.; Howard Andrews, S.
WINDSOR: A. B. Naltey, M.; J. H. McClelland, S.

STANISLAUS COUNTY.

BONITA, Crow's L'd'g.: J. W. Treadwell-A. B. Crook.
CERES: W. B. Harp, M.; C. N. Whitmore, S.
GRAYSON, Grayson: T. C. Brown, M.; A. C. Lander, S.
OAKDALE: A. S. Emeby, M.; C. B. Ingalls, S.
ORISTIMBA, Hill's Ferry: W. J. Miller-E. H. Robison.
SALIDA, Modesto: B. F. Pabkes, M.; A. H. Elmore, S.
STANISLAUS, Modesto: J. D. Spencer-V. E. Bangs, S.
TURLOCK: A. S. Fulkerth, M.; W. S. Robinson, S.
WATERFORD: R. R. Warder, M.; W. C. Collins, S.

SUTTER COUNTY.

NORTH BUTTE: B. R. Spillman, M.; J. D. Dow, S., Yuba City.
SOUTH SUTTER, Pleasant Grove: Thos. Boyd, M.; Alex. Donaldson, S.
SUTTER, Meridian: W. C. Smith, M.; J. M. Gladden, S.
YUBA CITY: Geo. Ohleyer M.; S. R. Chandler, S.

TEHAMA COUNTY

FARMINGTON: Addison J. Loomis, M.; S. H. Loomis, S.
NEW SALEM, Paskento: C. Harbis-J. R. Whitlock,
RED BLUFF: R. H. Blossom, M.; C. E. Fonda, S.

TULARE COUNTY.

CHRISTMAS, Visalia: A. B. Corey, M.; W. H. Stuart, S.
DEEP CREEK, Farmersville: W. G. Pennebaker, M.; F. G. Jeffends.
FRANKLIN, Kingston: F. Wyruck-P. A. Kanawyer.
LAKE, Kingston: M. S. Babcock, M.; J. S. Robinson, S.
MOUMT WHITNEY: G. W. Duncan, M.; A. Thompson, S, Portersville.
TULARE: D. E. Wilson, M.; Victoria Wright, S,
TULE RIVER, Porterville: G. A. Williamson, M.; N. T. Blair, S.
VISALIA, Visalia: T. Fowler, M.; J. O. Blakeley, S.
WOODVILLE: J. A. Slover, M.; J. Stewart, S.

TUOLUMNE COUNTY.

SONORA, Sonora: S. S. Tubner, M.; R. F. Williams, S.

VENTURA COUNTY.

OJAI, San Buenaventura: C. E. Soule, M.; J. Horart, S.
PLEASANT VALLEY: D. Rondebush-P. Browning.
SAN PEDRO, San Buenaventura: J. Y. Saviers, M.; D D DeNure, S.
SATICOY: Milton Wason, M.; E. A. Duval, S.
SESPE, San Buenaventura: S. A. Guiberson, M.; Thos. Marple, S.
VENTURA, San Buenaventura: J. Willett, M.; Chas. Prebble, S.

YOLO COUNTY.

ANTELOPE: W. J. Clark, M.; C. L. N. Vaughn, S.
BUCKEYE, Buckeye: Wm. Sims, M.; L. Moody, S.
CACHE CREEK: D. B. Hurlbubt, M.; L. D. Stephens, S.
CAPAY VALLEY: R. R. Darby, M.; P. M. Savage, S.
DAVISVILLE: Chas. E. Green, M.; John Krimmeb, S.
HUNGRY HOLLOW, Yolo: G. L. Pabker-C. O. Perkins.
WEST GRAFTON, Yolo: A. W. Morris-G. W. Parkes.
YOLO, Woodland: J. A. Hutton, M.; D. Schindler, S.

YUBA COUNTY.

MARYSVILLE: C. G. Bockius, M.; Jas. M. Cutts, S.

Nevada Subordinate Granges.

RENO, Reno, Nev.: A. J. Hatch, M.; R. H. Kinney, S.
EAGLE VALLEY: G. W. Chedig-O. A. F. Gilbebt, S
CARSON VALLEY, Genoa: R. J. Livingston-J. S. Child.
WASHOE VALLEY, Franktown: Elias Owens, M.; G. D. Winters, S.
WILLINGTON, No. 6, Esmeraldi Co.: A. H. Hawley, M.; J. N Mann, S.
MERIT, Mason Valley, Esmeraldi Co.: Kimber Cleaveb, M.; Clark Cleaver, S.

☞ Deputies who organize new Granges are requested to send the list of officers, and the names of all charter members, with other facts of interest, for free publication in the Rural Press, as early as possible.

Grange Picnic.

Editors Press:—At the last regular meeting of the Alameda County Council, a resolution was passed to have a grand basket picnic, consisting of all the Granges in Alameda county, on the 17th of October next, at San Lorenzo grove. Invitations were sent to Danville and Walnut Creek Granges to join with us. Our State Lecturer, Bro. J. W. A. Wright, and our Worthy Bro. and Master of Temescal Grange, Prof. E. S. Carr, are invited to deliver addresses on the occasion. An invitation is extended to all Patrons who can make it convenient to be present, also to all *friends* who are not Patrons.

It was resolved by this Council that a vote of thanks be extended to Bro. Walcott, of the house of E. E. Morgans' Sons, and Bro. Baxter, Secretary of State Grange, for the able manner in which they explained the shipping interests, and for their suggestions for the good of the order. Yours fraternally,

Thos. Hellar, Secretary.

Hayward's, Cal., Sept. 26th, 1874.

Centennial Exhibition.

Editors Press:—It will be remembered that the National Grange at its last session was not forgetful of the interests of the Patrons of Husbandry throughout the union in our grand Centennial Exhibition, which we earnestly hope may be a great success, and may be so conducted as to prove an important aid in restoring the genuine harmony towards which our people are certainly tending. The following resolution, already published, was offered by William Saunders, first Master of the National Grange, and was unanimously adopted by members from the North, South, East and West:

"Whereas, It has been determined to hold an exhibition of the industrial productions of the world at the Centennial Exposition at Philadelphia, during 1876, therefore,

Resolved, That a committee of seven be appointed by the Worthy Master of the National Grange, to devise a scheme whereby the Patrons of Husbandry can be fully represented at such exposition, and report to the National Grange at its next meeting."

The committee appointed in accordance with this resolution are the following members of the National Grange: Saunders, District of Columbia; Chambers, Alabama; Hudson, Kansas; Chase, New Hampshire; Wright, California; Brown, Michigan; and Davie, Kentucky.

It follows, that no definite "scheme" can be reported for the above purpose, until the National Grange meets at Charleston, S. C., next February.

I have a late letter from Bro. Saunders, of which I send an extract, that our members in California may see that this matter, of so much importance to the interests of our entire Order, is receiving the proper attention at headquarters.

Speaking of the commissioners for the Centennial, Bro. Saunders writes: "I think it probable that I will visit them and learn their views with regard to arrangements, so that I can understandingly learn how best to co-operate with them.

I will take care that you will be promptly notified as soon as I can learn anything authoritative, or get hold of some tangible basis of action."

It is gratifying to know that some of the members of our Order in California are already preparing samples of our agricultural products of '74, and that the Central Pacific R. R. Co. offers every facility to transport the specimens which the Pacific Coast may have to send for every department of industry. The committee of the National Grange desire to co-operate cordially with all these efforts, through the committee, which will, no doubt, be appointed at the approaching meeting of the State Grange, as well as the committee appointed by the Grangers' Bank Convention last spring. Yours fraternally,

J. W. A. Wright.

Borden, Sept. 26th, 1874.

Grangers' Homestead Association.

Editors Press:—Letters of inquiry with regard to Lompoc and our association are coming faster than my time will allow me to read them. I shall, however, read all, and give each a careful answer if it takes all winter.

The surveyors are already in the field, and the valley will be thrown open to settlement as early as possible. On the first two days of sale shareholders only will bid against each other as to a limited portion of the lands for choice of locations, after which all seeking homes in that beautiful valley will have an opportunity to select and bid for choice.

Arrangements have been made with the original owners of the lands, whereby those who wish can pay for their farms after the first of January, and get their deeds.

Terms: Members of the association pay 11 per cent. on their stock when they join the colony, and 10 per cent. on the land they purchase on or before the last Monday in December, and 10 per cent. per annum thereafter until the land is paid for, with interest at 10 per cent. Persons not members of the association pay 10 per cent. at the time they purchase homesteads, 15 per cent. on or before the last Monday of December, and 10 per cent. annually thereafter, the same as stockholders. It will thus be seen that at least eight years' credit is allowed before final installment will become due. Those desiring homes on the ranch should become stockholders if possible, for the following reasons. First: They can compete for the most desirable locations. Second: If the ranch sells for more than cost the surplus will be divided among the stockholders to reduce the price of their homesteads. Those desiring to take stock can do so until the company is full by calling on me at Stockton, while at the State Grange.

A town carefully laid out by competent surveyors will be started on a beautiful plain, where pure water from a mountain stream can be distributed in abundance and under ample pressure. It is distinctly understood that we are to have a cold water colony.

To render this town unsurpassed for educational facilities, the directors have passed a resolution that one-fourth of the gross income from the sale of town lots shall be dedicated to the endowment of a college, which is to be erected on a 10-acre tract of ground, adjacent to the town. Another resolution set apart five per cent. of the gross proceeds from the sales of town lots and suburban blocks for the erection of public school buildings.

O. L. Abbott.

Notes of Grange Travel—No. 2.

EDITORS PRESS :—The first number of these notes ended with our large meeting at Chico, August 8th. Monday the 10th was the day appointed for Marysville or Yuba City, at whichever point our fellow-patrons of Yuba and Sutter counties might conclude to meet, the two places being less than two miles apart, though in adjoining counties and with the Yuba river between. After enjoying the hospitality of Bro. C. G. Bockius, in his delightful home in Marysville, we went together to Yuba City, where there was quite a fair attendance from the two Granges at 2 P. M.

It was to be regretted that we could not have met for the lecture here the previous Saturday, their usual day of meeting. No doubt the attendance would have been much larger. But it is impossible, of course, to arrange such a round of appointments as to meet every Grange at its regular meetings, and it was a great pleasure to meet as many Patrons as we did among those who are so noted for their zeal in our good cause. Our conference continued here about three hours.

Before leaving, I visited the substantial brick warehouse, built by the Grange, which you have already noticed in your columns. It is a first-class warehouse, with a capacity of about 5,000 tons, and was rapidly filling up with wheat under the carefnl supervision of Bro. Geo. Ohleyer, W. M. of Yuba City Grange. Their wheat crop this year is excellent, in quantity and quality.

A few words about the

Climate

Of this truly favored region of California. I was told that the highest the thermometer indicated there this summer was 106°. About the same time in Fresno county, more than two degrees further south, it was 116°. But, strange as it may seem, when the mercury ranges so high in our inland valleys, the *effects* of the heat are not more oppressive than the hottest days in September in San Francisco, where the thermometer indicates a temperature of only 86°. This peculiarity of our remarkable climate is due, no doubt, to cool breezes, cool nights, aud our pure air from the Sierras.

This reminds me of a great peculiarity of climate I witnessed the 4th of December last at Marysville. It was the day after the very uncommon snow storm with which our winter's rain began last year. The snow there was eight or nine inches deep. Yet, in a front yard with an eastern exposure, I saw an orange tree full of ripe oranges, and iu another a lemon tree, not only loaded with large ripe fruit, but in bloom, at the same time. Their limbs and rich leavcs were weighed down with snow. Imagine how beautiful a sight it was.

On inquiry, I learned that a thermometer on a porch near by showed the temperature to be 24°, the lowest knowu there for years. The trees in question were not injured.

Many would suppose the temperature in Stanislaus, Merced and Fresno counties is milder in winter than so much farther north as Marysville. Experience, however, proves otherwise, for in the winter of '72 the mercury in our southern counties was as low as 10°. But this, like our extremes of heat, is very rare.

Thanks to those who manage the telegraph in that region, a telegram from Biggs' station, Butte county, asking me to organize a Grange for them the night of the 10th, was not received till after the up-train left Marysville at 5 P. M. So away we went at 6 o'clock with a buggy, fast team, and good driver, and reached Biggs' in time to begin organizing at 10 P. M, and to finish at 2 o'clock next morning. But so eager were the good people there to have a Grange, that they stood the loss of sleep first rate. In spite of all difficulties, I had the satisfactiou to leave an excellent new Grange there, and another next day at North Buttes, Sutter county, some 10 miles towards Colusa.

By the way,

The Buttes,

Or jagged mountain peaks of Sutter county which give the name to the last-mentioned locality, are one of the most extraordinary formations in California or elsewhere. Their peculiarity consists in rising suddenly from the broad, level plains, near the Sacramento river, about midway between the Sierras and the Coast Range. They are a completely isolated, long, narrow ridge, 12 or 15 miles in length and five or six wide, and the highest reaches an altitude of 1,000 feet or more. They look almost as much out of place as does the celebrated Stone mountain in Georgia. Much of the country around their base is well timbered with white oak, and is good grain land.

After a much-enjoyed rest in the comfortable home of Bro. R. B. Spillman, W. M. of North Butte Grange, two of our newly-made brothers accompanied me in their spring wagon to Colusa, where, from the interest in our cause for which our many fellow-Patrons in that fortunate county are noted, we anticipated a rousing Grange meeting. But alas for human hopes, what a

Disappointment

Was in store! From a lamentable printer's error, leading to some uncertainty about the day of meeting, coupled, we fear, with a slight Grange freeze, consequent, it may be, upon the loss of light and warmth by the *Sun* in that Grangers' paradise, the attendance was slim, exceedingly slim. Indeed, there were fewer fraternal greetings and less good results accomplished there than anywhere in this long and delightful tour of duty in 24 of our counties. Bnt it surely will not be so in future appointments. It was a gratification, however, to confer there with a few of our most ardent workers in that prosperous county.

We are assured Colusa will yet ship a good share of her abundant wheat yield throngh our valued agents, E. E. Morgan's Sons.

Amply did the well-attended and warm-hearted meetings at Sacramento, Woodland and Napa, on the 13th, 14th and 15th of August repay for any previous disappointment. At the first two places the attendance was large, and was a good type of our

Happy Grange Gatherings.

But, in all jnstice be it said, that Napa carried off the palm. Yet this is nothing new. From the time when in April, '73, the first Grange in California organized there under the new farmers' movement; from the time when she added to her well-earned fame, by the organization there of the State Grange in the following July, Napa has ever been distinguished for the zeal, the devotion, the fidelity, the generosity of her hundreds of model Patrons of Hushandry.

None uuderstand better the purposes and workings of our noble Order; none more thoroughly and beautifully exemplify its principles in their lives; none more constantly exhibit the spirit of self-sacrifice, of fraternal forgiveness and love and aid, as well as conciliatien toward outside friends, as tanght by the precepts of the Grange; none are more attentive to their duties; none display more judgment, taste and liberality in their unsnrpassed harvest feasts, than do our brothers and sisters of Napa Grange and Napa county. On their altars the flames of faith, hope, charity and fidelity ever burn brightly.

Under the genial and strengthening influence of their presence, a member of our Order could scarcely dare to be lukewarm, still less prove false in the observance of his sacred pledges. Oh! that every Patron throughout our land could know and emulate their example in all respects. Our million members and more would, indeed, form a nuclens, aronnd which every true lover of our country would rally in support of so great and so good a cause. And tell me, what power on earth could then successfully resist our

Peaceful Army of Reform?

The 15th of August, with the Napa Patrons, will long be remembered by those who were so fortunate as to share its delightful festivities. The work done there has already been recounted in your columns, how Worthy Master Hamilton presided and conferred the fourth degree on the regular class; how many words of cheer, eucouragement and instruction were spoken by our Worthy Bro. Walcott and others present; what earnest resolutions were passed in support of E. E. Morgan's Sons, and how joyously more than 200 eager Patrons from numerous Granges, with many invited guests, partook of the rich harvest feast so lavishly prepared. May they all live to witness many such happy scenes.

The next day Bro. Hamilton and myself enjoyed a quiet Sunday's rest together in the beautiful and well-improved home of Bro. J. D. Blanchar, six miles from Napa and just nnder the shadows of the Coast Range mountains, which separate them from Sonama valley. This is a productive, well cultivated and valuable ranch. A hill just back of his house gives one a commanding view of

Napa Valley.

And how can I take leave of this part of my trip, without recording a few words in praise of its beauty, rife as its praises are from all who visit it?

Even now in the fall of the yoar it is very beautiful, although its yellow stubble fields, and the dry, bare mountain sides, uot more than a cannon shot apart, detract somewhat from its appearance, in spite of its graceful oaks, its green orchards and vineyards, and waving corn. But early in the year, as it was my good fortune to see it from the same standpoint last January, it is surpassingly beautiful. Then the whole valley, as seen for eight or ten miles to the right and left, and its many mountain sides, was richly clothed with the varied verdure of spring.

Then, Napa river dotted with sails; Napa City and Yountville in the distance, their spires towering high in the sunlight; hundreds of well-wooded farms neatly laid ont and fenced; its many tasteful farm-houses with all their attractive surroundings, the very picture of enchanting peace and tranquility; its herds scattered over the valley and mountains; all form a combinatiou of rare beauty on which the eye delights to dwell. With all this, it is one of the most fertile valleys in California. In short, so varied are the many attractive features of Napa valley, that it might safely contest the prize with many of the most famous valleys of Switzerland.

To compare with our own valleys, Yosemite is sublime and beautiful, Hetch-Hetchy valley is grand aud wild, but Napa valley, in spring, combines all the elements of picturesque landscape beauty. It presents a view of which the sight uever grows weary, and to recall its image is ever pleasing to memory.

Yours fraternally, J. W. A. WRIGHT.

Borden, Fresno Co., Sept. 22d, 1874.

Is the Grange Work Triumphant?

EDITORS ALTA:—In your excellent editorial of the 14th inst., these words occur: "A prominent official of the State Grange who uses the familiar signature of J. W. A. W., says publicly in reference to the management of the wheat sale and shipment: Never before has the work of the Grange been so triumphant. It is too soon yet to announce a triumph. After the accounts are closed and the profits pocketed, such a declaration will be more appropriate."

Please to bear in mind that the assertion is not intended to refer "to the management of the wheat sale and shipment" alone, but te the spirit and enterprises of the Grange in California, in all respects. It refers to the firm will and unity of the Bretherhood as observed in twenty-feur counties of the State; to the successful inauguration and wholesome influence of our varied undertakings. These include not merely the direct loading of ships at various points by different Granges, thus carrying out one of our leading principles of bringing the California producer and the European consumer into closer relations, but they include the Grangers' Bank of California and local Farmers' Banks in various counties, the Weol Agency, the Dairy Agency, the Fruit Grewers' Association and their drying establishments, the very successful Purchasing Agency, the Farmers' Mutual Fire Insurance Co., the Grangers' Narrew-gauge Railroad from Salinas to Monterey (eighteen and a half miles), the capacieus, substantial and well-filled Grangers' warehouses aloug our railroads and rivers, the completion of handsome two-story Grange Halls, with large store-rooms below in which merchants friendly to our cause are invited to open stores in the interests of the Grange; also some independent Grange stores where local merchants have not shown much inclination to accommodate. We refer to the low rates of storage and interest, low price of sacks and more moderate profits in trade. We refer last, hut not least, to the hearty union of the farmers and the chances of our State in matters of our mutual interest. We refer to the fact that we are gettiug for wheat in San Francisco to-day almost as much as our grain-buyers paid us in 1872, when wheat was from sixty to seventy cents per cental higher in the Liverpool market than it is now. The latter fact is proved by the following figures, copied from the San Francisco *Journal of Commerce* of September 9th—an acknowledged authority:

The Liverpool rates, on September 8th, for the last three years, have been as follows:

1872	$3 11
1873	$3 15@3 17
1874	$2 43@2 49

Yes, it is to such an incontrovertible array of facts as the above, and to many more which we might name if allowable, to which we refer in saying, "Never before has the work of the Grange been so triumphant." This, too, in spite of open and secret opposition in manifold lorms. And is there not some reason for the assertion when we remember that the State Grange of California has been in existence only fourteen months? When we remember that these things have come to pass from the organization of farmers for self-protection in the Grange—an organization of which it has been persistently predicted from the first that it would be short-lived, and a complete failure, because these foolish farmers had neither brains, money, honesty, nor business qualifications.

We are sometimes met with the statement that the Grangers are responsible for the present low prices of wheat in San Francisco. The above figures prove that this assertion is false, and show that the present low price is the fault of the Liverpool market. And these figures show that, but for our organization, we would in all probability be getting to-day only $1.20 or $1.25 for our wheat in San Francisco, if we were now treated as we were two years ago. As to the little matter of closing accounts and pocketing the profits on this year's transactions, we are easy, and are perfectly willing to take the chances. We have counted the cost, and carefully calculated the risks, and believe we can stand these risks, divided as they are among our members, quite as well as the grain speculator can afford to take them alone.

We are contending for a principle. Yes, a set of principles, aud the influence of their successful application will extend far beyoud the wants of the preseut year.

We most gratefully teel that the triumph of our work in establishing these principles, and the faith of our members in them, have never been so great before.

We by no means claim that this triumph is complete; but this oompletion is one of the good things in store for our future, we hope.

J. W. A. W.

San José, Sept. 14th, 1874. —*Alta.*

THE following are the officers of the San Jaciuto Grange, San Diego county, organized on the 29th ultimo: T. R. Henry, M.; G. A. Collins, O.; J. M. Benson, L.; John Wakefield, S.; James Carroll, A. S.; Mrs. Mary Heroday, C.; John Flanagan, T.; Mrs. Martha Collins, Sec'y; Allen Barr, G. K.; Mrs. Rosaline Fowler, Ceres; MRS. Mary Worthingtou, Pomona; Miss Jennie Marine, Flora; Mrs. J. Bensou, L. A. S.

ON HAND.—We have several interesting Grange addresses which will appear soon. Our space, it will be seen, is unusually crowded just now by various fair reports, etc.

Grange Agent.

Mr. T. K. Stewart, of Sacramento Grange, No. 12, has been appointed a general agent for the California Farmers' Mutual Fire Insurance Association. The association is organized for the purpose of affording the farmers of this State the means of safely insuring against less by fire, at actual cost of insurance, without being connected with city risks—as it is well known that a large portion of losses sustained are city losses, and insurance companies who assume such risks, and sustain such lesses, are compelled to affix such rates as will enable them to survive such losses; conntry risks are so much less hazardous, very few losses, comparatively speaking, occurring; but if insured in companies who de assume city risks they are compelled to centribute to such losses when made.

SEC. 1. Each person insuring in this association shall make a deposit of two per cent. on the amount for which his, her or their property is insured, for the purpose of making assessments for losses and expenses of the association, and the money so received shall be deposited with the Grangers' Bank of California, and a certificate of deposit issued to the member for the amount; the money so deposited to draw interest as may be agreed upon by the directors with the bank. And when the deposits in said bank shall amount to over $50,000, the president, vice-president, secretary, treasurer and directors, shall have power to withdraw from said hank the excess of $50,000, and deposit the amount so withdrawn with local banks in other parts of the State, or invest the same in real estate securities, school or county, or township and county bonds of this State, as may be deemed prudent, and for the best interests of the insured.

All persons insuring shall pay a fee of $5, which includes the issuance of the first policy for five years; and thereafter all policies issued or renewed shall be subject to and pay $1.25 in U. S. gold coin.—*Sac. Valley Argus.*

New Granges.

EDS. PRESS:—Sept. 19th I organized Wellington Grange, No. 6, at Wellington, Esmeralda county, Nevada, with 23 charter members. The following is a list of officers: S. A. Hawley, M.; F. B. Rickey, O.; D. C. Simpsou, L.; C. Smith, S.; Frank Rivers, A. S.; A. Burbank, C.; J. P. Davis, T.; J. N. Mann, Sec'y; W. B. Hutson, G. K.; Mrs. Matilda Rivers, Ceres; Mrs. Mary J. Davis, Pomona; Miss Susie Hawley, Flora; Mrs. Mary Burhank, L. A. S.

On the 20th ult. I organized Merritt Grange, No. 7, in Mason valley, Esmeralda county, with 24 charter members, and the following list of officers: K. Clearer, M.; N. Osborne, O.; W. H. Spragg, L.; E. Green, S.; C. Martin, A. S.; Thos. Shedden, C.; W. B. Saunders, T.; J. J. Fox, G. K.; Cyrus Clearer, Sec'y; Mrs. R. A. Clearer, Ceres; Mrs. W. Hearnleren, Pomona; Paulena Stuckenbaugh, Flora; Miss Alice Spragg, L. A. S.

These Granges are in a fine agricultural locality and much interest is manifested in their welfare hy the entire community in which they are located. Yours truly,

A. J. HATCH.

Still They Come.

Sacramento Grange, No. 12, at its meeting yesterday, passed the following resolutions, in relation to the removal of Prof. Carr:

WHEREAS, It is rumored that the Board of Regents of the State Uuiversity discharged Professor E. S. Carr, as Professor of Agriculture in said University, on account of alleged incompetency, aud

WHEREAS, It is but proper and right that those now interested in the success of the College of Agriculture in said University and in agricultural education generally, should be correctly iuformed as to all matters pertaining to the conduct and management of said College, especially where contradictory statements are in circulatiou calculated to injure the reputation and militate against the efficiency of the University, therefore,

Resolved, That we respectfully call on the Board of Regents for a statement of the real cause or causes of their action in the matter of the discharge of Prof. E. S. Carr from the Professorship above referred to.

Resolved, That a copy of these resolutions be forwarded to the Secretary of the Board of Regents.

THE STATE GRANGE.—Before our next issue the State Grange will have met. We bespeak for our sistors and brothers a happy meeting, an interesting and profitable session and a pleasant acquaintance with the county seat of one of our foremost counties. Much is to be done and much can be done hy a judicious improvement of the time. Let everyone come with his business well prepared, so that there may he no unnecessary delays.

GRANGERS' BANK IN NEW YORK NOT ENDORSED BY THE NATIONAL BANK.—In reply to a letter asking for iuformation, O. H. Kelly, Secretary of the National Grange, says the Grangers' Mortgage Bank lately advertised in New York is not endorsed hy the National Grange, nor is it recognized by tho Committee in any shape whatever.



A Sermon.

It wasn't no great thing of a baby—
Was rather inclined to be thin—
Was peaked, and had a peculiar
And chalky kind of a skin.
Its eyes was its principal feature—
Was black and wide-open and bright,
And seemed, I must say, kind o' scary,
The rest of its face was so white.

It didn't look wholesome by no means;
Too solémn, strange-lookin'. and old,
And conghed like it might have been forty,
Laid up with a settled cold.
It never was blessed with a rattle,
Or any such frivolous thing,
But gravely kept fast in its fingers
Three buttons tied onto a string.

Its parent (the usual number
Bein' short by a matter of one)
Was proud of the little old specimen,
And appeared to consider it Al.
That isn't no way to express it—
She worshipped it, as I may say,
And early and late, night and moruin',
She slaved for it every day.

Time was when she wasn't no better
Than what she should ought to have been;
But when she come out pale and friendless
From the hospital what she'd been in,
A-carryiu' that solemn white baby,
She gave up the old sinful trade,
And since then she hasn't done nothin'
But work for her daily bread.

She's lived in this garret for six months,
A-makin up weskits and such;
And it's very well known that them sewers
Don't realize fortunes—not much!
And there in the corner the baby
Sat quiet and searee ever stirred—
Sat there wide awake with its buttons,
And never remarkin' a word.

In the winter and spring she had sewiu'
Sufficient to keep her alive,
But with the warm weather her matters
Somehow didn't happen to thrive;
And then the poor delicate baby
Got sick as the summer grew hot;
But with all of the woman's hard trials
She never complained of her lot.

When sewin' fell off she took washin',
Whenever she got it to do;
But I'm sure that she often went hungry—
Who knows what that woman went through?
She carried her work back and forwards,
Although she was never quite strong,
But wherever she went with her bundles
She tugged the sick baby along.

I helped her sometimes, but I couldn't
Do much with what little I had;
Though it gave me the heart-ache to see her,
Her face was so pitiful sad.
When she had to go without eatin'
The baby got little, of course;—
Dear me! It was painful to hear it,
Its cough was so hollow and hoarse.

Last week it got worse, and the mother
Give up goin' out in the street.
And yesterday morniu' I come up
To bring her a mouthful to eat.
She looked at me haggard and mournful—
She "couldn't eat nothin'," she said;
Last night as the shadows was fallin',
They was both of 'em there—dead!

It doesn't seem likely they're parted,
Though I make no pretence to be wise,
That child would have grown up to somethin'
(If he'd lived), with them wonderful eyes.
He must have been born for a preacher;
I've a notion—but maybe I'm queer—
That he's preachin' a beautiful sermon
This minute, for them that can hear.

PELEG ARKWRIGHT.

FOX'S RULING PASSION.—A writer in the *Galaxy* says of Charles James Fox: "Before he was fourteen his father took him to the Continent to show him life. At Paris and Badeu they of course visited the gambling houses, and the boy, scarcely entered upon his teens, alarmed even his father by the eagerness with which he entered into the play. At this early age he commenced the habit which became almost the ruling passion of his life; which, in spite of the large estates left him by his father and the great emoluments of his various offices, made him a poor man, haunted by bailiffs and pestered by duns. The sums which he lost were enormous. At one time he is said to have played for two-and-twenty successive hours, losing five hundred pounds an hour. At another time, after he had lost fearfully, a friend called upon him to offer his condolences. He found Fox quietly reading 'Herodotus,' and upon expressing some surprise at his philosophy, was asked, 'What would you have me do, when I have just lost my last shilling?' At one time he found himself the winner of eight thousand pounds. One of his creditors, hearing of his good luck, presented his note, and asked for payment. 'Quite impossible,' said Fox, 'I must pay my debts of honor.' 'Well, then,' said the creditor, 'throwing the note into the fire, 'now mine is a debt of honor;' and as such it was paid. This anecdote is somewhat differently related by Rogers. According to him, it was Fox himself, who, pressed by a creditor, asked for the note, tore it in pieces, and thus satisfied his conscience by paying the amount, which had thus become a debt of honor. It is related, however, that Fox would never touch a card when he was in office, and when late in life his political friends paid his debts, he left off playing entirely."

HE who is learned and does not teach is like a myrtle in the desert.—*Ex.*

After Fifty Years.

[Written for the PRESS.]

In the last quarter of the past century the Highlands of Scotland were the most uncivilized nook outside of Russia, in old Europe. Neither roads nor mail coaches bothered the inhabitants, who, in the enjoymeut of their kilts, Gaelic and oatmeal, knew little about the outside world and cared less. Even such news as that of the death of the king was at least six months old before it got up among the lochs and the good "Hielanmen," and not seldom found they had been faithfully praying for the health and continued prosperity of some high state dignitary, who had been in his grave a year or more. The people led an odd, half-savage, poverty-stricken sort of a life. A patch of half an acre in some little valley or on the mountain side, with a cow or two, was considered a competence, and supported a family which, though only of avorage size for the region, with time would now bring to the parents governmental medals and extensive fame. The social pleasures of such a pastoral life were necessarily very few and simple. A wedding or a christening were nearly the only occasions sufficiently festive to draw together "a' the neebors frae the country-side." As the population was thin and scattered, the nearest neighbors being miles apart, these merry-makings seldom took place above twice or thrice in the year.

In the little village of Milton—four stone cottages, moss-grown with age, and six acres of cultivated land were dignified by the name of village—Aleck McLean and Janet McLenan, the strapping son and bonnie daughter of two Milton households, had finished their long and decorous courting, and were about to be made man and wife. No doubt the affair was talked over and looked forward to with eager anticipation by all the lads and lassies for twenty miles around. The day came and with it the youth of all the country. Among them were Sandy Frazer and Meg Mackintosh, a young pair who hoped within the year to give occasion to a similar gathering. All day long the sports and dancing went on, and the usual quantity of whisky, without which Scotch joy is never complete, was consumed by the old people. Night drew near and the guests made haste to depart, for nearly all had a long journey to make and very generally on foot, as both horses and vehicles were rare, and for "none but the gentry." Sandy Frazer lingered to the last. He had a walk of six miles before him and alone, for Meg was to remain over night with their hosts. It was dark, and a heavy mist was rolling up among the mountains, when the lover kissed his betrothed good night and set out.

Sandy Frazer was never seen alive after. Search was made and kept up for weeks. Sandy, a fine, tall, manly fellow, had been a favorite, and not a lad but entered into the melancholy work heart and soul. But all efforts proved fruitless. Crags, precipices and bogs were explored in vain. As time wore on the mysterious fate of the young man just entering upon life so happily, became a household tale to tell about the peat fire of winter evenings to children, who had come and grown since he sunk out of life.

Poor Meg, with the loyalty of her race, remained faithful to the lost Sandy, and would hear no other lover. In course of years, as kinsfolk passed away, she became that peculiarly Scotch village character, an "auld wife," given to good deeds and odd work; living from house to house, nursing the sick, caring for the children and filling the place with her store of fable and gossip, which the newspaper now occupies in the modern household. Meg had grown to nearly eighty years and had heard not a word of her lost lover.

One summer's day the men digging in a peat bog, and taking out winter's fuel, came upon a body. It was that of a stranger, young and apparently not long dead. The grievesome news sped from mouth to mouth, and by sunset twenty men and women were gathered, gazing at the body, which had been cared for and decently laid out on the sward. None could tell who or what he was. Meg came tottling down the hillside, leaning on her stick, with the eager air of one who would add to her store of profitable gossip. She hobbled through the crowd. As her eyes rested upon the handsome young face, she stood for an instant as if bound by a horrid spell, and then with a wild shriek threw herself upon the body, crying as she fondled and carressed the youthful face. "It's my ain puir Sandy, my ain dear Sandy come back tae me!"

YOUTHFUL CANDOR.—Me and Bill went to the fair—also to the cattle show. We went with Johu in the cart. A cattle show and fair is where they trot horses. They sell pools outside the gate. It is wicked to play cards for pools. Pools at a cattle show "eucourage the honest farmer, and develop that noble animal, the horse." I read the last part of that in the paper. The honest farmer has a red face and wears a white hat. The best way to develop a horse is to hire the driver on the other side to let yours beat. A driver that can scream and frighten the other horses is bully. If he can smash another fellow's wheel, and not tip over his own sulky, he gets the first prize. The place to do that is on the home-stretch. The home-stretch is next to the judge's stand. The judges don't stand all the time. I saw one judge sit down and squint at the horses through the bottom of a tumbler. When I grow up I mean to study law and be a judge.

The Man who was Satisfied with the Weather.

We never knew more than one man who was always satisfied with the weather at all times and under all circumstances. It was Chubb. In summer, when the thermometer bolted up among the nineties, Chubb would come to the frout door with beads of perspiration starting out all over his red face, until his head looked like a raspberry, and look at the sky and say "Spleudid—perfectly splendid! Noble weather for the poor, and the ice companies, and the washerwomen! They don't shake up any such weather as this in Italy. Gimme my umbrella, Harriet, while I sit out yer on the steps and enjoy it." In the winter, wheu the mercury would creep down fifteen degrees below zero, and the cold was severe enough to freeze the inside of Vesuvius solid to the center of the globe, Chubb would sit on a fence and exclaim, "By Jingo! did you ever see such weather as this? I like an atmosphere that freezes your very marrer. It helps the coal trade and keens the snakes quiet. Don't talk of summer time to me. Gimme cold, and give it to me stiff." When there was a drought, Chubbs used to meet us in the street and remark, "No rain yet, I see; magnificent, aint it? I want my weather dry; I want it with the dampness left out. Moisture breeds fever and ague, and wets your clothes. If there's anything to despise, it's to carry an umbrella. No rain for me, if you please." While it rained for a week and swamped the country, Chubb often dropped in to see us and to observe: "I dunno how you feel about this yer rain, but it allus seems to me that heaven never drops no blessing but when we have a long wet spell. It makes the corn jump, and cleans the sewers. I would't give a cent to live in a country where there was no rain. Put me on the Nile, and I'd die in a week. Soak me through and through to the inside of my undershirt, and I feel as if life was bright and beautiful, aud sorrow nothing but nonsense." Chubb was always happy in a thunder-storm. "Put me in a thunder-storm aud let the lightnin' play round me, and I'm at home. I'd rather have one storm that'd tear the inside out of the continent than a thousand years of little, driblin,' watorin'-pot showers. If I can't have a rippin' and a roarin' storm I don't want none." One day Chubb was upon his roof fixing a shingle, when a tornado struck him, lifted him off, carried him a quarter of a mile, aud dashed him with such terrible force against a fence that his leg was broken. As they carried him home we met him, and when we asked him how he felt, he opened his eyes and laughingly said, "Immortal powers! what a storm that was! When it does blow it suits the senior members of the Chubb family if it blows hard. I'd give both legs if we could have a squall like that every day. I—I—" Then he fainted. We want Chubb elected President. He is the only man in the universe who don't growl at the weather.—*Exchange.*

STRANGE ANTIPATHIES.—A writer on "Antipathies" in *Chamber's Journal* says: "The secretary of Francis I. used to stop up his nostrils with bread if he saw a dish of apples, to prevent an otherwise inevitable bleeding at the nose. A Polish king had an antipathy to both the smell and sight of this wholesome fruit, and a family of Aquitaine had an hereditary hatred of it. A Flemish damsel was sadly troubled by an unconquerable aversion to the smell of bread. Cheese, mutton, musk and ambergris have been so repugnant to some nasal organs as to send their owners into convulsions. Gretry, the composer, could not endure the scent of the rose; neither could Anne of Austria. The mere sight of the queen of flowers was too much for Lady Heneag. bedchamber woman to Queen Bess; indeed, Kenelem Digby records that her cheek became blistered when some one laid a white rose upon it as she slept. Her ladyship's antipathy was almost as strong as that of the dame who fainted when her lover approached her, wearing an artificial rose in his buttonhole. A violet was a thing of horror to the eyes of the Princess de Lamballe; tansy was abominable to an Earl of Barrymore; Scaliger grew pale before the water-cress; and a soldier who would have scorned to turn his back on a foe, fled without shame from a sprig of rue. A poor Neapolitan was always seized with a fit upon attempting to swallow a morsel of flesh meat of any kind, and nature thus condemned him to vegetarianism—a sorer infliction than that suffered by Guinerius, whose heart palpitated violently if he indulged in a pork dinner; or by the lady who could not taste udder of beef without her lips swelling to uncomfortable dimensions. Dr. Prout had a patient who declared honest mutton was as bad as poison to him. Thinking this was all fancy, the doctor administered the obnoxious meat under various disguises, but every experiment ended in a severe vomiting fit. Another unlucky individual always had a fit of the gout a few hours after eating fish; and a Count d'Armstat never failed to go off in a faint if he knowingly or nuknowingly partook of any dish containing the slightest modicum of olive oil."

"Judge," said a defendant in an assault case in one of the Justice's Courts yesterday, "I plead not guilty to premeditated assault, but he called me a horse thief and I gave him a paroxysmal kick."—*Oakland News.*

WHO is the straightest man mentioned in the Bible? Joseph, because Pharoah made a ruler of him.

Deacon Barnes' Sunday.

"Beautiful! beautiful!" mentally ejaculated Deacon Barnes, at the close of a sermon about heaven. "Those are my ideas exactly."

And so enrapt was he with his thoughts as he passed out of church, he forgot to ask lame old Mrs Howe to ride home with him, as was his usual custom.

"Perhaps it is just as well," he thought, "for she is a worldly woman, and would probably drawn my thoughts away from heaven."

At the dinner table his son exclaimed: "Oh, father, I have a situation at last!"

"Have you forgotten that it is Sunday, John?" askod his father, sternly. "Don't let me hear any more such talk."

John ate his dinner in silence. How could his situation be a wrong thing to speak of on Sunday? He was so thankful for it, that it seemed to come from the hand of God. God knew all about the restless months in which he had answered an advertisement every day.

When the minister gave thanks in church for all the mercies of the past weeks, John's heart gave a grateful throb, and he determined anew to acknowledge God in all his ways.

John ate his dinner in silence, while his father thought about heaven.

In the afternoon, Mr. Barnes' nephew, a stranger in the place, came over from his boarding place opposite, and sat on the piazza, talking with John.

"I can't allow this, Tom," said Mr. Barnes, coming to the door with his Bible in his hands. "You must not sit here breaking the Sabbath. Go back to your boarding house and read some good book."

Tom started up angrily, and spent the afternoon fishing and bathing with an old colored man, his only acquaintance in the place, while Deacon Barnes sat in a large rocker on the piazza with a handkerchief over his face, and thought about heaven.

Presently his two little grand-daughters came out on the piazza with a large picture-book, and sat down with him. There was a flutter of leaves and a great deal of buzzing as the little yellow heads bent over the book, and finally they laughed outright.

"Children, where's your mother?" sternly demanded Deacon Barnes, springing to his feet.

"Up stairs, putting baby to sleep," they both answered together.

Deacon Barnes strode into the hall.

"Ellen! Ellen!" he shouted, "I should think you might keep these children quiet on the Sabbath. They won't allow me to think."

Ellen had been awake all night with a fretful baby. She had hushed him and just fallen asleep when her husband's voice aroused her and awoke the baby.

"Please send them up-stairs," she said wearily.

And all that sultry afternoon she amused the three children in a close, upper room, while her husband rocked and fanned himself and thought of heaven.

Leave my Name Out.

One of the bores of newspaperdom is the daily procession of chaps who march into the editorial rooms just after the adjournment of the Police Court, with the request, "Please leave my name out of your police reports," and accompanying said request with explanations which prove that the fellows are among the most gifted liars in the universe. This thing is becoming monotonous. It is useless to tell them that a certain way to prevent the dreaded publication is to behave themselves respectably—in they come right on time next morning with freshly-blackened eyes and battered hats, and with the same plaintive petition, or to ask that we falsify the police records as to the character of the offense or penalty inflicted. As before remarked, this is becoming monotonous. and uuless there is an early change, we shall feel it necessary to adopt the western style of corrections, of which the following paragraphs are samples:

NOT THE MAN.—The name of Mr. U. No appeared in our Police Court yesterday, charged with stealing a baby wagon. This is not Mr. U. No, our well-known bridge tender. He wouldn't stoop to steal a baby wagon, though it wouldn't be safe to leave a circus chariot or a freight train laying around where he could get his hands on it.

AMENDE HONORABLE.—Our local columns yesterday contained an account of the elopement of a gay Lothario of this town named Stiggins, with the wife of a well-to-do farmer in a neighboring county. And now comes Stiggins, the plasterer, to say it isn't him. Stiggins' wife is sitting in a buggy in front of our office, and, after a cursory glance at her, we are ready to say that we wouldn't blame Stiggins if he did run away. She must be a living and constant provocation to skedaddle. All right, Stig; it is another man this time, but if you get a chance to elope with a good-looking woman our advice is to "git."

GIVE THE DEVIL HIS DUE.—Pluguglie, who runs a saloon on the tow-path, called this morning to say that he is not the Pluguglie who beat and robbed a countryman at a late hour Wednesday night. We are bound to believe him, but at the same time we must say that we wouldn't like to encounter this particular Pluguglie alone at a late hour of the night with any valuables about us. If robbery, murder and sudden death are not written on his countenance, we don't want a cent.—*Hartford Post.*

Getting Married in England.

Prentice Mulford, writing of getting married in England, says: "I was occupied nearly two months in getting papers signed, paying for certificates and signatures, and getting permission of various people to get married. tI was a regular chancery job. It was a trip through the circumlocution office. The paternal English Government puts various obstructions in the way of matrimony to keep its people virtuous. There was a necessity for our marriage to take place in the Roman Catholic Church. The English Government will not allow a Roman Catholic priest to marry a pair without putting its official finger in the pie. It insists virtually on marrying the parties itself before the union shall be considered legal. First, we had to be 'cried' in church. Then it was necessary to apply to the registrar to certify to him that our banns were published. He wouldn't let us marry until twenty-one clear days after the first certificate had been taken out. And before he would give us that certificate he required that my wife that now is should have the consent of her father. So she went and obtained his consent. Then we went to the registrar and said we had the consent of her father. But that would not do; we must have his written consent. So we went after his written consent. But the old man wasn't so ready to give that. He had veered around, or somebody had been talking to him, and he'd got a notion in his head that a father should be more careful in allowing a daughter to marry a foreigner; because Americans with many Englishmen do rank as foreigners, and they have all sorts of tales current among them about poor girls being entrapped into marriage, carried to America and sold as slaves. You may stare, but this is true. They've got our negro slavery of the past, and the present merchandise of Chinese women in California, all mixed up in their heads, and this is the result of it. It was a long job getting the old man's signature, but the girl got it at last, and she can get 'most anything when she makes up her mind to. She left home and set up for herself at an age when most young women are lingering about the rag-baby era. The registrar made out a paper and told us to call again in twenty-one days. We did so, and then he gave us another paper. But this did not marry us. Mr. Yardley must have a hand in that business. Mr. Yardley is something or otber which must be present in behalf of the English Government whenever a ceremony is performed by a Roman Catholic priest. So I went to Mr. Yardley and paid him four shillings and sixpence, and at the altar he read something to me and made me sign another paper. There was the register to be signed in the vestry. Then there was another paper still, in which I promised tbe church not to interfere with my wife's religion, not to endeavor to convert her to another faith, and to have all my children brought up in the Catholic faith. I suppose now I am completely married. I am not quite certain, and half expect some other paper to pop in for my signature, or some forgotten official to pop up from some unexpected quarter with another certificate and a shilling fee."

Curious Anecdote of a Dog.—A recent number of *Le Petil Journal*, of Paris, is responsible for a dog story, the circumstances of which are somewhat as follows: Not long since a gentleman, while driving down the Aveuue de Neuilly, on a dark nigbt, was suddenly stopped in his course by a man who asked him for the loan of one of his lights to search for some money which the latter had lost through a hole in his pocket, the amount being a considerable sum in gold. Instead, however, of complying with the man's request, the traveler called up a large Danish dog, and, after taking a coin which the man still had remaining in his pocket, and holding it to the dog's nose, he told the animal to "go seek." The intelligent animal understood what was required, and immediately commenced his search for the missing coins, whioh he found, bringing them back one by one to his master, who handed them over to the rightful owner. He, of course, was in ecstacies, having been sent on particular business by his employers with the money he had just previously lost, and which he would, probably, have never got a sight of again, had it not been for the extraordinary sagacity of the dog.

The "War Governor" Vanquished.—The Washington *Capital* relates the following anecdote of ex-Governor Dennison, of Ohio: On the night the Neil House, Columbus, was burned Governor Dennison, not believing the hotel to be on fire, mounted the balcony to address the crowd. It was an immense concourse, for the alarm was given at a very convenient hour, immediately after supper, and it was too tempting for William to resist, so he sang out in that clear, clarion voice of his: "My fellow citizens, the conflagration is not here, it is elsewhere. But it has been suggested to me by friends, that, in view of your promiscuous, unexpected, and I may say startling assemblage on this occasion, it may be well, while the conflagration, wherever it may develop its lurid torch, is manifesting itself, to discuss a few of the momentous issues now dividing the people of this ensanguined land." Before William could reach the said issues the fire scorched his coat tails and he was knocked over by a trunk.

In addresses from man to man, hypocrisy is detestable. How much more so in addresses from man to God!

Young Folks' Column.

The Little Boot.

Dumpy, stumpy and old,
The funniest little hoot,
With mended toe and flattened heel,
Ever worn by a little foot.
Within the children's room
The widowed mother stands,
Still smiling with misty eyes
On a little hoot in her hands.

Carefully laid away,
With a mother's yearning care,
Are toys with which the children played,
The clothes they used to wear.
With loving, longing heart
Her gaze is backward cast,
As she softly lifts the little hoot
From the stillness of the past.

She sees a little boy
Thrust out a chubby foot,
And hears his happy laugh and shout
At sight of his first hoot;
And, trudging down the road,
Stubbing grass, and leaves and roots,
She sees again the solid form
Of the little man in hoots.
A conqueror of the day,
He made the soft air ring;
Amid the shoeless lads at school
The boy in hoots was King.

Oh, the stillness of the room
Where the children used to play!
Oh, the silence of the empty house
Since the children went away!
And is this the mother's life—
The memories her heart doth hold?—
"To bear, and love and lose,"
Till all the sweet, sad tale is told
In a single broken toy,
A flower pressed to keep
All faded still the faded life
Of one who fell asleep.

The Little Sailor of Olcott.

We were leaning over the Creek bridge at Olcott, watching Ed. Martin as he took his evening fish. Martin keeps the little boat-house on the west side of the creek, where at any hour of the day can be found a row-boat creek-worthy or lake-worthy. As we stood there, there appeared on the landing at the boat-house a little fellow, "knee-high-to-a-grasshopper," who wanted to know—in a voice worthy of a large man—which boat he should take. As the youngster was just about tall enough to see comfortably all over the top of an ordinary table, every eye in the party was at once directed with an expression of mingled wonderment and amusement at the speaker. He was burdened with little more than pantaloons, shirt and slouch sailor cap. The question as to which boat he should take was put to Mr. Martin, his father, who directed him to the little "Lena," we believe, a graceful sbell, large enough to hold a party of four or half a dozen comfortably.

As the little boatman stepped into the "Lena," a series of questions were put to his natural protector, who was playing with the fishing line.

"Why, does that little fellow go out on the creek alone?"

"O, yes; he goes where he pleases."

"How old is he?"

"Five years old."

"Do you let him take the boat wherever he chooses?"

"Yes, he goes on the lake alone frequently with the sail-boat. He takes parties out sailing, miles away from the land."

"Are you not afraid to have the little chick do so?"

"No; he knows what he's about."

It was very evident from the way he was now handling the oars that he knew what he was about. He sped up the creek like an arrow, and had just the stroke that one might imagine the experienced man-of-war's man to have. There was some surprise felt by lady witnesses that the father could allow so diminutive a piece of humanity to brave the dangers of the waves alone. But they forgot, perhaps, that he was born a sailor, and moreover, that a child is no more helpless—in ordinary times just as powerful as a strong man on the fickle waves. It was faith, you remember, that in those old times did wonders on the deep.

As the party were leaving the place remarking on what they had seen and heard, a man who stood near trying to catch the attention of of some three-pounders with a spoon hook, gave his head an expressive shake and said:

"That boy is safer than many men on the water. I have met him miles out upon the lake, sailing over the white caps as self-possessed and brave as any old tar."

What do the fathers and mothers of five-year-olds born with silver spoons in their mouths, and passing their time with block-houses, high chairs and bibs, think of that?—*Lockport Union.*

One of the saddest things about the small boy of the present day is the uncertainty which seems to attend him as he bounds along through life. You can't always tell what he is going to say. At a Sunday school service held not long ago, an amiable clergyman, endeavoring to illustrate the necessity of the Christian profession, in order rightly to enjoy the benefactions of Providence, spoke as follows: "For instance, I want to introduce water into my house; I have it pumped. The pipes and faucets are in good order, but I get no water. Now, why do I get no water?" The reason, he wished the young people to see, was that he had made no communication with the main in the street. But the boys were too intent on plumbing and water rates. "Now, why do I get no water?" "*I* know," shrieked a little one; "you don't pay!"

Good Health.

The Increased Use of the Members.

We doubt if the human body has ever in any instance attained the acme of its possible development; and by this we mean that while certain sets of muscles or organs have, in individual cases, become subjected to the will so as to perform feats impossible save through education, we do not believe that the being ever lived who could control every member so as to cause it to operate to the extent of its capabilities. Whether in future ages such a condition will mark a higher stage in the development of the race; whether, as the human mind expands, or as the saying is, the "world grows wiser," it is reserved for physical culture to keep pace with such mental growth, is a subject for speculation, which, in view of the doctrines of evolution and the constant approach of organic species toward more perfect individualism, is by no means devoid of present interest.

We have discussed at some leugth the question of the use of the left hand, and we have pointed out that, by a mistaken notion, children are taught to discard the use of the member, and hence to lose half the powers which nature intended they should have when she formed the body as it is. We have also suggested that, so far from restraining the infant from using its left hand, its tendency to employ both members indiscrimately should be encouraged. Now, we propose to advance a step further, and to ask why should not a child be taught to utilize both hands at once, and at different occupations. The idea may seem somewhat chimerical at first, but it is not without the bounds of possibility. The reader has doubtless seen jugglers who, in performing their dextrous feats, become so expert that, without any apparent difficulty, they can keep half a dozen knives or balls constantly in the air or on each hand. The falling and rising of these objects are not uniform, and hence to all intents the performer accomplishes a totally different result with each member. In similar manner great pianists—Rubenstein is a very striking example in point—use either hand upon the keys with equal dexterity and both together in playing music of tremendous difficulty, which requires a power of perception and a control of the muscles of each individual finger which is simply wonderful. Again, an organist, in performing upon a grand instrument, has several things to think of at once; both hands on the keyboard, both feet on the pedals, with stops on either side, couplers and the separate devices for the *crescendo* and other accidental effects are to be looked after. Here are four members of the body acting different parts at the same time.

We could multiply instances of this kind with little trouble, all going to show that even when advanced in life it is possible to educate a certain set or even sets of muscles to perform hitherto unnatural work. Cases there are where men, on being disabled in the arms, have had recourse to their toes, and used those members for writing and even handling tools. We have visited the studio of quite a celebrated French artist whose exquisite paintings were entirely produced with brusbes handled in the above manner. But while an individual member or even the body may be educated to perform feats apparently impossible, it requires a higher order of training to compel the members to perform different operations at once—a training, we thiuk, only to be fully imparted in beginning at the earliest years, but still fully possible. With our dual brains the right lobe is now the most developed, and with it the dexter side of the body. Let means be taken to develop the left side equally, and the body is symmetrical in its powers. Each side, governed by both brains, will be capable of work for which now, when controlled by, say, three-quarters of the brain power, it is inadequate.

We need not point out the advantages to a person who can thus use both hands in connection with the brain. We have known an artist who could draw two different pictures at once; and a very eminent professor of natural history, while watching a specimen through a microscope, sketches with one hand while writing with the other. Now, if a person advanced in life can become so educated, how much easier it would be to impress the same on the plastic mind of a child! Once taught, the person could write upon two different subjects at once, could make two copies at the same time, could write up two sets of books, could make stenographio notes and write them out in long hand simultaneously, and perform in brief a variety of oporations productive of lucrative results. Moreover, ho could do each understandingly, and not somi-automatically with one hand. Nine-tenths of ordinary pianists who have to "learn a piece" play the treble with their brains and the bass with their muscles. The left hand learns certain fixed skips and jumps by practice, and performs thom automatically at certain times, while the right haud carries tbe expressiou as well as the air of the composition, and is much more directly under the control of the performer.—*Sci. Am.*

Writers' Cramp.—This disease is more common than one would supposo. Dr. Poore mentions ten cases as having occurred in his own practice within a year, and he gives specimens of the handwriting in various stages of the disease.

Natural History.

The Laughing Plant.

The London *Garden* copies, from Palgrave's work on Central and Eastern Arabia, an account of a plant whose seeds produce effects similar to those of laughing gas. It is a native of Arabia. A dwarf variety of it is found at Kaseem, and another variety at Oman, which attains to a hight of from three to four feet, with woody stems, wide-spreading branches, and bright green foliage. Its flowers are produced in clusters, and are of a bright yellow color. The seed pods are soft and woolly in texture, and contain two or three black seeds, of the size and shape of a Fronch bean. Their flavor is a little like that of opium, and their taste is sweet; the odor from them produoes a sickening sonsation and is slightly offeusive. These seeds contain the essential property of this extraordinary plant, and, when pulverized and taken in small doses, operate upon a person in a most peculiar manner. He begins to laugh loudly, boisteronsly; then be sings, dances, and cuts all manner of fantastic capers. Such extravagance of gesture and manner was never produced by any other kind of dosing. The effect continues about an hour, and the patient is uproariously comical. Wheu the excitement ceases, the exhausted exhibitor falls into a deep sleep, which continues for an hour or more; and when he awakens, he is utterly unconscious that any such demonstrations have been enacted by him. We usually say that there is nothing new under the sun; but this peculiar plant, recently discovered, as it exercises the most extraordinary influence over the human brain, demands from men of scienee a careful investigation.

Learned Birds.

The Baltimore *American* gives the following account of a troupe of trained Java sparrows and paroquets now exhibiting in the streets of that city: "When a suitable place is found, a circular table is opened, and the birds turned loose upon it. They manifest no fear at the crowd, and do not offer to escape. The performance consists of ringing bells, trundling small wheel barrows, slack wire walking, firing off pistols, dancing, swinging each other in small swings, an excellent imitation of a trapeze performance, and a number of other equally interesting tricks. The most wonderful part of the performance, however, is done by a paroquet. The bird walks to the center of the table, and, after bowing to the crowd, seats himself on a chair near a bell. To the clapper of the bell there is attached a small cord, and any one in the crowd is allowed to ask the bird to strike any number of times upon the bell. If asked to strike 10 times, he leaves the chair, seizes the bell-rope and pulls it 10 times, aftor which he bows and returns to his seat. This was repeated a great many times, and, with one exception, the bird made no mistake. The bird will strike 27 times, but after that he refuses; aud his owuer states that he has worked nearly a year to get this bird to strike up to thirty, but it appears that his memory gives out at that point, and it is unable to count further."

Marine Animals in Fresh Water.—Prof. Ramsey, in *Popular Science Monthly*, states some facts which certainly have a most important bearing upon the attempts of our fish culturists to habituate shad, salmou and othor anadromous fish in salt water, and ought to encourage them to hope for complete success. He says: At the present day, animals commonly supposed to be essentially marine, are found inhabiting fresh water. In the inland and fresh lakes of Newfoundland, seals which never visit the sea, are common and breed freely. The samo is the case in Lake Baikal, 1,280 feet above the sea level, in Central Asia; and, though these facts bear but slightly on my present subject, seals being air-breathing mammalia, yet in the broad mouth of the Amazon, far above the tidal influx of the sea water, marine mollusca and other kinds of life are found, and in some of the lakes of Sweden thero are marine crustacea.

Mushroom Power.—A correspondent of the *Gardeners' Chronicle*, of London, gives an interesting account of the force exerted by the mycelium of the mushroom in making its way through apparently impenetrable materials. He says: "I observed a few days ago in onr mushroom-house, with consiclerable interest, and I may say, with surprise, the penetrating power of mushroom spawn. One side of the bed is of brick, 4½ inches thick, firmly set in hard lime, so close in the texture that it is impossible to introduce the point of a nail without considerable force. Nevertheless, the mycelium found admission, and produced mushrooms of a oonsiderablo size on the outer side. The wall in several places contains porous bricks, and there, too, the mycelium found its way right through."

Rabies in Ants.—Corrosive sublimate, it is said, has the most remarkable effect upon ants. The powder, strewed in dry weather across their path, seems to drive every ant which touches it crazy. The insect runs wildly about and fiercely attacks its fellows. Tho news soon travels to the rest, and the fighting members of the community make their appearance with a determined air, as if the obstacle would be speedily overcome by their efforts.—*Naturalist in Nicaragua.*

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SAN FRANCISCO:

Saturday, October 3, 1874.

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An Explanation.

We are under the necessity of calling for—not exactly a respite from the extra labor which the season of fairs bring with it—but for an extension of time in performing these labors. Our readers will not fail to realize the unusual demand upon our space and time which this season necessitates, and we are not afraid that our present draught upon their patience will be unaccepted. We are fully as anxious to publish anything and everything relating to these interesting occasions as they are to read it. As far as lay in our power we have attended these fairs, and have certainly derived our share of gratification from them, and we hope, our share of profit, also; and as time and space permit, we shall give through the columns of the PRESS accounts of all of them.

Among the material which we have in reserve for this purpose is the essay of Vital E. Bangs, delivered before the Stanislaus County Agricultural Society, on the evening of September 16th. We gave a brief synopsis of this admirable essay in the PRESS of last week. We shall give more, and if possible, the whole of it in our next.

THE finest things that have been in town for some time, are the beautifully bleached and tanned Angora goat skins, which Captain Shirland received from below, a short time since, where he had sent them to be prepared. These pelts make the handsomest, richest and most durable robes in use, and are alone, after paying the cost of tanning, worth twice as much as a common sheep. Then say the Angora goat business does not pay.—*Placer Herald.*

ON FILE.—"A Henpecked Husband's Soliloquy," E. E. A.; "Letters to Boys, No. 6," J. E. J.; "A Durable and Economical Fence," E. W. S.; "How to Make a Small Farm Pay," V. E. B.; "From the Kitchen," MRS. C. I. H.

The best quality of wheat is selling at 80 cents per bushel in Salt Lake City.

UTAH shipped last season upwards of a million bushels of choice wheat.

Editorial Notes from the State Fair.

Among the Lowly.

On our first visit to the Agricultural Park we chanced, as often chances to the visitant of new places—to alight among the swinish portion of the population; and, scorning everything that savors of snobbishness, we determined on not leaving these unpretentious quarters to pay our respects to cattle and horse gentry, until these humble dwellers in pens had received at least a passing notice. We were, however, a little too early in our call on the pigs; finding many of them sleeping as only a pig can sleep. I shall not dwell on the individual merits of the different animals, and shall speak of them only in general terms. An Eastern man in becoming acquainted with the hogs of California—the four footed ones I mean—is somewhat surprised to

Find Them all Black,

And some, in their generalizing simplicity, suppose that the Fifteenth Amendment has influenced this preference for the dark skinned races of pigs; but this is not the case. These breeds are healthier in this climate than any other. There is an extremely fine display of this class of animals at the present fair. There are a good many Eastern people visiting the fair; some Cincinnati pork packers being among the number, and they speak of the swine exhibit in very complimentary terms.

The Sheep Department

Also shows an improvement over the exhibit of any former State fair. The French and Spanish Merinos greatly predominate in number, but there are some good Cotswolds, Leicesters and Southdowns, with grades. The display of Angora Goats, also, evinces a steady improvement in this important department of stock. It is evident that the regular breeders, and this stock, are all right; all we want now, to make this a valuable source of wealth to California, is a more clearly defined view of the commercial aspect of the product, and, if possible, the establishment of manufactories in this State.

It is pleasant to see how

California Gathereth her Chickens Under Her Wings.

It was not pleasant, however, to bear the adverse criticism that was bestowed upon the display in the poultry department. There was a good deal of crowing in this neighborhood, but those who watch closely for breed-points, declare there is a tendency to display here at the sacrifice of pure blood. There were, however, some coops of fowls that would undoubtedly bear the most scrutinizing examination.

There is a growing conviction that justice is blind in

Awarding Premiums

At fairs as in courts of law, and we confess, that while we were present to-day at some of the examinations, we came to the conclusion that there is a vast deal of foolery about it, if nothing worse; and we do not wonder now that exhibitors, and often the public, appeal to the higher courts. We spent an hour under a hot Sacramento sun, observing a committee of five dispose of 13 cows that were brought before them; for we wanted to see a little how the thing was done. The exhibitors were ill-humored and uncourteous; and the judges were evidently confused and muddled in forming an opinion, and timid in rendering it. There was too much Bunsbyism about it.

It having been announced that a

Stock Sale

Was to take place on Friday forenoon, we resolved to be present at it; and almost suffered martyrdom by being burned at the stake—or at the fence post against which we leaned. The sale was a failure; only two or three head of cattle were sold; there being little inclination to bid, and the prices of those sold being unsatisfactory. The sale was accordingly postponed until the day following. We noticed that the auctioneer who officiated at this cattle sale, was the personage who figures most conspicuously in pool selling at the races; and it seemed to us as though the attendants at the stock sale were just a little suspicious that possibly they were being sold. The postponement referred to was accelerated somewhat by the ringing of the bell for

The Race

Between Occident, Sam Purdy and Blackbird. And a very exciting race it was, though the time made by the horses was ordinary, the first and fastest heat being 2:21½, and the two last being 2:28¾. There were six heats trotted, Sam Purdy winning three, and the race; Occident winning two, and Blackbird winning one. Occident broke badly in every heat but the last. Every break was at the same point, the first quarter, and every time he broke he lost several rods; but the way in which he retrieved his losses after setting down to work, was truly admirable. In the last heat, however, he did not break at all; still he lost it. He was evidently a little worked down with the six heats and the great amount of false scoring. But he only lost the last heat by a neck. Some pronounce Occident "a bilk," as they do a good many of us; but he is not a bilk. He is a glorious horse, and has wonderful speed; but he is extremely nervous, and consequently not reliable. Probably Occident has not sown his wild oats yet. Sam Purdy is also a splendid horse, and is as true as steel. He won his heats to-day under the whip.

The crowd at the race was immense; 17,000 being considered a very moderate estimate of the number of people present. We think there were 20,000 present. The "grand stand," as it is called, was packed to an extent that was really imprudent, and hundreds of tickets were sold after the officers were well aware that there was no possible chance for the purchasers to obtain even standing room. The admission fee to the grounds is fifty cents, to the "grand stand" fifty cents extra.

Now, in regard to this horse racing matter we would say,

Come and Let Us Reason Together.

A passion for horse racing—for trotting especially—has become a deep-rooted characteristic of the American people, especially among the well-to-do classes; and for us to try to crush out this strong taste, or to hope to divert it to other channels, is as silly as to say to the sea of womanly vanity, "thus far shalt thou go, and no farther." And why should we fight against it? A very large portion of the American people say let us have it. They accept it as their favorite recreation, and are willing to pay for it. There is more danger of our people having an insufficiency than an excess of sport, and this is in strict keeping with our national temperament and habits. In gratifying this taste people do not interfere with the rights of others; and the system of propriety that is offended by it is morbidly sensitive. And would it not be better to accept and respect this as one of our national sports, and promptly correct its abuses, than to seek to make it disreputable, and thus develop deceit and hypocrisy in connection with it? For our part we are extremely pleased at observing the earnest and simple manifestation of the ladies in regard to the results of the race. We have never seen the women of California appear to better advantage; for the reason that they were full of unrestrained good nature; pleasing because they were being pleased.

But, we repeat, let us divest horse-racing of its gambling element; and while striving for purification here let it be borne in mind, that there are some other apartments that require the use of the duster and scrubbing-brush. It would be well, perhaps, to look out for some who are crying "stop thief" in connection with horse-racing, and not allow them to cover up their own thieving tracks with the dust that is raised in the pursuit of the horse-jockey. To withdraw in disgust from agricultural societies on account of the presence of the sporting man is, in our opinion, about as commendable as to keep away from the ballot box because corrupt politicians are supposed to have had the manipulation of it.

It is evident that a large majority of the visitors at fairs demand these speed-contests between horses; but we believe that quite as large a majority of them would co-operate in proper measures to strip these contests of their gambling phase.

The San Francisoans who are spending fair week here, express a longing to get back to the refreshing breezes of the Bay; to drink once more of pure and wholesome water, and to escape the sleep-destroying mosquito.

YOUNTVILLE FARMERS' BUILDING.—At a meeting held by the Directors of the Yountville Farmers' Building Company at Yountville, on Saturday last, a resolution was adopted calling a meeting of the stockholders of the company, the same to be held at the office of the company in Yountville, on the 10th of October next, for the consideration and decision on a proposition to increase the capital stock of said company from $5,000, divided into 100 shares of the par value of $50 each, the present stock, to $20,000, divided into 400 shares of $50 each. The foundations of the building now in course of erection by the company are all finished, and the brickwork was commenced on last Monday, so that there is every prospect of its being completed by the time appointed in the contract, the 1st of October next.—*Napa Reporter, Sept. 19th.*

OBTAINING JUDGES.—A writer in the *Ohio Farmer* says: "The way to obtain good judges at fairs is to find out the names of the best men for the purpose in all the surrounding country, and notify them of their selection, say a month before the time, inclosing a complimentary admission ticket, with a request that they will at once return it if they decline the service, and promising payment sufficient for a day's board at a hotel and little contingencies, if they perform the duty required. This has been adopted at the New York fairs for some years past, and to some of the best judges of horses and cattle they also pay traveling expenses. In this way they find no serious difficulty in obtaining good men for awarding committees."

OVER 300 boxes of fruit have been shipped over the mountains this week by Wm. George. Many boxes are sent of late to different parties all through the valley and coast counties of California, who, having once tasted our foothill fruits, do not like to be without them. —*Grass Valley Foot-Hill Tidings.*

ANGORA GOATS.—A herd of 1,200 graded Angora goats rested at this place last Wednesday night, and crossed the ferry Thursday morning, on the way from the vicinity of Monterey to Lake county. The goats appeared to be in thrifty condition, and a very large portion of them were of three-fourths and seven-eighths grade.—*Contra Costa Gazette.*

Award of Premiums at the State Fair.

Following is a list of premiums awarded at the close of the State Fair.

Graded Horses.

STALLIONS.

Best 4 yrs old and over, J. D. Carr, of Gahilan; Carr's Membrino; $50.
Best 2 yrs old, Theodore Winters, of Solano; Soamperdown, $30.
Best 1 yr old, E. H. Miller, Jr. of Sac.; Blackbird, $20.

MARES.

Best 4 yrs old and over, D. P. Diggs, Yolo; Minnie Ball, $40.
Best 4 yrs old and over with colt, William Hamilton, of San Jose, Winona and colt, $50.
Best 3 yrs old and over, D. M. Reavis, of Chico; Flora, $30.
Best 2 yrs old, William Hamilton, of San Jose; Emma, $20.
Best 1 yr old, D. M. Reavis, of Chico; Nellie, $15.

Horses of All Work.

STALLIONS.

Best 4 yrs old and over, J. J. Bell, of Shasta; Duke, $40.
Best 3 yrs old, William Hamilton, of San Jose; Justice; $30.
Best 2 yrs old, John Henry, of Yolo; Henry Ward Beecher, $20.
Best 1 yr old, W. A. Findley, of Weatland; Billy, $15.

MARES.

Best 4 yrs old and over with colt, Carl Halverson, of Patterson's Station; Belle and colt, $40.
Best 4 yrs old and over, James McComb, of Dixon, Solano; Maid, $30.
Best 3 yrs old, E. Pierce, of Sacramento; Lucy Moore, $20.
Best 2 yrs old, Mark Hopkins, of Sacramento; Belle, $15.

Draft Horses.

STALLIONS.

Best 4 yrs old and over, C. Hubbard, of Sac.; Wm. Wallace, $40.
Best 3 yrs old, McCarty & Lapham, of San Francisco; Judge Templeton, $30.
Best 2 yrs old, Wm. F. McCracken, of Freeport; Georga, $20.
Best 1 yr old, John Gosling, of Sac.; Prince June, $15.

MARES.

Best 4 yrs old and over with colt, John Neal, of Sac.; Eliza and colt, $40.
Best 4 yrs old, Chris. Thadt, of Dixon; Kate, $35.
Best 3 yrs old, Wm. B. Gibson, of Woodland; Betsy, $25.
Best 2 yrs old, Chris. Thadt, of Dixon; Lucy; $20

Roadsters.

STALLIONS.

Best 3 yrs old, Wm. Hamilton, of San Jose; Honest Allen, $40.
Best 2 yrs old, Wm. Hamilton, of San Jose; Frank Malone, $40.
Best gelding 4 yrs old and over, C. F. Jones, of Marysville; Ben Wade. $40.
Best gelding 3 yrs old, D. R. Hunt; premium recommended for "Pat Hunt."

MARES.

Best 4 yrs old and over, J. Sessions, of Oakland; Young Diamond, $40.
Best 3 yrs old, John Munson, San Francisco; Patchen Queen, $30.
Best 2 yrs old, Leland Stanford, Sacramento; Gilberte, $20.

Carriage Horses.

Best matched span carriage horses, owned and used as such by one person, W. A. Matthews, of San Jose; No. 1 and mate, silver goblet worth $40.
Best double team roadsters, owned and used as such by one person, Wm. B. Carr, of San Francisco; Brown Billy and mate, $40.
Best saddle horse, Marion Biggs, of Butte county; Wild Bill, saddle valued at $40.

COLTS.

Best year ling horse colt, Wm. Hamilton, of San Jose Black Allen, $30.
Best suckling horse colt, S. Eaton, of Marysville; Mike Nye, $20.
Best yearling mare colt, Adam Newbauer, of Sacramento; Daisy Donner, $20.
Best suckling mare colt, Carl Halverson, of Sacramanto; Queen, $15.
Best exhibit of not less than six colts, owned by one person, of any sex or age, Wm. Hamilton, of San Jose; six Ethan Allen colts, $50.

Sweepstakes.

Best graded mare, 4 yrs old and over; special premium recommended to George Beanment for Amelia.
Best Jack, 4 yrs old and over, Major Biggs, of Butte county; Humboldt, $40.
Best Jennet, 4 yrs old, Thomas Edwards, Sacamento; Julia, $30.
Best Jennet, 3 yrs. old, Thomas Edwards, of Sacramento; Nancy, $20.

Thoroughbred.

STALLIONS.

Best 4 yrs old and over, Theodore Winters, of Solano; Norfolk, $75.
Best 3 yrs old, John Hall; of Alvarado; Woodbury, $50.
Best 2 yrs old, Wm. Boots, of San Jose; Nathan Coombs, $40.
Best 1 yr old, Wm Boots, of San Jose; Bob Wooding, $30.
Best colt under 1 yr, Theodore Winters, of Solano; No. 1, $20.

MARES.

Best mare 4 yrs old and over with colt, Theodore Winters, of Solano; Hennie Farrow and colt, $60.
Best mare 4 yrs old, John Hall, of Alvarado; Peggy Ringgold, $50.
Best mare 3 yrs old, J. C. Simpson, of Oakland; Marian, $40.
Best mare 1 yr old, Theodore Winters, of Solano; Mollie McCarty, $25.
Best mare colt under 1 yr, John Hall, of Alvarado; No name, $20.

Families.

Best thoroughbred sire and not less than 10 of his colts, Theodore Winters, of Solano; Norfolk and 10 of his colts, $150.
Best thoroughbred dam and not less than ten of her colts, same premium, recommended for Moss Rose and colts, and Hennie Farrow and colts, $100.

Durham Cattle.

BULLS.

Best 4 yrs. old and over, D. M. Reavis, of Chico; Stonewall, $60.
Second best 4 yrs. old and over, Jeff. Bridgford, of Missouri; Moscovite, $30.
Best 3 yrs. old, H. G. Glenn, of Jacinto; General Grant, $30.
Second best 3 yrs. old, C. Younger, of San Jose; Tempest, $15.
Best 2 yrs. old and over, D. M. Reavis, of Chico; Duke of Liberty, $20.
Second best 2 yrs. old and over, Jones & Co., of San Jose; Master Maynard, $10.
Best 1 yr. old, Jones & Co., of San Jose; Mason Duke, $15.

Second best 1 yr. old, Jeff. Bridgford, of Missouri; Cornell, $7.50.
Best calf, C. Younger, of San Jose; Arthur Lemon, $10.
Second best calf, Jeff. Bridgford, of Missouri; Bourbon Duke, $5.

COWS.

Best 4 yrs. old and over, Jeff. Bridgford, of Missouri; Jenny McLain, $40.
Second best 4 yrs. old and over, C. Younger, of San Jose; Sprightly, $20.
Best 3 yrs. old, Jeff. Bridgford, of Missouri; Ellen 3d, $30.
Second best 3 yrs. old, Jones & Co., of San Jose; Lorena 2d, $15.
Best 2 yrs. old, Jeff. Bridgford, of Missouri; Cora Lee, $20.
Second best 2 yrs. old, C. Younger, of San Jose; Valley Maid, $10.
Best 1 yr. old, Jeff. Bridgford, of Missouri; Lady Melden, $15.
Second best 1 yr. old, Jeff. Bridgford, of Missouri; Della Bridgford, $7.50.
Best calf, M. Wick, of Oroville; Gem, $10.
Second best calf, Jeff. Bridgford, of Missouri; Medora, $5.

Jerseys.

BULLS.

Best 4 yrs. old and over, J. B. Haggin, of San Francisco, Dashwood, $60.
Best 2 yrs. old, A. Maillaird, of San Rafael; Keystone, $20.
Best 1 yr. old, L. C. Powers, of Sacramento; Volunteer, $15.
Second best 1 yr. old, J. B. Haggin, of San Francisco; Billy Dashwood, $7.50.
Best calf, same person; Hero, $10.
Second best calf, A. Maillaird, of San Rafael; Florian, $5.

COWS.

Best 4 yrs. old and over, L. J. Orcutt, of Covington, Massachusetts, Blanche, $40.
Second best 4 yrs. old and over, L. C. Powers, of Sacramento; Daisy Eyebright, $20.
Best 3 yrs. old, J. B. Haggin, of San Francisco; Nelly Bly, $30.
Second best 3 yrs. old, same person; Marla, $15.
Best 2 yrs. old, A. Malllaird, of San Rafael; Flora Dell, $20.
Second best 2 yrs. old, J. B. Haggin, of San Francisco; Lillie Hudson, $10.
Best 1 yr. old, L. J. Orcutt, of Covington, Massachusetts; Ruby, $15.
Second best 1 yr. old, L. C. Powers, of Sacramento; Cherry, $7.50.
Best calf, J. B. Haggin, of San Francisco; Inez, $10.
Second best calf, A. Maillaird, of San Rafael; Lady Jane Third, $5.

Alderneys.

BULLS.

Best 4 yrs old and over, Robert Beck, of Sacramento; Touchstone, $60.
Second best 4 yrs old and over, L. C. Powers, of Sacramento; Saratoga, $30.
Best 1 yr old, W. J. Prather, of Woodland; Bismarck, $15.
Best calf, A. Malllaird, of San Rafael; Young Comet, $10.
Second best calf, same person, $5.

COWS.

Best 4 yrs old and over, A. Mailliard, of San Rafael, Cora, $40.
Best 3 yrs old, same person; Annie, $30.
Best 2 yrs old, same person; Romana; $20.
Best 1 yr old, same person; Lady Bowen Fourth, $15.
Best calf, same person; Romana Second, $10.

Ayrshires.

BULLS.

Best bull 2 yrs old, Robert Beck, of Sacramento; Lord Clyde, $20.
Best bull 1 yr old, same person; $15.

COWS.

Best 4 yrs old and over, to be passed upon.
Second best 4 yrs old and over, to be passed upon.
Best 1 yr old, L. A. Upson, of Sacramento; Bonny Jean, $15.

Holsteins.

Best bull 4 yrs old and over, S. B. Emerson, Mount View; Opldus, $60.

Devons.

Best bull 3 yrs old, Seneca Daniels, of Sonoma; Duke, $30.
Best bull calf, same person; Beecher, $10.
Second best bull calf, same person; Tilton, $5.
Best cow 4 yrs old and over, same person; Fairy, $40.
Second best cow 4 yrs old and over, same person; Fashion, $20.
Best cow 2 yrs old, same person; Fancy, $20.

Graded Cattle.

BULLS.

Best 3 yrs old, C. P. Hensley, Rio Vista; Major, $20.
Best 2 yrs old, E. Comstock, Yolo; Granger, $15.
Best 1 yr old, H. Hurmel, Solano; Grenadier, $10.
Best calf, E. Comstock, Yolo; Mike, $5.
Second best calf, E. Comstock, Yolo; Laddie, $2.50.

COWS.

Best 4 yrs old and over, E. Comstock, Yolo; Chub, $30.
Best 3 yrs old, Charles Clark, San Jose; Mollie, $20.
Best 2 yrs old, E. Comstock, Yolo; Blanche, $15.
Best 1 yr old, E. Comstock, Yolo; May Queen, $10.
Best calf, Charlea Clark, San Jose; Mollie 1st, $10.
Second best calf, E. Comstock, Yolo; Lady Tilton, $5.

Herds.

Best herd of thoroughbred cattle, to consist of one male and five females, owned by one person, Carr & Chapman, Gabilan; Governor Booth and herd, silver pitcher worth $150.
Second best do., Jones & Co., San Jose; Maynard and herd, silver pitcher worth $75.
Second best graded bull 3 yrs old and over, Charles Green, Rio Vista; Duke, $10.
Second best bull, 1 yr old, graded, H. Humel, Solano; Bolingbroke, $7.50.
Second best cow, 3 yrs old, E. Comstock, Yolo; Spark, $10.
Second best cow, 1 yr old, S. B. Emerson, Mount View; Fairy Queen, $5.

Sweepstakes.

Best bull of any age or stock, S. B. Emerson, Mount View; Sheriff, silver pitcher worth $100.
Second best do., Jeff Bridgford, Missouri; Muscovite, silver pitcher worth $75.
Best cow of any age or stock, Carr & Chapman, Gabilan; Lady Solway, silver pitcher worth $75.
Second best do., C. Younger, San Jose; Sprightly, silver pitcher worth $35.
Best bull and five of his calves under one year, C. Younger, San Jose; Thorndale and calves, silver pitcher worth $100.
Second best do., M. Wick, Oroville; Red Cloud and calves, silver pitcher worth $50.

Sheep.

SPANISH MERINO.

Best ram 2 yrs old and over, Severance & Peet, of Niles Station; Green Mountain, $30.
Second best ram, Severance & Peet, of Niles Station; California Chief, $15.
Best ram, 1 yr old and under 2, Hammond & Co., of Vermont; No. 1, $20.
Second best ram, 1 yr old and under 2, Hammond & Co., of Vermont; No. 2, $10.
Best 3 ram lambs, Fred Cox, of Sacramento; $20.
Second best 3 ram lambs, Severance & Peet, of Niles Station; $10.
Best pen of 5 ewes, 2 yrs old and over, Severance & Peet, of Niles Station; $20.
Second best pen of 5 ewes, 2 yrs old and over, Severance & Peet, of Niles Station; $10.
Best pen of 5 ewes, 1 yr old and under 2, Severance & Peet, of Niles Station; $20.
Second best 5 ewes, 1 yr old and under 2, Severance & Peet, of Niles Station; $10.
Best 5 ewe lambs, same persons; $20.
Second best 5 ewe lambs, same persons; $10.
Best ram and 5 of his lambs, same persons; Big Leg and 5 lambs, $30.

FRENCH MERINO.

Best 2 yrs old and over, Wm. Blacow, of Alameda county; Gamester, $30.
Second best 2 yrs old and over, R. A. Branton, of Dixon; Napoleon, $15.
Best 1 yr old and under 2, Wm. Blacow, of Alameda county; Sultan, $20.
Second best 1 yr old and under 2, R. A. Branton, of Dixon; Rufus, $10.
Best 3 ram lambs, Murray & Watt, of Sacramento; $20.
Second best 3 ram lambs, Wm. Blacow, of Alameda county; $10.
Best pen of 5 ewes, 2 yrs old and over, Wm. Blacow, of Alameda county; $20.
Second best pen of 5 ewes, 2 yrs old and over, R. A. Branton, of Dixon; $10.
Best 1 yr old and under 2, Wm. Blacow, of Alameda county; $20.
Best pen of 5 ewe lambs, Murray & Watt, of Sacramento; $20.
Second best pen of 5 ewe lambs, Wm. Blacow, of Alameda; $10.
Best ram and 5 of his lambs, same person; Gamester and 5 lambs, $30.

COTSWOLD.

Best ram 2 yrs old and over, S. B. Emerson, of Mount View; Link, $30.
Best ram 1 yr old and under two, Landrum & Rogers, of Watsonville; Prince, Jr., $20.
Best 3 ram lambs, same persons; $20.
Best pen of 5 ewes 2 yrs old and over, same persons; $20.
Second best pen of 5 ewes 2 yrs old and over, S. B. Emerson, of Mount View; $10.
Best ram and 5 of his lambs, same person; $30.
Best pen of 5 ewe lambs, same person; $20.

SHROPSHIRE.

Best ram 2 yrs old and over, L. Pierce, of Suisun; Jack, $30.
Best pen of 5 ewes, 2 yrs old and over, same person; $20.
Best ram and 5 of his lambs, same person; Jack and lambs, $30.

SOUTHDOWNS.

Best ram 2 yrs old and over, George Bement, of Napa; No. 1 Buck, $30.
Second best ram 2 yrs old and over, J. D. Carr, of Gabilan; Fordham, $15.
Best pen of 5 ewes 2 yrs old and over, Geo. Bement, of Napa; $20.
Second best pen of 5 ewes 2 yrs old and over, J. D. Carr, of Gabilan; $10.
Best 1 yr old and under two, George Bement, of Napa; $20.
Best 5 ewe lambs, same person; $20.
Second best 5 ewe lambs, J. D. Carr, of Gabilan; $10.
Best 3 ram lambs, George Bement, of Napa; $20.
Second best 3 ram lambs, J. D. Carr, of Gabilan; $10.
Best ram and 5 of his lambs, same person; Fordham and lambs, $30.
Best Leicestershire ram, 2 yrs old and over, J. D. Carr, of Gabilan; Lord Leicester, $30.
Best Silesian ram, 2 yrs old and over, S. Treat, of Sac.; Longfellow, $30.
Second best Silesian ram, 2 yrs old and over, Murray and Watt, Sacramento; Damifino, $15.

GRADED.

Best ram 2 yrs old and over, J. H. Glass, of Sacramento; Good Fleece, $25.
Best ram 1 yr old and under 2, G. W. Hancock, of Sacramento; Whitney, $15.
Best 5 ram lambs, R. A. Branton, of Dixon; $20.
Best pen of 5 ewes 2 yrs old and over, same person; $20.
Best pen of 5 ewes 1 yr old and under 2, same person; $15.
Best 5 ewe lambs, G. W. Hancock, of Sacramento; $15.

SWEEPSTAKES.

Sweepstakes over any class or breed—Big Leg and 5 lambs, Severance & Peet, Niles Station; $75.
Second, Gamester and 5 lambs, Wm. Blacow, Alameda Co.; $35.

Goats.

ANGORA.

Best buck 2 yrs old and over, N. Gilmore, of El Dorado; Hannibal, $40.
Second best buck 2 yrs old and over, Landrum & Rodgers, of Watsonville, Tommy, $25.
Best buck under 2 yrs old, same person; Hercules 87, $30.
Second best buck under 2 yrs old, J. P. Sargent, of Gilroy; Aladdin, $20.
Best pen of 3 does, 2 yrs old and over; N. Gilmore, of El Dorado, $10.

GRADED.

Best pen of 3 does, 2 years old and over; J. P. Sargent, of Gilroy, $20.

SWEEPSTAKES.

Best buck, N. Gilmore, of El Dorado; Hannibal, $50.
Second best buck, Landrum & Rogers, of Watsonville; Hercules 87, $50.
Best doe, N. Gilmore, of El Dorado, $25.
Second best doe, Landrum & Rogers of Watsonville, $15
Best pen of 10 kids, Landrum & Rogers, of Watsonville, $30.
Second best pen of 10 kids, J. P. Sargent, of Gilroy, $15.

Swine.

Best boar 2 yrs old and over, R. S. Thompson, of Napa; Young Comet, $30.
Best boar under 2 yrs, R. S. Thompson, of Napa; Souse Genteel, $20.
Best boar 6 mos and under 1 yr, R. S. Thompson, of Napa; Washoe, $15.
Best breeding sow 2 yrs old and over, J. C. Mills, of Centerville; Princess, $25.
Best breeding sow 1 yr old, E. A. Bridgeford, of Colusa; Kitty Thompson, $25.
Best sow 6 mos old and under 1 yr, R. S. Thompson, of Napa; Berkshire Beauty, $10.
Best pair of pigs from 6 mos to 1 yr old, R. S. Thompson, of Napa, $30.
Best pen of 10 pigs; E. J. Sparks, of Lincoln, $30.

SWEEPSTAKES.

Best boar of any age or breed, E. A. Bridgeford, of Colusa; Berkshire Boy, $40.
Second best boar of any age or breed, W. P. A. Craig, of Rye Patch, Nevada; Sucker Boy, $25.

CLOSING OF THE MECHANICS' INSTITUTE FAIR.—With the date of our present issue, this grand indnstrial exhibition closes. There is evidently a feeling of mutual satisfaction between the managers, the exhibitors, and the public at large. But the temporary gratification which it has afforded is as nothing compared with the permanent improvement in taste and the practical information that it has promoted.

Professor Carr and the University.

Professor Carr has published in the *Chronicle* a full and elaborate statement of the matters at issue between himself and the Regents of the State University, giving at the same time a succinct history of the action of the Board in relation to the Agricultural and Mechanical Art Colleges, from the date of the organization of the University. The statement and history is too lengthy to admit of its publication entire, in the PRESS, as it would occupy about five of our pages. Hence we can give only a brief digest of the document. Those who do not see the *Chronicle* may be pleased to learn that it is soon to be printed in pamphlet form for general circulation.

The Professor starts out with a history of the Congressional action which led to the national endowment of Agricultural colleges in the several States. The share of California in this national gift was 150,000 acres of land, which, by act of Legislature was appropriated to the founding of a University, in which, to meet the requirements of the Congressional act, a College of Agriculture was first to be established, to be followed in the order as named by a College of Mines, a College of Civil Engineering, and a College of Letters—the latter to be coexistent with the College of Arts.

Grave Defects.

The Professor thinks that the injustice complained of in regard to the College of Agriculture has been brought about, not so much by a defective plan of organization so far as its educational features are concerned, as by the extraordinary powers conferred upon the Governor and Board of Regents. By virtue of these powers, he says, we have the anomoly of an institution created by a public fund, supported by public taxation, which is to all intents and purposes a private institution, beyond the reach of penalties of the press or of public censure for malfeasance in office.

The Regents hold that the grant of Congress to "provide colleges for the benefit of agriculture and the mechanic arts," was "really granted for the encouragement of all branches of modern scientific instruction, and was so construed in the application of it to the University of California." The history of the Credit Mobilier and every great fraud committed upon the public under the sanction of law, says the Professor, shows that the first steps of the fraud have been to obtain the necessary legislation. In all the shifting scenery of the play the conspicuous figures remain the same. They also at first construed the provisions of the organic act with regard to a Secretary to be impracticable.

The professor next proceeds to review the act of transference of the College of California to the State University; criticises the manner in which the first Board of Regents of the University was made up, and their early acts in selling off a large portion of the University grounds.

The organization and opening of the University, in which Prof. John Le Conte largely assisted as acting President, is favorably alluded to.

The Agricultural College.

Prof. Carr having been called upon to take charge of the professorships of Agriculture, Agricultural Chemistry, and Horticulture, entered upon active duties at the opening of the University September, 1869, and occupied his first year with two lectures a week to the advanced class; a course of twelve lectures to the Normal School, and in lecturing to agriculturists and school teaching, at there various gatherings. In addition to which he devoted considerable time to a thorough and systematic study of the agricultural capacities of the University grounds at Berkeley.

The Professor was informed January 5th, 1870, by a note from Secretary Moulder, that Dr. Merritt had been authorized to expend $1,500 in "ornamenting the grounds" at Berkeley; and the suggestion was made that he should confer with the Dr. about "the introduction of new and valuable plants." The Professor promptly expressed his willingness and desire to aid in any work in that direction. and proffered some additional suggestions. The result was the setting out of a few acacias, blue gums, etc.; but nothing being done or proposed by the Regents of any practical value.

Early in May the professor addressed a letter to the Regents making such practical suggestions as his experience and observations at similar institutions suggested, to which communication no answer was ever returned; but some two months afterwards the Board of Regents passed some resolutions directing him to deliver one or more lectures at important localities, in all portions of the State, on such subjects connected with agriculture as were likely to be of the most value and interest to the various localities. These resolutions became famous by reason of the remarkable declaration of which they contained, that the Regents proposed by this act "to transfer the Agricultural College of the University from the closet to the field," a declaration absurd in its nature, and which became a standing jest among the teachers throughout the State.

The Profeasor did his best to carry the spirit of the resolutions out, as thousands of persons in all parts of the State can testify. During the first year of this work he traveled about 2,000 miles, and over 3,000 miles during the second year. The only change ever made in this programme was a notice from the Regents, "to incnr no additional expense for traveling while delivering lectnres until further notice."

Considerable space is devoted to the Professor's correspondence with the Regents in relation to laying out the University grounds, and utilizing them for agricultural instruction. He devoted much time to this matter, bronght to it much valuable experience and observation of his own, consulted with some of the ablest and best experienced individuals and teachers from the East, who chanced from time to time to be in California, and his plans were fully endorsed by Prof. Bolander. Yet but little or no attention was paid to his communications, or at least not till after his expulsion was resolved upon. To the average mind, ontside of the Board of Regents, it wonld seem that the Agricultnral Professor of the University should be fully consulted in such matters; but such does not appear to have been the case—and while only $400 was expended under his direction, over $20,000 was expended under the direction of Dr. Merritt.

In July, 1872, Mr. Bolander, in the form of a resolution, urged upon the Regents the immediate location of grounds to be devoted to agricnlture and horticulture, presenting his suggestions under ten distinct heads. These resolutions were for the time laid on the table; but in September following, Professor Carr again urged the importance of the subject on the attention of the Regents, when the constrnction of a greenhouse and the employment of a gardener was finally ordered. But as no location was made for improvements, notwithstanding frequent appeals for the same, supplemented by letters and advice to that effect from Dr. Grey, who was then perfecting a similar work for Harvard University, nothing was done. The inference drawn, is that Professor Carr's plans for utilizing the grounds for purposes of instruction, would interfere with the plans of ornamentation proposed by Fred. Low Olmstead, which requires an expenditure of from forty to eighty thonsand dollars.

President Gilman.

Under this head the Professor writes: "Soon after the inauguration of President Gilman it became evident that he had not only no sympathy with the Agricultural College, but that he would use all his influence to divert its means into other channels. He prononneed the organization so carefully studied by acting President Le Conte, as "extremely faulty and defective," and in the register, soon after published, wiped ont the College of Agricnlture, as such, making an agricultural "conrse of study" one of several not essential to any degree conferred by the University. So marked was this change that when the head of the Department at Washington wrote to me for the statement of the condition and progress of our Agricultural College, to include in his report to Congress for 1872, and I replied by sending the register (not feeling authorized to speak for the President or Regents), he immediately replied: 'What I want is a register or catalogue or other document concerning yonr Agricultural College. Please fill the inclosed blanks, answers to specific questions which will give the desired information.' I gave the letter and blanks to President Gilman, with a copy of the previous report made under President Durant.

When the congressional report was distributed, the information concerning our Industrial College of Agricnlture and the Mechanic Arts was confined to two brief paragraphs, as follows: "The most important change made in this college during the present year is the eleotion of Daniel C. Gilman, President of the University." President Gilman is a graduate of Yale College, and was for several years Professor in the scientifio school of that college. He has spent some time in Germany in the study of science in Berlin. His inaugural address was delivered at Oakland, November 7th, 1872, and is replete with practical observations on the prineiples and character of the edncation which our public demands." "The farm has not been improved, etc." "Students are not instructed in agriculture outside of the school room."

The Professor complains that after suitable rooms in the new Agricultural College buildings had been assigned to the use of the various Professors, by mutual arrangement between the Faculty and Building Committee, and the furnishing either completed or in progress, Pres. Gilman informed him that the rooms designed for him were wanted for other pnrposes. By this act all his plans for exhibiting rare and valuable plants and conducting experiments towhich light and heat were essential, were thus summarily overthrown by relegating the accommodations into the north end of the basement. He says: "I remonstrated strongly" and said "I should be ashamed to take the farmers of the State through the buildings and exhibit such accommodations for the Agricultural College."

The paragraph on page 69, of the Regents statement to the Joint Committee of the Legislature, is untrue. My remonstrances were made to the President, as my communications usually were after his appointment. If the Board never received "any expression of my wishes," it was not my fault.

The Regents say, (also on page 68 of their statement,) that "on the removal to Berkeley, the sum of $500 was placed at my disposal to secure the aid of competent lecturers during the year in matters of practical agriculture." This is not true. I never heard of this except in the pages referred to, and never knowingly had a cent at my disposal for these purposes. (See following letter to Regents, April 6, 1874.)

[Continued on Page 220.]

Miscellaneous.

Pacific Coast Products.

Nothing is more wonderful in history or romance than has been the progress of the States and Territories of the Pacific Coast—and, wrten aright, neither the grandest epic nor the most powerful novel ever composed by poet or novelist, could equal it. The world at large has always regarded California as the real embodiment of all that was ever imagined or written of the fabled El Dorado, but few ever had a tangible idea of what that wealth really was, or of the wondrous capabilities of it and its sister States and Territories, extending as they do from the Dakota Black Hills paradise to the Golden Gates, and from the placers of British Columbia to those of Sonora. The occasion of holding the Ninth Industrial Fair, which represents in a certain measure this wealth, past and progressive, and has seemed to us to be a fitting occasion for publishing some reliable statistics to show what the Pacific Coast has added to the wealth of the world from the days of '49 to the no less prosperous ones of the present. Naturally the first thing that strikes one in this connection is

The Woudrous Wealth in Gold and Silver,

Which has been sent forth to circulate among the various channels of trade, and to revivify the commerce of the world, which, by the end of the present year will be, not less than $1,683,386,241, or $1,385,309,503 in gold and $298,076,738 in silver. That is an amount equal to the total gold and silver coin in circulation in the three great commercial nations of the world, the United States, Great Britain, and France. What the United States would have done without all this flood of wealth poured through its commercial veins and extracted from the placers and the bowels of the Sierras it is not easy to conjecture.

Next in importance to Gold and Silver comes

Wheat.

Of course, as may be seen by the annexed table, from the San Francisco *Journal of Commerce*, the Pacific Coast States and Territories produced since their first settlement $300,000,000, and of which they exported to the end of 1874, $109,441,276. Wheat is now King on the Pacific Coast, instead of Gold, and will be worth more to it (especially California) then all the wealth of her placers and her mountains. The following table shows the yield year by year:

Wheat Yield of California, etc.

Year.	Centals.	Year.	Centals.
1855-56	3,500,000	1865-66	5,000,000
18 6-57	3,250,000	1866-67	9,000,000
1857-58	3,000,000	1867-68	9,000,000
1858-59	3,000,000	1868-69	10,000,000
1859-60	3,700,000	1869-70	10,500,000
1860-61	5,500,000	1870-71	9,750,000
1861-62	4,500,000	1871-72	7,750,000
1862-63	4,750,000	1872-73	16,000 000
1863-64	5,080,000	1873-74	14,500,000
1864-65	4,000,000	1874-75	21,000,000
Total for California			152,700,000
California, previous to 1855			500,000
Oregon, since 1850			20,000,000
Other Pacific States and Territories			3,000,000
Grand total			176,200 000
Worth			$300,000,000

The following tables show the exports and their value from the year when Californians first began to believe that their Wheat would successfully compete with that of Chile, Russia, and the Eastern States in the markets of the world:

Year.	Centals.	Value.
1855-56	340.690	953,932
1856-57	131,886	369,064
1857-58	19,962	81,844
1858-59	61,784	177,348
1859-60	558,457	932,776
1860-61	2,123,867	2,973,414
1861-62	1,154,670	2,540,274
1862-63	1,478,301	2,328,323
1863-64	1,529,281	2,599,778
1864-65	215,220	977,031
1865-66	1,825,801	3,651,602
1866-67	5,095,642	8,153,008
1867-68	5,046 575	12,6 6,437
1868-69	5,742,331	9,761,963
1869-70	5,802,487	8,516,045
1870-71	4,159,456	9,150,801
1971-72	2,213,723	5,091,563
1872-73	10,616,136	19,166,132
2873-74	9,179,732	19,399,941
Total	57,356,011	$109,441,276

Already one of the great staples of the Pacific Coast is

Wool.

There is no portion of the world so well adopted to Wool growing as the Pacific Coast. The rapidity of the increase in its production will be seen by the following table:

Wool Production of California and Oregon.

Year.	California.	Oregon.
1855	360,000	
1856	600,000	
1857	1,100,000	
1858	1,428,000	
1859	2,376,000	
1860	3,260,000	220 000
1861	4,600 000	300,000
1862	5.750,000	410 000
1863	7,600,000	342,800
1864	8,000,000	430 000
1865	7,721,000	800,000
1866	7,299,959	900,000
1867	9,628,286	1,000,000
1868	14,801,256	1,000,000
1869	15,253,370	1,300,000
1870	19,460,565	1,500,000
1871	23,687,000	1,500,000
1872	24,255,000	1,750.000
1873	32,155,000	2,000,000
Total lbs.	191,335,427	13,552,800

Total Wool Production of the Pacific States and Territories.

California	191,335,427	pounds.
Oregon	13,552,800	"
New Mexico	15,000,000	"
Washington	2.000,000	"
Colorada	2.000,000	"
Utah	2,000,000	"
Wyoming	250,000	"
Nevada	100,000	"
Dakota	100,000	"
Idaho, Montana and Arizona	100,000	"
Grand total:	226,438,227	"

Of this amount, worth $45,000,000, there has been exported from San Francisco 166,798,565 lbs, worth $37,607,810, in 15 years, as shown by the annexed table:

Year.	Pounds.	Value.
1859	2,378,250	$ 356,738
1860	3,055,325	397,192
1861	3,721,908	507,297
1862	5.990,300	1.068,487
1863	5,268,480	1.225,151
1864	5,935,670	1.254,778
1865	6,549,931	1,334,425
1866	4.662,129	897,938
1867	7,057,631	1,143,571
1868	13,225,181	2,404,399
1869	12 263,662	2,370,165
1870	19,390,209	3,718,493
1871	22,485,443	6,748,824
1872	24,578,980	7,750,000
1873	29,235,376	6,430,352
Total	166,798,565	$37,607,810

California will this year produce

Ten Million Gallons of Wine,

And in future years will be one of the greatest Wine producing countries in the world. The number of gallons exported up to the end of 1873, was about five millions. The value, etc., is shown in the annexed table:

Year.	Packages.	Value.
1859	1,849	$35,582
1860	858	27,519
1861	774	12,399
1862	1,122	28,635
1863	2,095	79,026
1864	1,650	47,931
1865	3,552	89,851
1866	7,104	169,947
1867	5,650	145,517
1868	9,836	212,333
1869	13,545	499,828
1870	16,900	703,111
1871	12,000	871,301
1872	1,011,675 (gallons)	1,100,186
1873	996,747 (gallons)	1,109.308
Total		$5,117,974

The Salmon Fisheries

Of the Columbia will in future years supply the markets of the world with this fish. The following show the particulars of the export for the last fifteen years:

Year.	Packages.	Value
1859	3,296	$ 32,759
1860	4,422	32,463
1861	2,318	23,834
1862	1,692	11,228
1863	1,142	9,935
1864	1,638	15,574
1865	941	8,824
1866	2,131	23,137
1867	3,880	36,148
1868	10,538	76,013
1869	20,293	180,367
1870	23,586	163,945
1871	29,372	190,417
1872	29,763	221,021
1873	67,706	523 387
Total	202,739	$1,554,052

Hides

Used to be a much greater article of export than now. We ourselves utilize them to make Leather, which we either manufacture into Boots and Shoes or export. This explains the decrease shown in this table:

Year.	No.	Value.
1859	151,364	$ 454,092
1860	200,850	699,750
1861	181,166	554,961
1862	321,583	1,033,873
1863	312,439	1,124,156
1864	388,281	1,064,073
1865	390,361	1.051,317
1866	169 307	546,994
1867	89,693	329,667
1868	74,274	282,160
1869	109,605	371,356
1870	103,280	390,873
1871	82,225	346,346
1872	39,518	173,242
1873	25,552	343.011
Total	2,579,799	$8,675,611

Tallow.

Of Tallow the same may be said as of Hides. We need all we have, and indeed have to import to supply our Soap and Candle factories. The following have been the exports of this article:

Year.	Pkgs.	Value.
1859	1,557	$37,848
1860	2,125	49,698
1861	2,192	65,983
1862	2,351	77,089
1863	3,402	107,358
1864	1,041	26,474
1865	31	1.038
1866	777	16,311
1867	1,752	29,541
1868	1,893	31.411
1869	337	9,508
Total	17,533	$452,259

Domestic Produce.

The total value of Domestic Produce exported since 1859 is here shown:

1859	$2,079,337	1867	$15,855,336
1860	4,470 098	1868	16,637,091
1861	6,637,837	1869	15,768,637
1862	6,242,830	1870	15,104,521
1863	6,514,029	1871	14,311,029
1864	7,137,535	1872	22,795,483
1865	8,168,289	1873	31,282,560
1866	11,107,722		
Total			$184,112,414

The Germ of an Immense Trade.

The little exhibit of beet sugar, made at the general produce stand of the *Journal of Commerce*, possesses a significanoe which, we apprehend, but few of the visitors to the Mechanics' Pavilion fully appreciate. We are assured by those who are in the way to know, that that sugar, which is quite eqnal to the best that can be produced from the raw cane sugar, so largely imported into this city, and which sells for as large a price, can be manufactnred in California at a cost which will admit of its transportation overland to St. Louis or Chicago, or by water to New York, and sold in those cities in direct competition with refined cane sugar.

Do our people realize what this fact means? It means that we have here the germ of an immense trade, which may, some day, reach a larger value than either our wheat or gold! The United States is aunually importing over eighty millions in raw sugars, which are refined in the various cities along the seaboard. Now if we can manufacture and ship to New York at a profit a single cargo of beet sugar, what need preveut our eventually shipping enough to supply the chief part, if not the whole of the Eastern market? And what does that call for? Let us see: Eighty millions in valne of raw sugar represents abont 500,000 tons of refined, which, at $200 per ton, the present average value of refined sugar, would give us $100,000,000 as the possibilities which this trade might reach, to say nothing of the enormous annual increase in the consnmption of this article. We base our estimate on what is now being done at Sacramento, where land is worth more than double what it can be bonght for in most other parts of the State, equally or better suited to the business, and upon freights at $20 per ton, when they should and soon will be reduced to $12.

One acre of land will produce about one ton of sugar, and we have already in tillage more than a million of acres of good sugar beet land in the State—or double the land needed for the purpose of our entire supply; while we have still another million in our unreclaimed tules, equally as good.

Those who have studied the history of the growth of manufactures in different countries are aware from what insignificant beginnings many of the great and leading industrial interests of various conntries have sprnng, and can readily perceive how important the beet sugar prodnct of California may become in the early future, if onr capitalists will only take hold of the enterprise. As already intimated, there are but few who examine those two or three little twenty-five-pound boxes that comprehend the possibilities which they portend, or the fact that there is every probability that the beet sugar interest of California will very soon—possibly within the next decade—exercise as important an influence over the commerce and business of this State as do now either our gold or wheat products!

There are, however, a few individuals in the State who have thoroughly informed themselves in this matter, and who are about to test the sincerity of their belief by investing largely in the enterprise. They do this and propose to erect new establishments, while they know that the capacity of our preseut refineries is far more than is needed to snpply the largest possible home demand for sugar. They look with confidence to their ability to undersell the cane sugar refineries, either in this city, New York or Chicago, and they can do it. There will be at least three or four new beet sugar factories started on this coast within the coming year, in addition to those already in existence.

Action of Water upon Lead Pipes.

Vincent says: In most great towns the water, after it passes from the mains of the water companies, is distributed to and through the houses of the inhabitants in lead pipes. Every now and then some wiseacre, who has learnt enough chemistry to know that plumbic oxide is sometimes formed by the action of water on lead, creates a panic in the mind of the public by pointing out this important fact. A great fuss is then made, and a great deal is said about the danger of this poison being overlooked until too late, from its being introdnced into the human system in almost imperceptible qnantities, there to accumnlate until fatal consequences to health and strength are produced. Experiments are therenpon immediately directed to be made by the professional chemist of the locality, who accordingly proceeds to plunge pieces of pure lead and lead pipe into the waters accused, into distilled water, fresh rain water, well water, etc. The results to be expected are well known, and have been well known for at least fifty years. The distilled water attacks and dissolves the lead with very great rapidity, rain water not quite so rapidly; the well water but seldom attacks it at all, and the river water, if it has traveled throngh any considerable distance, never. Few people have had long experience of a country district without meeting with more or less of such a panio.

The public mains are manifestly above snspicion. It is only the short private branches which are of lead. The result of most careful experiments made npon the water from different sources, after passing through the lead branch into the house was, that in inhabited houses, that is to say where the water never remains stationary in the lead branch for more than ten to twelve hours, not a trace of lead could be discovered.

With regard to water which is allowed to remain for a considerable period in contact with lead, the amount of the action depends entirely on the purity of the water. In distilled water the pretty tiny white scales of crystalline hydrated plumbic oxide form with very great rapidity, if there is free access of air, and the bottom of the vessel containing the lead and water will speedily become covered with a white deposit. Freshly fallen rain water acts nearly as well. Hence rain water for alimentary purposes should never be collected through leaden gutters. On the other hand, however, infinitesimal the amount of lime salts in solution may be, if they can be detected at all, the water in which they are found is positively free from all action as regards lead. Soft water dissolves lead, hard water preserves it untarnished. No other salts appear to preserve the lead so entirely free from oxide as do the salts of lime. Inasmuch, however, as it is impossible for water to percolate or pass over any considerable amonnt of soil without taking lime into solution, and this lime it is impossible wholly remove by any means short of complete distillation; it follows that all river water may be conveyed with the most perfect secnrity through lead pipes without in any way interfering with its wholesomeness as a potable water.

The Fastest Time Ever Made on the Hudson River Railroad.

William H. Vanderbilt and family and the President of the New Haven railroad and family reached Albany from Niagara Falls in a special train of two dining-room cars abont two o'clock yesterday afternoon. We do not know what time they made on the New York Central, bnt at 3 P. M. locomotive No. 26, James Paul, engineer, hitched on the train at West Albany and started it for New York. Their coming had been telegraphed ahead, and there was clear sailing. It took abont 10 minntes to do the slow traveling over the bridge and down along the yards, and then Jimmy "pulled her ont," and away flew the train like a meteor. At Coxsackie and other points people gazed with terror as the cars thnndered by at the rate of a mile a minute. They could hardly be seen, bnt looked like one piece of wood and iron rushing through the air. There was a slight slow-up at Hudson, and in three minutes after the train dashed by Catskill station with a "whir!" that was astonishing. Gravel-stones, dust and dry sticks whirled along in the wake of the lightning-train in clouds.

Three minutes were consumed in Tivoli for water, and once more "old 26" was measuring iron at the rate of a mile a minute till Rhinebeck was reached. There they were repairing the telegraph wire, and part of it was across the track. Five minutes were consnmed there, when the wire was cnt and the train dashed on again, the cars rocking on the rails like a cradle, and the dnst flying in every direction. Over bridges and trestle-work, around curves, through deep cuts it rattled away, rushing over Fallkill bridge into this station at a 40-mile-an-hour gait, having made Poughkeepsie in one hour and 38 minutes from Albany, and deducting 18 minutes for stops, the actnal running time was one honr and 20 minntes—the best time ever made on the Hndson river railroad. – *Poughkeepsie Eagle, Sept. 6th.*

Warmth of Clothing.

Dr. Von Pettenkofer, in a careful study of the subject of the warmth of clothing, recently published, has pointed out that the permeability of stnffs to air is a condition of their warmth. Of equal surfaces of the following materials, he found that they were permeated by the following relative quantities of air, the most porous, flannel, such as is used ordinarily for clothing, being taken at 100:—Flannel, 100; linen, of medium fineness, 58; silk, 40; buckskin, 58; tanned leather, 1; chamois leather, 51. Hence, if the warmth of cloth dedepend upon the degree in which it keeps ont the air from our bodies, then glove kid must be 100 times warmer than flannel, which every one knows is not the fact. The whole question, then, is resolved into that of ventilation. If several layers of the same material be placed together, and the air be allowed to permeate through them, the ventilation through the second layer is not much less than through the first, since the meshes of the two form a system of continuous tnbes of uniform diameter, and the rapidity of the movement of the air through these is affected merely by the resulting friction. Through our clothing, then, there passes a stream of air, the amount of which, as in ventilation, depends npon the size of the meshes, upon the difference of temperature beween the external and internal atmosphere, and upon the velocity of the snrrounding air. Our clothing, then, is required, not to prevent the admission of the air, but to regulate the same so that our nervous system shall be sensible of no movement in the air. Further, onr clothes, at the same time, regulate the temperaturo of the contained air, as it passes throngh them, so that the temperatnre of the air between the clothing and the surface of our body avorages 84 deg. to 86 deg. Fah. The hygroscopic property of different materials used for clothing essentially modifies their fnnctions. This property varies with the different materials; wool, for instance, takes up more water than linen, while the latter takes up and gives off its watery contents more rapidly than the former. The more the air is displaced by water from the clothes, the less will be their power of retaining the heat; in other words, they conduct the heat more readily, and hence we are quickly chilled by wet garments.

USEFUL RULES.—The following simple rules should be at hand with every millman, and in fact every one who has charge of machinery of any kind: To find the circumference of a circle or of a pulley—Multiply the diameter by 3.1416; or as 7 is to 22, so is the diameter to the circumference. To compnte the diameter of a circle or of a pulley—Divide the circumference by 3.1416; or multiply the circnmference by .3183; or as 22 is to 7 so is the circumference to the diameter. To compnte the area of a circle—Multiply the circnmference by one-quarter of the diameter; or multiply the square of the diameter by .7854; or multiply the square of the circumference by .07958; or multiply half the circumferenoe by half the diameter; or mnltiply the square of half the diameter by 3.1416. To compute the diameter of a toothed wheel—Multiply the number of the teeth by the true pitch and the product by .2184. These results give only the diameter between the pitch line on one side and the same liue on the other side, and not the entire diameter from point to point of teeth on opposite sides.

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Hints to be Remembered.

A note dated on Sunday is void.

A note obtained by fraud, or even from one intoxicated, can not be collected.

If a note he stolen it does not release the maker—he must pay it.

An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.

A note by a minor is void.

Notes bear interest only when so stated.

Principals are responsible for their agents.

Each individual in partnership is responsible for the whole amount of the debts of the firm.

Ignorance of the law excuses no one.

It is a fraud to conceal a fraud.

The law compels no one to do impossibilities.

An agreement without consideration is void.

Signatures in lead pencil are good in law.

A receipt for money is not legally conclusive.

The acts of one partner bind all the others.

Contracts made on Sunday can not be enforced.

A contract made with a minor is void,

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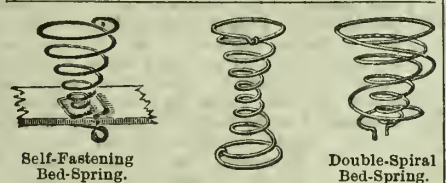
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Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

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No. 6 Leidesdorff street, - - San Francisco

sep12-tf

[Continued from Page 217.]

I did what I could to make the basement rooms assigned to my use presentable before the visit of the Legislative Committees, occupying the holidays in furnishing them with my own library and collections. The lecture-room, without fire, was exceedingly cold and damp during the rainy season."

Professor Carr and the Legislative Committee.

The Professor, in referring to the matter of investigations of the last Legislature, says: "Learning that I was accused of having furnished these Committees with information, and as the matter of University reform was getting mixed up with the Merritt investigation, I made an explanation to the Advisory Committee of the Regents, no testimony from me having been called for by any Committee of the Legislature up to that time. I showed them that I had no connection whatever with the Legislative proceedings in the matter, except such as have necessarily resulted from the kind of service in which I have been employed; that while I had endeavored to carry out the intentions of the Board, as first explained to me by Regents Tompkins and Fitzgerald, and afterward by formal resolutions and instructions, I had as faithfully represented the sentiments of the people to them, and had repeatedly placed before them in writing the measures which had been urged upon me as important to secure a cordial feeling toward the University and its work; that I had every reason to believe that the manner in which I had represented the aims and objects of the University were approved by the Regents and by the public; and that I had been placed without intention on the part of the Regents in the difficult position of reconciling the various published announcements of the Regents with the dormant condition of the Agricultural College, and that I had been placed before the public in the position of apparent responsibility without the power to meet it. Of this, a resolution authorizing me to appoint a gardener, without providing material for the prosecution of his work, or locating grounds for his operations, was an illustration. In conclusion I said: "In the peculiar relation which the transference of the Agricultural College 'from the closet to the field' has placed me toward the people of this State, I have neither been disloyal to their interests nor to yours, but have always acted on the belief that these were identical. If loyalty to the interests of industrial education, to which I have given the best years of my life, and mean to give what remains of it, is treason to the University, or if it is so construed by your honorable body, I must plead guilty to the charge."

* * * At this juncture the Professor of Agriculture was informed that the Regents contemplated his summary removal on the ground of disloyalty to his employers. The charge of incompetency was not made. The Secretary addressed to me a letter of inquiry as to what, in my opinion, "was feasible for the improvement of instructions in agriculture and horticulture," as if no suggestions on that subject had ever been presented to them. I replied by referring them to former communications, with some new suggestions.

Incompetency.

The House Committee on Education had reported favorably to a change in the Management of the University, on the ground that the various callings, interests and sections of the State were not represented in the Board; 18 of its 22 members being lawyers and business men, having their offices in San Francisco. The Committee said, "All admit that the Professor of Agriculture is not only a scientist, but a thoroughly practical instructor. He should live on the ground, and students should be allowed to labor, thereby applying science under the direction of their instructors."

On April 17th, the Board, through Mr. Stearns, their Secretary, addressed an application to me for information and printed documents on the subject of agricultural education. This, to an incompetent party, by those who know so well what agricultural education is at home and abroad, was answered two days later with full details on every point.

We may here introduce, as a somewhat extraordinary matter under the circumstances, the statement of Professor Carr, that not one of the regents—not even President Gilman, himself—has ever been present at one of the Professor's lectures to the agricultural class. Perhaps, under these circumstances, the Regents are competent judges of incompetency and unfitness; but the public would like to know *how*.

But we have neither time nor space to follow the subject further. Those of our readers who would like to know more of the matter will no doubt take the trouble to secure a full copy of the Professor's statement, which will soon be placed within the ready reach of all who may desire its full perusal.

LINCOLN OR RYE GRASS.—A correspondent of the *Willamette Farmer* says: I have tried it on three different kinds of soil, and it has done well. My opinion is that it is the best grass for dry ground that we have on this coast. I sowed one piece on a high ridge that was very ferny, and the grass grew four or five feet high, completely smothering the fern down. It is of a quick growth, and starts early in the spring. I have one piece in my field that is over six feet high at present. I have some timothy alongside of it, that is not over one foot high. I have not tested it to any great extent for hay, but so far as I have done so I am satisfied it will make fair hay, but for grazing I think it will excel any grasses we have.

AGRICULTURAL NOTES.

California.

ALAMEDA.

WHEAT.—*Enterprise*, Sept. 26: The wheat yield of Alameda county for the present year, 1874, is estimated at 400,000 centals, and the sum total in the State at $16,110,600.

The new warehouse being erected by Mr. Esdon will be 60x100 feet, and is calculated to hold about 2,500 tons of wheat.

COLUSA.

COTTON HARVEST.—*Sun*, Sept. 26: Andrew Rutland is now picking his cotton crop, and we hope all the farmers who take an interest in its production will make it convenient to visit him during the coming fortnight. A variety of production is the true solution of every question connected with agriculture in California. Cotton is as good a crop as wheat, and stands high freights much better. W. N. Herd placed in front of the Colusa county bank, this week, a stalk of cotton about four feet high and covered all over with bolls and bloom. A good stand of such cotton on an acre would produce at least a bale to the acre.

LARGE PEARS.—Supervisor Kopf sent us this week some pears weighing two pounds each.

FRESNO.

THE RIGHT SORT. — *Expositor*, Sept. 26: Scarcely a day passes but two or three, and sometimes as high as a dozen persons call at this office in search of land on which to settle. Most of them appear to be hardy, industrious working men, who desire only a chance, and they are ready to settle and go to work, with a view to making a permanent home. There are a few, however, who are looking for "inducements" before they decide to settle. This class we have but little use for. If they can't "induce" themselves to "pitch in" and labor for a competency, they are of no benefit to any community. We are pleased to see so few of this last sort of people coming in.

LAKE.

WHEAT.—*Bee*, Sept. 24: The farmers of Lake have thus far held on to their wheat crop, being independent of the San Francisco grain sharks. The recent upward tendency of the market shows that they have been sensible in so doing. When, however, a handsome paying figure is reached it would be wise policy to let the crop slide.

MONSTER CABBAGE.—A huge specimen of the latter, weighing, stripped of the outside leaves, twenty-three and a half pounds. This vegetable monster was raised on the farm of these gentlemen at Glenbrook. Lake vegetable products will compare favorably with those of any other portion of the State.

MARIN.

COFFEE CULTURE.—*Journal*, Sept. 24: R. J. Trumbull, seedsman, will, as an experiment, put in a small piece of coffee on his place, in San Rafael. The seed was imported direct from Java, by Mr. Lichtenburg, who has lived on the island, and thinks the conditions of soil and climate here so similar that this famous coffee will succeed as well here as there. So may it prove and experiment will tell.

MENDOCINO.

WOOL.—*Democrat*, Sept. 26: The fall clip of wool is already coming into market and being forwarded below.

WEATHER.—Cold mornings, hot noons, cold nights, sum up the weather status here at present.

MERCED COUNTY.

WHEAT.—*Tribune*, Sept. 26: The Merced Grange are at present shipping 1,000 tons of wheat to San Francisco, with which they propose to load a ship for Liverpool. The first installment of 100 tons was shipped yesterday.

As an evidence of what the sheep interest amounts to in Merced county, we will state that a prominent sheep-raiser of this county has, the present season, sold over $25,000 worth of thoroughbred rams.

NAPA.

FINE PEPPER TREE.—*Reporter*, Sept. 26: The largest tree of this description in this county is growing in the yard of H. J. Clark. It is a very fine and beautiful specimen, and bore this year three sacks of peppers. It is a great pity that these berries are possessed of sufficient noxious properties as to render them useless for any domestic purpose.

GOOD YIELD OF ACORNS.—This appears to be a good season for acorns in Berryessa valley. A farmer gathered three barrels of them for his hogs last week, and all of them under one oak.

NEVADA.

FRUIT SHIPMENTS.—*Union*, Sept. 24: It may not be generally known to our readers that quite a business is being carried on this season in shipping fruit raised in Grass Valley to points eastward on the railroad. C. R. Hill has been shipping for some time a load daily to Colfax, and will continue to do so as long as the fruit season lasts. The loads are sent in time to connect with the Eastern bound freight train, which conveys the fruit to Truckee and beyond. The fruit of this section, particularly apples and pears, are of superior quality and size, and meet with a ready sale beyond the mountains. The amount of fruit thus sent off does not represent a tithe of that which is raised here, and much of which is permitted to go to waste for want of home demand and consumption.

PLACER COUNTY.

IMMENSE GROWTH.—*Herald*, Sept. 27: In a garden at Rocklin, we were shown some peach trees, that when set out last February, averaged about one foot high, which are now all of seven feet high, and otherwise large in proportion. Assuming that it took them one month to get started, the growth since would average one feet a month. In the same garden were fine large volunteer watermelons, cucumbers, enough on a few vines to supply the town; as fine tomatoes as grows anywhere, and gourds as large as a water bucket. Think of this, and then say what you think of the fertility of the foot-hills?

SAN BENITO COUNTY.

WHEAT.—*Enterprise*, Sept. 26: The streets of town are blockaded every day by long teams loaded with wheat for the different warehouses in town and vicinity. Since the crop has been threshed it turns out to be larger than was anticipated. There have been no sales here yet that we are aware of. The farmers seem to have made up their minds to hold on indefinitely.

SANTA CRUZ.

FRUIT.—*Sentinel*, Sept. 26: L. Thurber brought to the office a sample of apples, sound and perfect, of last year's growth. They are of the Newtown Pippin variety, but resemble the yellow winter Pearmain. Mr. Thurber keeps his apples in river sand and boxes. Overhauling his apple bank to make fresh deposits, he found the fruit which had been accidentally overlooked in the hurry of removing them last spring. Apple producers would do well to adopt Mr. Thurbers's plan, if they wish fruit to keep sound, fresh and good until October of next year. The samples may be seen at this office.

SISKIYOU.

SCOTT VALLEY.—*Union*, Sept. 26: The orchards of this valley are loaded with fruit, and the gardens are filled with vegetables. Some time ago L. S. Wilson sent to New York for one pound of potato seed, and from that one pound of seed he raised 214 pounds of potatoes. G. W. Heard threshed 4,500 bushels of grain from a piece of land that yielded only 2,000 bushels of grain last year.

SONOMA.

STATISTICAL.—*Democrat*, Sept. 26: The products of Sonoma county for this year will be about 20,000 tons of wheat, 1,000,000 gallons of wine, 30,000 tons of potatoes, 200,000 bushels of barley, 200,000 bushels of oats, 30,000 tons of hay, 150,000 bushels of corn, 250,000 pounds of wool, besides a large revenue from lumber, butter, cheese, fruit, poultry, hogs, beef cattle and surplus horses. Total assessed value of all property, $16,808.25. Estimated population, 25,000.

SUTTER.

APPROACHING. — *Banner*, Sept. 26: October will be upon us in a few days more. It is really our first fall month. With it comes the first rains and the first seeding of summer fallow. During this month the farmer must lay in his winter's wood and provisions. It will be an unusually active month this year. Much grain will change hands and be shipped below. Many old accounts will be settled up and many entered into. There are many things to be done. The straw and hay should be protected, and no careless farmer should be found who has left his grain exposed to the rains.

TULARE.

COTTONWOOD. — Cor. *Times*, Sept. 26: The crops in this region were excellent this year, the wheat averaging from 25 to 40 bushels to the acre. The soil of this particular region is of a peculiar character, differing greatly from that of any other portion of the county. Crops are raised here altogether without irrigation. If the grain is sown early and put in well, so as to receive the benefits of the first rains, a good crop is sure to be the result. A large portion of the railroad land is being cultivated, the parties expecting to purchase as soon as it is thrown into market. The farming interests are fast being developed, and we expect soon to stand with the first farming districts of the country. Several of our neighbors are storing their grain in the Visalia warehouse. Already the work of sowing grain for the next crop has begun.

YOLO.

COTTON.—*Mail*, Sept. 24: We have upon our table four bolls of cotton, which have been handed us by Mr. Geo. Cobb, of Cacheville. Mr. Cobb cultivated a few stalks in his garden to test the thing, and if it could be raised to such perfection on our soil in large quantities, as this experiment shows, there is no doubt but it would prove of greater value to the farmer than that of wheat. We cannot say as to the amount of irrigation it requires to raise cotton in this climate, but since it is the rains and frosts that injure the crops South, we are inclined to think that one crop could be raised here each season.

IT is a matter of great importance to our agricultural friends in the country to know that Plowmen, Farm Laborers, Engineers, Teamsters, Blacksmiths, Milkers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description is sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery steeet, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

No office is better qualified to select skilled and unskilled labor and has greater facilities to fill your orders. ag22-tf

FOR STATE OF NEVADA.—We have appointed Mr. F. B. Alderson our special agent and correspondent for the State of Nevada. He will visit our friends and patrons there soon.

Prepayment of Newspaper Postage by Publishers.

During the last days of the last session of Congress was passed a law authorizing the prepayment of postage on newspapers and other publications, particularly periodicals, upon some simple system to be devised by the Post-office Department. In order to expedite matters, the Postmaster-General was specially directed to prepare some plan. The work was placed in the hands of Third Assisant Postmaster-General Barbour, with full authority, subject only to the revision of the Postmaster-General. General Barbour at once set to work, and puzzled himself for some time before he devised a plan, which he has now partially arranged. He arrived in this city three days ago with A. D. Hagen, chief of the stamp division in his bureau, for the express purpose of obtaining the views of Postmaster James and others on the practicability of the system he has arranged. While the system is completed, all the details are not yet finished. New stamps have yet to be devised, and General Barbour will consider them before returning to Washington and obtain estimates for having them printed. The system he has devised is simple. It provides for the preparation of receipt-books by the Department for each publisher of a newspaper or periodical. The form of receipt at the New York Postoffice will be somewhat as follows:

(Name of newspaper.) Date. No.——. Amount ——. ..... Stamps.	No. — NEW YORK, ——. Received —— dollars and —— cents postage on —— lbs newspaper publications at two cents per lb. ——, Postmaster.

The receipt book will be retained at the Postoffice, where the newspapers will be weighed. The stubs of the receipt book will serve as memoranda to the Postoffice of sums paid, from which returns to the General Department are made. The stamping of papers in bulk will not require more than four stamps of different denominations to make up the amount of postage paid by the publishers on any package, whatever that amount may be. Even on a ton of newspaper matter, on which the postage will be forty dollars, only the four stamps will be required to make up the amount of postage paid. This stamp system has been devised, as the Act of Congress requires the use of adhesive stamps. The stamps will be affixed to the stub of the receipts, by the Postoffice clerk, and then cancelled.

Thus the publisher will be saved the trouble of buying and affixing stamps. After the law goes into effect, he will take his receipts and hold them as evidence that the postage was paid. General Barbour expects to save by this system of payment thousands of dollars to the Treasury Department every year, besides saving to the department and publishers much labor. He has exhibited the plan to Postmaster-General Jewell, who approves it in every respect. When the details are completed, a circular will be issued by the Department explaining the system, copies of which will be forwarded to the newspaper and publishing houses, and to the four thousand postmasters throughout the States, and on the 1st of January next the change will be made.—*N. Y. World.*

LARGE SALE OF WOOL AND MUTTON.—Geo. Hamlin brought 138 head of mutton sheep to town this week, which he disposed of to Jno. Kempf for $3 per head. We understand he sold his wool clip also at 21¼ cts. per pound, —*Napa Register.*

PATENTS & INVENTIONS.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[FROM OFFICIAL REPORTS FOR THE MINING AND SCIENTIFIC PRESS, DEWEY & CO., PUBLISHERS AND U. S. AND FOREIGN PATENT AGENTS.]

By Special Dispatch, Dated Washington. D. C., Sept. 29th, 1874.

FOR WEEK ENDING SEPT. 15TH, 1874.*

PENCIL SHARPENER.—John S. Hall, S. F., Cal.

HORSE HAY-FORK.—Edmund Harrison, Hollister, Cal.

COBBLESTONE PAVEMENT.—Philip Zadig, S. F., Cal.

TRACK CLEANER.—Thos. C. Churchman, Sacramento, Cal.

MACHINE FOR PUNCHING SHEETS OF METAL.—Thos. H. Drury, Wheatland, Oregon.

TRADEMARK.

FOR CATARRH REMEDY.—Norman S. Coon, S. F., Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

FINE FARM FOR SALE.

160 acres good farming land adjoining the town of Petaluma, well watered, fenced and improved, with a comfortable house, barn and outbuildings, orchard, vineyard and garden. Title U. S. patent. Price $8,000. Apply to

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sep-26 Real Estate Agents and House Brokers.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Sept. 30th, 1874.

The Prodnce market this week, taken as a whole, presents no very important changes. Grain is now selling at about the same figures as a week ago, though quotations are certainly stiffer. The advances have been principally in Dairy Produce, Barley, Oats and Potatoes; the declines have been in Flour, Onions, Nuts, etc. However, the prospects for better prices for the Cereala during the fall and winter are certainly more promising than has been the case for some time past—the San Francisco Produce Exchange cannot be said to be characterized by too much activity, but better things are hoped for.

Receipts of Wheat are quite large, owing to the shipment of several cargoes, now going forward on Grangera' account. Several of the Granges have already loaded a ship each, while others have contributed, and thus effected shipments on their own account.

Barley—Pricea obtalned this week are materially above what was anticipated. The export movement is as yet alow.

Beeswax—Steady.

Beans—Market quiet.

Broom Corn—New arrivals have not yet affected quotations.

Buckwheat—No sales.

Corn—Another decline is noted.

Cotton—In nominal demand.

Dairy Produce—The market for fresh California Butter atill continues strong. Point Reyes commands 60c. ℔ lb., and fancy samplea will even go higher. It ia difficult to foretell the course of the Butter market. Pricea are already so high that an advance would seem almost impossible at this season; and yet we are assured by dealers that even better figures may soon be looked for. Firkin and Pickled Roll are also higher. California Cheese is very firm at unchanged quotations. There is but little Eastern in market, and prices are nominal.

Eggs—A further advance of 2½c. ℔ dozen has taken place.

Feed—Bran and Middlings are a shade off. Hay is also lower. Straw now sells at 50@55 ℔ bale. Oil Cake Meal and Corn Meal are unchanged.

Flour—Is lower in price, though quite strong at present figures, owing to the demand for export to China, Central and South America.

Fresh Meat—Market dull and low.

Hops—Advices from the East and Bavaria show a marked falling off in the yield, which is now pretty well ascertained. California has a large surplus for export, and yet we are receiving invoices from Washington Territory and Oregon.

Oats—A decided advance.

Onions—Market weaker.

Potatoes—Are doing better. Pricea are about 5c ℔ cental higher all around. Sweet are coming forward freely and the market is depressed.

Poultry—Quotations remain as last noted.

Provisions—Demand fair.

Pulu—Sales at 10c.

Seeds—The fall trade is settling in, and business is quite lively.

Wheat—Liverpool advices have imparted a slight upward impulse to the local market. Quotations still remain very low, and few sales are noted. Most of the Wheat now being forwarded is on contract terms. Freights are at present favorable to the shipper. The intelligence from Eugland and the continent as additionally gathered during the week serves to corroborate the belief of fair crops in that direction. The *Mark Lane Express* of the 1st inst. says: Another week of beautiful weather has put our this year's gathering out of harm's way, the bulk being gathered in the finest condition. The fall in France and the sunshine here have, however, made quite a revolution in prices, and, if a cheap loaf means national prosperity, we seem very near its attainment. But it may be, having reached the base we may now gradually proceed to the ascent of the commercial pyramid, and take a fair view from its top. French farmers have already begun to show some resistance to the downward movement, which so much exceeded their expectations, and in England the same feeling has been evinced, for we hear of those who would have never sent up their produce to London had such a sacrifice been thought of.

Wool—The fall clip comes forward slowly. The impression we had of its burry quality is sustained by samples shown us. Market unchanged.

LUMBER.

WEDNESDAY M., Sept. 30, 1874.

The Lumber trade still continues good, and until the wet season sets in building operations will call for large supplies.

CARGO PRICES OF REDWOOD.

Rough, ℔ M.	$16 00
Rough refuse, ℔ M.	12 00
Rough clear, ℔ M.	32 50
Rough clear refuse, M.	22 50
Rustic, ℔ M.	30 00
Rustic, refuse, ℔ M.	24 00
Surfaced, ℔ M.	26 00
Surfaced refuse, ℔ M.	16 00
Flooring, ℔ M.	30 00
Flooring, refuse, ℔ M.	20 00
Beaded flooring, ℔ M.	32 50
Beaded floor, refuse, M.	22 50
Half-inch Siding, M.	32 50
Half-inch siding, ref. M.	16 00
Half-inch, Surfaced, M.	25 00
Half-inch Surf. ref., M.	18 00
Half-inch Battens, M.	22 50
Pickets, rough, ℔ M.	13 00
Pickets, rough, p'ntd.	16 00
Pickets, fancy, p'ntd.	25 00
Shingles, ℔ M.	2 25

PUGET SOUND PINE—Retail Price.

Rough, ℔ M.	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ℔ M	30 00
Fencing, ℔ lineal foot.	1c
Flooring and Step, ℔ M	30 00
Flooring, narrow, ℔ M.	32 50
Flooring, 2d quality, M.	25 00
Laths, ℔ M.	3 25
Furring, ℔ lineal ft.	¾

REDWOOD—Retail.

Rough, ℔ M.	20 00
Rough refnse, ℔ M.	18 00
Rough Pickets, ℔ M.	18 00
Rough Pickets, p'd, M.	20 00
Fancy Pickets, ℔ M.	30 00
Siding, ℔ M.	25 00
Tongued and Grooved, surfaced, ℔ M.	32 50
Do do refuse, ℔ M.	22 50
Half-inch surfaced, M.	40 00
Rustic, ℔ M.	35 00
Battens, ℔ lineal foot.	¾
Shingles ℔ M.	2 50

DOMESTIC PRODUCE.

WEDNESDAY M., Sept. 30, 1874.

BEANS.			
Beans, sm'l wh. ℔	3¼@		3½
do. butter.	—	@	2
do, large, do.	—	@	—
do, bayo.	2	@	2¼
oo, pink.	1½	@	2
do, pea.	3	@	3¼
BROOM CORN.			
Per ton.	$100	@	175
COTTON.			
Cal. 1873. ℔ lb.	—	@	20
DAIRY PRODUCE			
Butter, Cal. choice ℔ lb	55	@	60
do, good.	45	@	55
do, inferior.	32½	@	45
do, firkin	30	@	35
do, pickled	35	@	42
Cheese, Cal. new	10	@	16
do. Eastern	12½	@	16
EGGS.			
Eggs, Cal. fresh	40	@	42½
do, Oregon	30	@	35
do, Eastern	25	@	30
do, Ducks'	40	@	42½
FEED.			
Bran, per ton	16 50	@	17 50
Middlings	26 00	@	27 50
Hay	9 00	@	14 00
Straw, ℔ bale	—50	@	— 55
Oil cake meal	—@		30 00
Corn Meal	40 00	@	42 00
FLOUR.			
Extra	4 50	@	5 12½
Superfine	3 90	@	4 30
FRESH MEAT.			
Beef, fr quality. ℔ lb	8	@	8½
oo, second do.	6	@	7
do, third do.	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed.	6½	@	6½
do, dressed	9	@	9¼
GRAIN, ETC.			
Wheat, coast	1 30	@	1 40
do shipping	1 40	@	1 50
do milling	1 45½	@	1 52½
Barley, coast	1 00	@	1 07½
do brewing	1 05	@	1 20
Oats, choice	1 55	@	1 70
do common	1 40	@	1 55
Corn, White	—	@	1 55
do, Yellow	—	@	1 60
Buckwheat	2 75	@	3 00
Rye	1 00	@	1 05
HOPS.			
California, 1874	30	@	32½
East'rn, '73, ch'ice	30	@	40
MISCELLANEOUS.			
Beeswax, per lb.	25	@	27½
Honey in comb.	20	@	25
do Strained	7½	@	10
Pulu	9	@	10½
Onions	60	@	90
NUTS—JOBBING.			
Cal. Walnuts	13	@	14
Peanuts per lb	6	@	7
Chile Walnuts.	10	@	11
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds b'rd shell	10	@	12½
do, soft	20	@	25
Filberts	18	@	—
POTATOES.			
Sweet, per cwt	1 12½	@	1 37½
Cuffee Ovel	05	@	20
H. M. Bay	1 05	@	20
Pigeon Pt.	1 05	@	20
Humboldt.	—	@	—
Petaluma	—	@	—
Mission	95	@	1 10
Salinas	50	@	70
Bodega	—	@	—
St Barbara.	—	@	—
Sac. River	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per ℔	17	@	19
do gobblers	17	@	19
Hens, per dz	5 50	@	7 00
Roosters, young, large	4 50	@	6 00
Broilers, small	2 00	@	3 00
do large	3 00	@	4 00
Ducks, tame, doz	5 00	@	7 50
Geese, per pair.	2 00	@	2 25
Hare, per doz	2 50	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	2 00
Mallard Ducks.	—	@	—
do small	—	@	—
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	90	@	1 25
Prairie Chickens	—	@	—
Gronse	—	@	—
Rabbits	1 25	@	1 50
do tame	5 00	@	6 00
Venison, per lb.	6	@	10
PROVISIONS.			
Cal. Bacon, Light	14	@	15
do Medium	—	@	13
do Heavy	—	@	12½
Eastern do	13½	@	14
Hams, Cal	15	@	15½
do Whittakers	—	@	17
do Duffield, ch	—	@	18
do Plankton & Armour	—	@	15
do Boyd's	—	@	15½
do Stewart's	—	@	15½
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	10	@	11
Lard	13	@	14
SEEDS.			
Alfalfa, Chili	—	@	11
oo California	—	@	14
Canary	4	@	4½
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	3	@	4
do. Brown	2	@	2½
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	—	@	11
Timothy	11	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Mesquit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Alsike	—	@	60
WOOL, ETC.			
Spring, short, ℔	22½	@	25
do cnoice Nort	25	@	31½
Medium gdes	18	@	22
Fall clip	18	@	20
Burry	14	@	18
Hides, dry	19	@	20
do wet salted	6½	@	9½
Tallow, Crude	5	@	6
do Refined	6	@	7

FRUITS AND VEGETABLES.

WEDNESDAY M., Sept. 30, 1874.

The range in Apples is large; selling at 40@$1.25 ℔ box. Strawberries are more plentiful and lower. Plums have advanced to 2½@7c ℔ lb. Melons, both Watermelons and Muskmelons are cheaper.

There have been no change in Dried Fruits.

In Vegetables, the only marked change has been the advance in Green Corn, which is now selling at 20c ℔ dozen.

FRUIT MARKET.

Tahati, Or. ℔ M	35 00	@	40 00
Lorita, do	—	@	—
Cal. do	—	@	—
Limes, ℔ M.	12 50	@	15 00
Cal. Lemons, ℔ M	—	@	—
Australian do	40 00	@	45 00
do per box	4 50	@	5 00
do Sicily ℔ h'x	—	@	—
Bananas, ℔ bnch	3 00	@	4 00
Cocoanuts, ℔ 100	6 00	@	8 00
Pineapples, ℔ dz	6 00	@	8 00
Apples, ℔ box	40	@	1 25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries ℔ lb	15	@	20
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	2½	@	7
Peaches, bskt.	1 25	@	2 00
do, ℔ box	2 50	@	2 75
do ext Mountain, lb	5	@	8
Pears, eating, bx	2 00	@	2 50
do Cooking	40	@	50
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel's ℔ 100	6 00	@	10 00
Muskm'l's ℔ 100	5 00	@	10 00
Pomegran's ℔ 100	6 00	@	7 00
Figs	6	@	8
Grapes, Bl'k H'g	2	@	4
do Muscat	4	@	6
do Malavo'e	4	@	5
do Sweetw'r	1½	@	2½
do Mission	1	@	2
do Rose of Pern	4	@	5
do Tokay	4	@	5
do Morocco	8	@	10
do St. Peter	—	@	—

DRIED FRUIT.

Apples, ℔ lb	6	@	7½
Pears, ℔ lb	10	@	12½
Peaches, ℔ lb	8	@	9
Apricots, ℔ lb	10	@	12½
Plums, ℔ lb	8	@	10
Pitted, do ℔ lb	14	@	16
do Extra, ℔ lb	—	@	—
Raisins, ℔ lb	5½	@	12½
Black Figs, ℔ lb	8	@	10
White, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	30	@	35
Zante Currants.	8¼	@	8½
Dates	12½	@	14

VEGETABLES.

Asparagus	15	@	20
Beets	—	@	1
Cabbage, ℔ 100 lbs.	—	@	2 00
do new, doz	50	@	60
Carrots, ℔ 100 lbs.	1 00	@	1 25
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ℔ lb	5	@	6
Green Peas	3½	@	4
Green Corn ℔ doz.	—	@	20
Sum'rSquash, lb	4	@	5
Marro'fat Sq'sh, tn	60	@	00
Artichokes, ℔ doz.	15	@	25
String Beans, ℔ lb	—	@	5
Lima Beans	4	@	5
Parsnips	12½	@	15
Shell Beans	3½	@	7
Peppers, ℔ lb	12½	@	20
Okra ℔ lb	25	@	40
Okra, Green	6	@	8
Cucumbers, doz	6	@	8
Tomatoes	3	@	5
Egg Plant ℔ lb	8	@	8
Rhubarb	—	@	—
Lettuce	10	@	—

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ℔ lb*	40
do unpaired, ℔ lb†	32
Peaches, do, ℔ lb†	12½
do pared, ℔ lb*	30
do do ℔ lb†	30
Bartlett Pears, pared, lb*	50
Pears, pared (sliced) lb*	20
do do (ring) ℔ lb†	18
Pears, 10-lb boxes, family use, extra	22½
Seckel Pears, unpar'd, lb†	12½
Currants, stemmed, lb*	40
do unstemmed, ℔ lb†	32½
Royal Ann Cherries, pitted, ℔ lb*	25
Kentish Cherries, pitted, ℔ lb	55
Apples, pared (ring) lb†	12½
do do (whole), ℔ lb	12½
Apples, 10-lb boxes family use, extra	18
Plums, pitted, ℔ lb†	25
do do ℔ lb*	40
Rhubarb, ℔ lb†	35
Corn, ℔ lb†	30
Beans, ℔ lb†	60
Potatoes, ℔ lb†	14
Sweet Potatoes, ℔ lb†	15
Onions, ℔ lb†	40
Beef, ℔ lb†	40
Tomatoes, ℔ lb†	75
Squash, ℔ lb†	20

*In caddies. †In bulk.

RETAIL GROCERIES, ETC.

WEDNESDAY M., Sept. 30, 1874.

There are no change in Groceries, with the exception of Butter, which has advanced.

Butter, Cal. ch'ice	55	@	70
do common	40	@	55
Cheese, Cal., lb	12½	@	17½
Lard. Cal., lb	12½	@	15
Flour, ex. fam. bl	5 00	@	5 50
Corn Meal, lb	2½	@	3½
Sugar, un. crah'd	—	@	12
do lt. brown, lb	7	@	9
Coffee, Sbarboro's family gr'nd, lb	32½	@	—
Coffee, green, lb	24	@	32½
Tea, fine blk, 50, 65, 75		@	1 00
Tea, finst Jap, 55, 75, 90		@	1 00
Candles, Adnant'e	17	@	25
Soap, Cal., lb		@	10
Can'd Oysters, dz.	2 0	@	2 50
Syrup, 8 F. Gol'n.	35	@	40
Dried Apples	8	@	10
Dr'd Ger. Prunes	15	@	17
Dr'd Figs, Cal.	9	@	10
Dr'd Peaches	10	@	12
Oils, Kerosene	30	@	35
Wines, Old Port	3 50	@	5 00
do Fr, Claret	1 00	@	1 25
do Cal., dz. bot	3 00	@	4 50
Whisky, C.B, gal.	3 50	@	5 00
Fr. Brandy	4 00	@	10 00
Rice, lb	10	@	12½
Yeast Powders, dz.	1 50	@	2 00

GENERAL MERCHANDISE.

WEDNESDAY M., Sept. 30, 1874.

Bags and Bagging are held rather more firmly, although quotations are still at bed-rock. Coffees are weaker. Ditto Rice. Sugars are firm, while Syrups are weaker. Tobacco is very strong in the market, an advance in Twist is reported.

BAGS.			
Eng. Stand Wht.	12½	@	13
Detriok's Machine Sewed, 22x36, do E W	—	@	13¾
do 22x36, do A	—	@	14½
Flour Sacks ½s.	9½	@	11½
" " ¼s.	6	@	7
Stand. Gunnies. double seam	15	@	—
single seam	13¾	@	14
" Wool Sacks.	65	@	—
Barley Bags 24x36	—	@	14
do 23x40	—	@	14½
do 24x40	—	@	15
do 28x36	—	@	16
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in. gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ ℔ lb cans.	2 75	@	3 00
do Table do	—	@	2 75
Jams & Jellies	3 75	@	4 25
Pickles ½ gl.	3	@	3 50
Sardines, qr box	80	@	—
do hf boxes.	3 20	@	—
COAL—Jobbing.			
Australian, ℔ ton	10 00	@	—
Coos Bay	—	@	10 00
Bellingham Bay.	—	@	8 50
Seattle	—	@	11
Cumberl'd, cks.	22 00	@	23 00
do bulk	18 00	@	20 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	19 00
Liverpool	11 00	@	12
West Hartley	12 50	@	—
Scotch	9 50	@	10 00
Soranton	15 00	@	17 50
Vancouver's Isl.	11 00	@	11 50
Charcoal, ℔ sk	75	@	—
Coke, ℔ bbl.	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	19	@	20
Costa Rica per lb	20	@	21½
Gnatemala	19	@	20½
Java	—	@	28
Manilla	20	@	21½
Ground in cs.	—	@	30
Chicory	9	@	10
FISH.			
Pac. Dry Cod, new cases	5	@	6
do boneless	11	@	12
Eastern Cod	7	@	8
Salmon in bbls.	9 00	@	25
do ½ bbls	4 50	@	4 75
do 2½ ℔ cans	3	@	00
do 2 ℔ oans.	2 65	@	2 75
do 1 ℔ cans.	1 75	@	—
Do Col. R. ½ lb	—	@	—
Pick. Cod, bbls.	22 00	@	—
do ½ bbls	11 00	@	—
Bos'. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mess.	3 00	@	3 50
" Ex mess. ½bs	—	@	12 00
Sm'k Herr'g, bx.	50	@	60
NAILS.			
Assorted size, ℔ lb.	5 00	@	7 25
OILS.			
Pacific Glue Co. Nsat F't No. 1.	—	@	1 00
Pnre	1 25	@	—
Castor Oil, No. 1	—	@	1 75
do do No. 2	—	@	1 60
Cocoannt	45	@	50
Olive Plagniol	5 00	@	—
do Possel	4 45	@	—
Palm	9	@	—
do Bagicalupi	—	@	—
Linseed, raw	—	@	1 05
do boiled	—	@	1 10
China nut in os.	82½	@	90
do bulk	75	@	80
Sperm, crude	—	@	1 40
do bleached	—	@	2 20
Coast Whales	35	@	40
Polar, refined	50	@	55
Sperm	1 40	@	1 50
Lard	1 00	@	1 10
Coal, refined Pet	37½	@	40
Oleophine	—	@	34
Devoe's Bril't	25	@	28
Long Island	—	@	34
Eureka	37½	@	40
Devoe's Petro'm	25	@	28
Barrel kerosene	20	@	25
Olive	4 00	@	9 50
Downer Kerose'e	—	@	40
Gas Light. Oil	—	@	34
PAINTS.			
Atlan. W. Lead.	7½	@	12½
Whiting	—	@	2
Putty	4	@	4½
Chalk	—	@	2½
Paris White	2¾	@	—
Oohre	4	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@	2 10
RICE.			
China No. 1, ℔ lb	6¾	@	6¾
do 2, do.	5½	@	5¾
Japan	—	@	6½
Siam Cleaned	7	@	—
Patna	5¾	@	5¾
Hawaiian	7¼	@	8
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	20 00	@	23 00
do coarse	15 00	@	20 00
SOAP.			
Castile ℔ lb	10	@	11
Local brands	5	@	8
SPICES.			
Allspice, per lb	15	@	16
Cloves	55	@	60
Caesia	32½	@	35
Citron	—	@	30
Nutmeg	1 20	@	1 25
Whole Pepper	20	@	22
Pimento	—	@	15½
Gr'nd Allsp pr dz	—	@	12½
do Cassia do	—	@	1 50
do Cloves do	—	@	1 50
do Mustard do	—	@	1 25
do Ginger do	—	@	1 00
do Pepper do	—	@	1 00
do Mace do	—	@	2 00
SUGARS, ETC.			
Cal. Cube per lb	11½	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12¼
Cirole A crushed	—	@	11½
Powdered	—	@	11¾
Grannlated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	11½
Golden C	—	@	10½
do Rey'g grade	—	@	6½
Cal. Syrup in bls.	—	@	60
do in ½ bls.	—	@	65
do in kegs	—	@	67½
Hawaiian Molasses	25	@	27½
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@	00
Gunpo'der, Cant.	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@	1 25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	45	@	55
Dwarf Twist	60	@	65
12 inch do	60	@	65
Light Pressed	65	@	75
Hard do	80	@	70
Conn. Wrap'r	40	@	50
Conn. Wrapper	20	@	30
Ohio do	7	@	15
Virgi'a Smok'g	60	@	95
Fine ot che'g, gr	8 50	@	9 25
Fine ont chewing, buc'ts. ℔ lb	75	@	90
Banner fine cnt	—	@	9 00
Eureka Cala	8 75	@	9 00
TURPENTINE.			
Eastern	60	@	65

METALS.

WEDNESDAY M., Sept. 30, 1874.

The price of Quicksilver has not advanced, notwithstanding the change in the N. Y. market. Iron and Steel are firm.

American Pig Iron, ℔ ton	—	@	42 00
Scotch Pig Iron, ℔ ton	45 00	@	47 50
White Pig, ℔ ton	—	@	42 00
Oregon Pig, ℔ ton	—	@	45 00
Refined Bar, bad assortment, ℔ lb	—	@	3½
Refined Bar, good assortment, ℔ lb	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5¾
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	—	@	09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	—	@	—
Norway Iron	—	@	—
Rolled Iron	—	@	—
Other Irons for Blacksmiths, Miners, etc.	—	@	4½
COPPER.			
Braziers'	—	@	32
Copper Tin'd	—	@	—
O. Niel's Pat	—	@	—
Sheathing, ℔ lb	—	@	24
Sheathing, Yellow	—	@	25
Sheathing, Old Yellow	—	@	12½
Composition Nails	—	@	—
Composition Bolts	—	@	—
TIN PLATES.			
Plates, Charcoal, IX ℔ box	13 00	@	14 50
Plates, I C Charcoal	12 75	@	14 50
Roofing Plates	11 50	@	14 00
Banca Tin, Slabs, ℔ lb	—	@	33
STEEL.—English Cast, ℔ lb	—	@	25
Anderson & Woods' American Cast	—	@	17
Drill	—	@	22
Flat Bar	—	@	22
Plough Points	—	@	17
ZINC.	—	@	11
Zinc, Sheet	—	@	11½
NAILS—Assorted sizes	—	@	8
QUICKSILVER, per lb	—	@	1 45

Mining and Scientific Press,

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The oldest, largest and best Mining Journal. Devoted, also, to Science, Invention, Mechanic Arts and Industry on the Pacific Coast.

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LEATHER.

WEDNESDAY M., Sept. 30, 1874.

Leather is now held quite firmly. The fall trade is ly as fair as was anticipated.

City Tannod Leather, ℔ lb			24@2
Santa Cruz Leather, ℔ lb			25@2
Country Leather, ℔ lb			24@28
Stookton Leather, ℔ lb			25@29
Jodot, 8 Kil., per doz	$50	@@	54 00
Jodot, 11 to 19 Kil., per doz	66	@@	90 00
Jodot, second choice, 11 to 16 Kil. ℔ doz	55	@@	72 00
Cornellian, 12 to 18 Ko	57	@@	67 00
Cornellian Females, 12 to 13	60	@@	64 00
Cornellian Females, 14 to 16 Kil	66	@@	74 00
Beaumorville, 15 Kil	60	@@	— —
Simon, 18 Kil., ℔ doz	61	@@	63 00
Simon, 20 Kil. ℔ doz	65	@@	67 00
Simon, 24 Kil. ℔ doz	72	@@	74 00
Robert Calf, 7 and 9 Kil	35	@@	40 00
French Kips, ℔ lb	1	@@	1 35
California Kip, ℔ doz	40	@@	45 00
French Sheep, all colors, ℔ doz	8	@@	15 00
Eastern Calf for Backs, ℔ lb	1	@@	1 25
Sheep Roans for Topping, all colors, ℔ doz	9	@@	13 00
Sheep Roans for Linings, ℔ doz	5	@@	10 50
California Russett Sheep Linings	1 75	@@	4 50
Best Jodot Calf Boot Legs, ℔ pair	5	@@	5 25
Good French Calf Boot Legs, ℔ pair	4	@@	4 75
French Calf Boot Legs, ℔ pair	4	@@	— —
Harness Leather, ℔ lb			30@ 37½
Fair Bridle Leather, ℔ doz	48	@@	72 00
Skirting Le

Stock Notices.



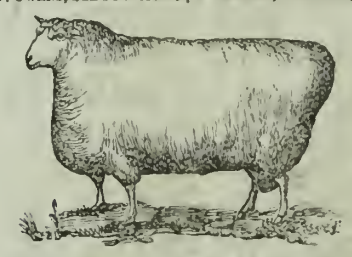
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These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

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PURE BLOOD

—AND—

ALL GRADES.

For sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address

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El Dorado, El Dorado county,
11v6-eow California.

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About three hundred Bucks, half and three-quarter bred Cotswold, and a few Thoroughbreds, for sale at Low Prices.

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MOODY & FARISH, San Francisco.
SHIPPEE, McKEE & CO., Stockton.

Orders left with the latter firm will receive prompt attention.

A. VROMAN,
22v7-4t Jenny Lind, Calaveras Co., Cal.

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We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

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I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

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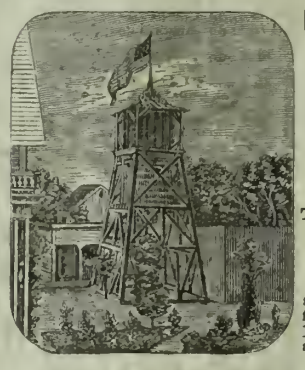


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My Flock Consists of 1,500 Sheep, 1,200 Imported and 300 of my own Breeding.

P. S.—This flock is not only the finest but the largest flock of imported Spanish Merino Sheep on the Pacific Coast. They have been selected from the flocks of the best breeders in Vermont, such as Rockwell, Santord, Rich, Hammond, Saxton, Dean, Ellsworth, Romley, Stickney, and others who are acknowledged to be among the best breeders of Spanish Merinos in America. 24v7-eow-4m



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Fowls of all varieties for sale in pairs, trios or singly. Adult fowls, $5 each. Young fowls, $3 and upwards. Write for further particulars to

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FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

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We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.

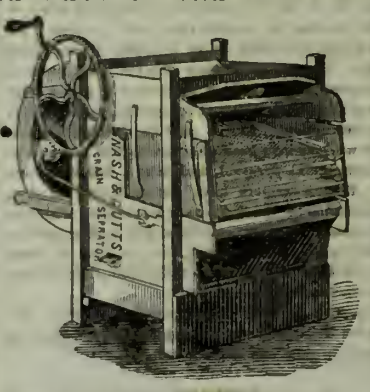


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PRICES—$40, $50 AND $75.

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Nash & Cutts' Machine will thoroughly separate Mustard Seed, Cheat, Barley, Oats, Cracked Wheat, etc., from Wheat in a rapid and satisfactory manner.

No zinc sieves used in the Nash & Cutts' Grain Separator and Fan Mill; therefore we can

Clean Faster, Better, and with Less Work and Trouble,

Than any other machine now in use.

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Only manufacturers of the Nash & Cutts' Grain Separator for the Pacific Coast. 1v8-3m

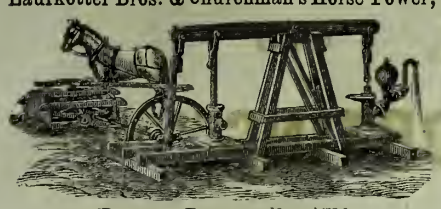
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To irrigate successfnily, yon must have the power that does not give out when the wind fails.

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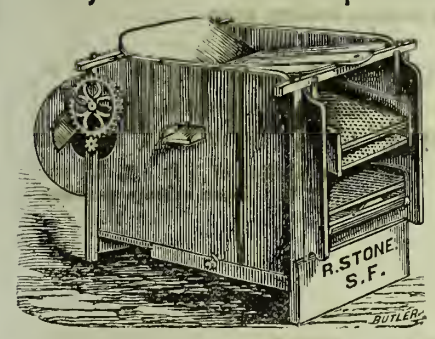
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Novelty Mill and Grain Separator



Is one of the greatest improvements of the age for cleaning and separating grain, while it oombines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

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Keep constantly on hand top and open Buggies, top and open Rockaways, Jnmp-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

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Also, a large assortment of single and donble Harness, of the most celebrated makers:

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AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made hy practical men who have been long in the business and know what is required in the constrnction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constrncted that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can he relied npon as the Best and Most Desirable Gang Plow in the world. Send for circnlar to

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THE CELEBRATED MITCHELL WAGON



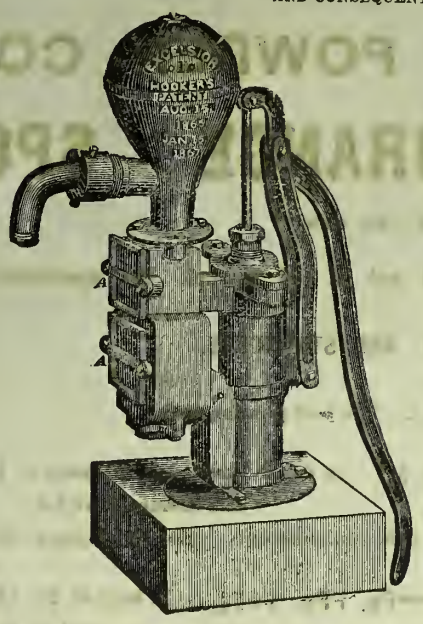
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THE "EXCELSIOR" FARMERS' PUMP.

After Seven Years use proving itself the

BEST PUMP ON THIS COAST,

AND CONSEQUENTLY THE CHEAPEST.



BASE.

We can advise all parties to buy the Pump to be

Worked by Hand, Windmill or Horse Power.

ALL SIZES FOR SALE.

REMEMBER,

Every Pump is tested to 125 pounds hydraulic pressure per square inch.

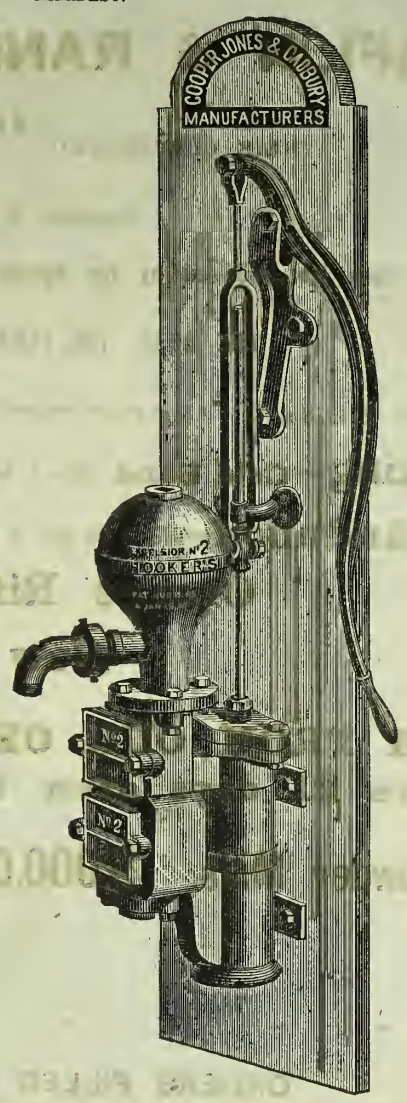
Will pump water 250 feet high.

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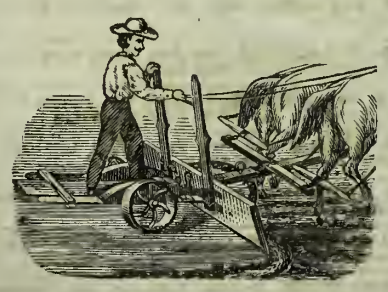
7v8-3m

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

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THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, hut this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

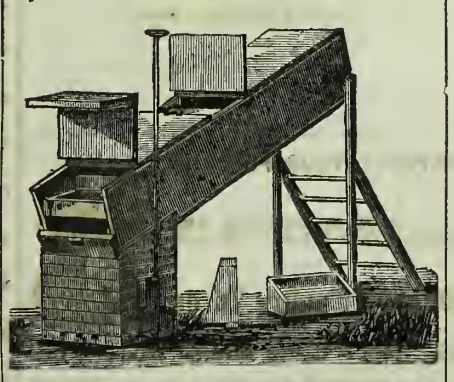
The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no eqnal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

Ryder's American Fruit Drier.



It is claimed no Drier can equal, and it is guaranteed no Drier can excel the AMERICAN in the excellence of its work. We suit this Drier to the wants of Farm and Factory. We make one series, Nos. 1, 2 and 3; one line of trays, capacity, say of apples, 8, 12 and 20 bushels per day of 12 hours; prices, $100, $125, $150. Factory Series, Nos, I, 2 and 3; capacity, 25, 40 and 60 bushels per day. Again we make a Douhle Factory over one Furnace with capacity over 100 bushels per day. Two of these Driers should turn off at least 1,200 pounds, or over half a ton per day. The prices given include the right and every item of expense to commence work, and are all constructed to be portable. Every variety of Fruits, Vegetables, Cereals or Meats can be curcd on this Drier for the home or foreign markets. The company have established depots in all the principal Eastern cities for the sale of Fruits, etc., prepared for the market on this Drier, and prices will from time to time be given to parties interested. This Drier took the first premium and silver medal at the Fair of the Maryland Institute, held at Baltimore in 1873. Send for Circulars. Farm, County and State Rights, and Driers complete with Heaters, sold by

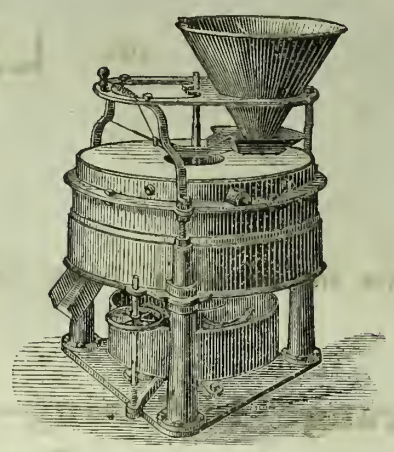
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General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. I3v7-3m-2am

POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. AROUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

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JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

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COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE, EGGS,

POULTRY,
LARD,
HAMS,
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This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

Davis & Sutton, Commission Merchants,

For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.

3v8-1y

ATTENTION SPORTSMEN!

THE **LAFLIN & RAND POWDER CO.** is shipping

THEIR CELEBRATED **"ORANGE SPORTING"** POWDER

Overland in their own cars.

The first car load of Powder has been just received by the Agents and put on the market; the sportsmen pronounce this Powder to be

THE BEST, THE CLEANEST AND STRONGEST.

Orange Lightning---No. 1 to No. 7. In one pound canisters only. The best powder made.

Orange Ducking---**Cold Band**—No. 1 to No. 5. In 6¼ lb. kegs, and canisters of 1 lb. Made expressly for fowl shooting. The cleanest Powder.

Audubon---No. 1 to No. 4. In 1 lb. canisters only. For small game—for muzzle loading guns.

Orange Rifle---Fg, FFg, FFFg. In kegs of 25, 12½ and 6¼ lbs., and canisters of 1 lb. and ½ lb. The best powder for rifles.

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POWDER FRESH FROM OUR ORANGE MILLS
Received here 21 days after it is made.

10 Powder Mills. 5,000,000.00 Invested in Powder.

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—CELEBRATED—
Worcestershire Sauce.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper end labels of which the names of Lee & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufactnrers and vendors of such, of eny other imitations hy which their right may he infringed.

To be obtained of **Messrs. CROSS & CO.**, San Francisco.



Cotswold Rams,

Half, tbree-quarter and seven-eighths (⅞) from imported sires. Lambs—yearlings and npwards—for sale hy **LEWIS & McCRACKEN,**
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M. EYRE, Napa, Cal.

Bronze Turkeys, Emden Geese,



Brahmas, Houdans,

LEGHORNS, and GAMES.

Black Cayuga and Aylesbury Ducks,

Bantams, etc.

Eggs, fresh, pure, true to name; well-packed so as to hatch after arrival.

ILLUSTRATED CIRCULAR AND PRICE-LIST FREE.

14v9-16p-tf.

WEDNESDAY AFTERNOON is the latest we can insert any notice in the RURAL PRESS. Communications should be received during the week previous to publication,

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IMPROVE YOUR POULTRY.

IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.



Oakland Poultry Yards,

Cor. 16th & Castro Streets, Oakland. Cal.

A fine assortment of imported Rouen and Aylesbury Ducks just received; price, $8 per pair. Warranted of the best strains in the country. Send stamp for circular to

GEO. B. BAYLEY,
4v8-tf P. O. Box 659, San Francisco.

MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to

B. F. CLAYTON, San Jose.
Or C. J. CLAYTON,
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For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator-429 Montgomery street, San Francisco. 2v7-6m

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

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W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

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J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petalnma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short-Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, OCTOBER 10, 1874. [Number 15.

Sowing Locust Seed.

A subscriber wishes to be informed as to "the best and most successful way of sowing the seed of the black locust; also the best variety of grapes, and where they can be procured."

The usual way of sowing black locust seed is to put it in the ground at the appearance of the first rains. But seed thus sown, without previous preparation of the soil, will scarcely germinate before spring; and a large portion of it will not germinate at all. We are informed by reliable parties that by scalding the seed before planting, a large gain in time may be secured, with an increase of two-thirds in the proportion of germinating seed. Pour water, at nearly a scalding heat, over the seed at night, and if in the morning the hard, flinty peeling has not disappeared, give them another warm bath. When they have become somewhat softened, sow in drills; not too closely, however, for, under favorable circumstances, they will attain a growth of six to eight feet the first year. Ground that has been burned over with brush, straw, or other material is favorable to the germination of locust or other flinty seeds. Probably the alkaline property thus imparted to the soil causes a more rapid softening to the kernel of the seed than the natural condition of the soil would produce.

In regard to the other inquiry of our correspondent, as to the best variety of grapes, etc., we can furnish no available information until we ascertain for what purposes the grapes are wanted. If our friend will inform us whether he wants the grapes for wine, for raisins or for the table, or if he wants some for all these purposes, we shall be pleased to furnish him with the desired list, and also inform him where he can obtain what he wishes.

The New Vegetable Market of San Francisco.—The new market erected by the Italian vegetable dealers was inangurated during the past week. The spirited Italians made the opening of their new edifice an occasion of rejoicing and display. A procession was formed at Eighth and Market streets, which moved down to the new market. The procession consisted of a barouche containing the officers of the association, then a wagon with a band, followed by more than 50 wagons laden with vegetables. The horses' heads were decorated with Italian and American flags. When they arrived at the market the wagons were placed in their respective stalls, and the horses in two large stables in the vicinity recently erected for their accommodation. While the families and friends of the dealers promenaded the market, the band playing several patriotic and other airs for two or three hours. We shall on some future occasion furnish our readers with an account of the character and capacity of this market.

The Storm of Last Week.—We find in looking over our exchanges, that the rain and thunder storm which visited San Francisco on he evening of Oct. 31st, extended over a large portion of the State. It has been generally remarked that the storm was a nearer approach to the Eastern style than any heretofore visiting California. We do not hear of any serious damage being done. The country is generally being congratulated on its appearance, and an early winter is predicted. Fruit has improved in appearance in consequence of the refreshing rain, and the comfort and pleasure of traveling have been enhanced.

A. W. Sisson imported sixty prairie chickens a year ago, and turned them loose on his ranch near Rocklin, in Sacramento county. He is so well pleased with the result that he is having one hundred more of the birds trapped, which he intends to turn loose in this State for breeding.

Mr. Martin, Secretary of the Immigrant Union, has been trying to negotiate at Los Angeles for a large tract of land on which to settle a farmer's colony. The large land-owners, however, do not favor the scheme enough to accept less than the market price for their land.

Sample of Cotton.

About three weeks since, a sample of cotton, grown on the ranch of Chapman & Friedlander at Borden's station, Fresno county, was sent to the business office of the Rural Press, and thence to the editorial rooms. In its transit from the business to the editorial rooms, it was accompanied by a note which contained some palpable inaccuracies as to the yield per acre, and it was in order to correct these statements that its notice in our paper was delayed. Probably we shall not succeed in making our readers look upon this as anything but a trivial matter, still it does not appear so to us; for it was a very fine specimen indeed, and as cotton is at present one of the important prospectives of California, we wished to publish the facts in connection with its production. In seeking to obtain these facts our course has been a remarkable instance of "the pursuit of knowledge under difficulties." Although the intervening three weeks has been rife with agricultural fairs and other matters of particular interest, we have not failed to look vigilantly after the cotton interest of Borden's station. We make no account of the sacrifice of shoeleather in pursuit of these facts, and are not particularly sensitive about incurring, as we evidently did, the suspicions of the employees in the office of the gentleman on whom our calls were principally made, that we were seeking some picayunish favor, or worse, that we were desirous of obtaining notoriety by assassinating a grain-king. We do not complain of these things; but when there is a probability of incurring the suspicions of our correspondents, that we are dilatory about acknowledging the receipt of facts or suggestions furnished us, then we cannot avoid manifesting a little uneasiness.

Yet all our labors in this direction have come to naught. We have the cotton, it is true, safe in one of our pigeon holes, and a very fine specimen it is, the fiber being long and lustrous, proving that good cotton can be grown in the locality from whence it came. In regard to its production we have learned this much: that it was grown without irrigation, and received scarcely any attention whatever.



CROW-BLACKBIRD.

Crow Blackbirds.

The crow blackbird, or "Boat-tailed Grackle," shown in the accompanying engraving, is an inhabitant of the Southern States, to the maritime portions of which it is more particularly attached. It abounds in the southeastern low grounds of Florida, and in those of Georgia and South Carolina, as well as in the Sea Islands of the Atlantic coast, as far north as the Carolinas, beyond which none are to be seen. These handsome birds are gregarious at all seasons of the year, and are often seen in very large flocks. They seek for food among the large salt marshes and their muddy shores, and in rice plantations as soon as the grain is fit to be eaten by them. In autumn they frequently resort to cornfields and ploughed lands of plantations, interspersed with ponds or marshy places, returning towards evening to the salt marshes, where they perch in immense flocks amidst the tall marsh grass. Their food consists principally of small fiddler crabs, insects of various kinds, ground worms and seeds, especially grain. They frequently seize on shrimps and other aquatic animals of similar nature which have been left on the beach by the tide.

These birds begin to mate in February, at which time the plumage of the male displays its richest hues of glossy black, with reflections of steel blue, dark violet and green. Their nests are often built quite near each other, upon branches of the smilax, the nest of a previous season always being reclaimed by its former occupants, who repair it. A new one, however, is promptly constructed of the long fibred Spanish moss that dangles from every tree, dry twigs, withered grass and dead leaves. One brood is reared every season and the squabs are excellent eating. The flight of the grackles is high and protracted in decided undulations of 40 or more yards. They move in loose flocks and are shy and wary. Probably a third of these birds, in the Carolinas and Georgia, remain during the winter, associating with the fish crow, alighting on stakes in the mudflats near the cities. They are also fond of the company of cattle, but never enter the wood. The males frequently attack birds of other species driving them from their nests and sucking their eggs. When wounded, if not disabled, they retreat with alacrity; when overtaken they defend themselves by biting and scratching, often causing the blood to flow from the hands of their captor. They are courageous and formidable, not unfrequently giving chase even to turkey-buzzards and hawks.

A Box of Grapes.—A few days since we received from a subscriber a note stating that a box of grapes awaited our order at one of the fruit commission houses of San Francisco; but on presenting our order it was ascertained that the commission merchant had, inadvertently, sold the whole invoice, leaving us out in the cold. After due explanation we were assured that we should receive our allotted portion out of the next invoice. In accordance with this promise the box of grapes was brought to the office of the Press yesterday; but in the meantime we had lost or mislaid the note of the donor, and are therefore unable to publish his name or address, as we desire to do in such cases.

It is hoped that this explanation will be as satisfactory to our friend as the contents of the box were to the members of our office. Parties well qualified for judging in these matters, pronounced the variety to be the real California Mission grape, and all hands acknowledge that they were sweet, rich and extremely palatable. Our unknown friend will please accept the thanks of the whole Rural Press corps.

Cattle Breeders' Sale.—The date of our going to press, will not admit of giving, until our next, the results of the San José cattle sale which takes place on Wednesday and Thursday of this week. This sale has been looked forward to with considerable interest. Cattle of all choice breeds were to be admitted, excluding everything below a three-fourth grade.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

How to Make a Small Farm Pay.

BY VITAL E. BANGS.

The various methods of making a small farm pay, depend of course, upon character of soil, climate and geographical position. Thus: a small farm near Bodega could be made more profitable for potatoes; one near San Francisco for vegetables and fruits; while one in the interior valleys could more advantageously be put into wheat or other cereal, because in summer the superincumbent atmosphere has less moisture, making it necessary while growing vegetables to resort more extensively to artificial irrigation.

Notwithstanding the difficulty attending the subject under every actual or possible condition, there is a certain line of conduct to be pursued with profit, by the majority of those who cultivate small farms in California. I have chosen as a criterion, a small farm in Stanislaus county, believing it to be as fair as any. Such a farm can be made to pay. 1st. By diversity of husbandry. 2nd. By a more thorough tillage. 3rd. By the practice of economy.

Diversity of employments is an absolute necessity to the owner of a small farm, because, under the ordinary system of tillage his time cannot be occupied with anything pertaining to the farm, much more than two-thirds of the time and because when the wheat crop fails he is left without resources. By diversity of husbandry, is to be understood, those various employments that are immediately or remotely connected with husbandry, such as the rearing of hogs, cattle, horses, chickens, turkeys, etc.; also, tending garden, orchard and vineyard in addition to the staple crops.

Hogs could run at large eight or nine months in each year, with but little, if any, detriment to growing crops; while in the fall they could fatten on what grain they could find in the stubble; in years of partial failure, when grain is left uncultured they could come in for a liberal share of the same and still leave enough to seed the ground. Thus, could the owner of a small farm secure all his bacon hams and lard, without sending to Chicago, and he could even sell, of these, one hundred dollars worth each year.

One or two cows can be kept with considerable profit, considering the investment. One good cow will furnish all the milk and butter consumed by a small family for a period of eight or nine months in each year. Her milk could be improved in quality and quantity by feeding her on corn stalks, turnip leaves or any similar product of the garden. One or two brood mares, strong enough for work could be kept with profit on a small grain farm; as a rule, however, no more horses or draught animals should be kept than are required to perform the work.

Chickens, ducks and turkeys, though they require a certain amount of care and vigilance while young, are profitable on a farm; since a great share of their food can be obtained at a nominal cost from stack bottoms. Turkeys, like hogs, can find their living in stubble fields, so that in one summer and autumn they will gain from four to eight pounds each, without additional expense. The owner of a small farm could put upon the market one hundred turkeys per annum, which, according to the customary price, would be equivalent to nearly as many dollars. Fifty or one hundred chickens could be sold within the year, which, together with what eggs could be spared, would help to swell the income of a little farm by one or two hundred dollars more. The difficulty seems to be to rear chickens or turkeys in the midst of hogs, but this can generally be traced to one or two causes—either the farmer keeps too many hogs, *i. e.* more than can be properly fed; or he does not keep those of gentle and quiet disposition. Under all circumstances, it is best to to have a poultry yard. This can be enclosed with pickets and sown to wheat late in the spring. Within the yard fig trees could be planted for shade; here young chickens could be kept until they would cease to be tempting baits to hogs. The yard can be made at an expense of about twenty dollars for material.

I would also make an auxiliary of a garden and orchard to help swell the income of the small farm. Hundreds of dollars per annum have to be paid for vegetables and fruit, which could be obtained at home for less cost than one half of the retail price.

In selecting a garden spot, it is best to get one with a gradual slant from one end to the other, those with hard land at the upper and sand at the lower end are the best, as affording different varieties of soil in a small space, and also affording an opportunity, with a self-regulating wind mill, of watering the garden at night by means of one main, and several side or lateral ditches.

Not unfrequently we hear people say "a garden won't pay;" the wind is too strong for fruit trees and too much water is needed for irrigation. Such people, no doubt, would make a failure of it, for they would probably enclose a quarter of an acre or less for experiment, then keep the ground moist in such way as to invite the roots of the trees and plants to the surface. Instead of enclosing four times the area at only twice the expense, then setting out trees enough for mutual protection against high winds and far enough apart to admit of plowing between the rows.

In the northern and middle portion of the Sacramento valley fruit-trees are generally cultivated, because the plow is found to be more efficacious than the ditch. The same method of treating fruit-trees bids fair to be a success at James E. Laughlin's, near Modesto. The writer has tried watering to a limited extent, and plowing around the same trees with the most satisfactory results.

The owner of a small farm should have a vineyard. Grapes of superior flavor can be raised in abundance, without artificial irrigation, if only the ground be cultivated between the rows. And against the objection that grapes thus raised are too small, we could state that, by allowing one-half or two-thirds of the usual quantity to mature upon the vines, grapes would be obtained of superior size and flavor. Our best California raisins will probably be obtained in this way.

That grape vines can be successfully cultivated on our plain-land, without well-water, is conclusively proved by experiments made by A. J. and S. W. Coffee, five miles from Modesto, also by the experience of John Jones, of San Joaquin county.

There is another consideration of equal importance to the owner of a small farm, and that is, *how* he shall do his work. To the owner of a section or more of land, a half crop on volunteer, considering the small outlay, might prove remunerative; but to one who barely pays his expenses with his half crop, the case is otherwise; hence, interest more imperatively calls upon him to adopt every means whereby he can increase his yield, and he finds through stern necessity that he more than any other man is interested in the thorough coultivation of the soil.

The first requirement of a thorough cultivation is deep plowing. Land should be plowed to the depth of eight or nine inches, once in five years. At other times land should be plowed deep enough to cover weed-seed beyond the power of resurrection for at least one year. The advantages to be derived from deep plowing are: that the yield is perceptibly increased for a series of years, or until the ground becomes packed, and that in cases of prolonged dry weather in the early part of the winter, the ground can be plowed to the required depth.

One of the best and most economic ways of putting in a crop of wheat or barley in the winter, is by the use of Matteson gang plows, with seed-sower and harrow attacked; otherwise and by the old method the ground may become too dry to sow after plowing, or too wet.

The owner of the average quarter section can make it pay by having 30 or 40 acres of summer fallow in each year, to be plowed twice —once in the winter, and again during the month of June. By this means noxious weeds are more effectually exterminated, the chances of a good crop are increased, the expenses of harvesting are lessened, while the amount of grain obtained is about the same as the ordinary yield over the whole quarter. If it were not for an unequal division of labor, whereby a person would have too much plowing to do in June, while hay was demanding his attention, and not enough to do at other times, it might do to extend the area of summer fallow still more.

Volunteer crops for any other purpose than hay should be discarded, except under the most favorable conditions. Harrowing the grain in spring is an effectual means of increasing the yield, where a heavy crust has formed on the top of the ground. Another essential requirement in the success of the small farm, is economy. By the practice of economy is to be understood, not only the various methods employed to prevent waste in the immediate present, but also those arrangements, as far as human foresight will allow, which are necessary to meet some future emergency; for example: it is necessary to employ not only the cheapest means of cutting and curing hay, but it is equally necessary to take into account the probable price of hay in the future. This could be approximately estimated from the amount of hay cut, or to be cut, in any one section of country, together with the amount on hand. The duty of the farmer evidently is to take a survey over more country than his own quarter-section of land.

The owner of a small farm should sell the various articles intended for market at reasonable rather than extravagant prices. The very high price is so seldom obtained, and obtained amid so many disappointments and drawbacks, that upon an average it will not pay to wait for it. From love of big prices, he who raises turkeys or hogs for market sells out at a time when he is compelled to take a low price, and quits this special branch of business in disgust. His mortification does not end here, for he finds when he is well out of the business, that the very article on which he had to sacrifice commands a high price.

It is a duty that the farmer owes to himself, no less than to the community at large, to patiently adhere to as many legitimate branches of business as upon an average can be made to pay. By this course monopoly and speculation are discouraged, and permanent prosperity secured again. By raising more stock and the various products of the orchard, vineyard and garden, the farm can be made to retain its fertility for an indefinite length of time.

The straw from a small farm should be stacked to provide for stock in case of future failure, and to furnish a valuable manure. It is a measure of economy to have a barn large enough to contain a small surplus of hay; also sheds for horses, cows and pigs, to protect them from the summer's sun and winter's storm. There are other and numberless ways in which the possessor of a small farm could practice economy, and which are best understood by an enlightened mind.

Other things, by administering to the spiritual wants of man, contribute indirectly to the profits of the farm. These are ornamental trees, shrubs and flowers. The relation that exists between flowers, in this case, and profit can be traced best by physiology—mathematics are too rigid and commonplace for the solution of such problems. A home with beautiful surroundings naturally incites to a love of home. If our homes contribute to our comforts or pleasures, we work with more zest in any labor connected with those homes; and physiology proclaims the fact that we can do more work under a cheerful than an unsatisfied state of mind. The more labor a farmer can command, the more capital he has in reserve; hence, he can make it pay to beautify his home and surroundings. The benefit to be derived from the cultivation of imagination and taste, who can estimate?

In conclusion, I would state that the owner of a small farm would not only make more money, by following the course briefly indicated here, but he would add much to his present stock of happiness.

A Farmer at the Fair.

Well, "after us the deluge," is an old saying, but what comes after the Fair? I had intended to give you some mere of the amusing experiences of myself and venerable grandsire, but having neglected to provide onrselves with season tickets in the beginning, our frequent visits began to tell upon the purses of both myself and relative. In fact, grandfather was fain to save his five cent pieces towards the last, for with all his independence, he was forced to borrow of the boy as he still calls me. But the good old man has retired to the classic shades of Sonoma, and is daily pestered by troops of little ones for stories of his city life. But enough; let us leave him to his new found glory, and speak of what the late exhibition has brought to our knowledge. I say late, for probably this will not reach you in time for any but your last issue, and then your paper will be issued like the blackedged billets of a high toned funeral.

We have found several persons in our peregrinations who expressed the opinion that nothing was to be seen at the Fair, but what could be found any day in the stores, warehouses, or manufactories. That is saying a good deal for San Francisco. If everything that is to be seen within the walls of the Pavilion can any time be found, as averred, anywhere in the city, then is San Francisco truly fortunate. But what is the lesson taught us in this assortion It is that what we have is not so highly prized as that which we have not; an old lesson that each and all of us must learn by actual experience sooner or later, and what few of us profit by.

I have learned this. That it is the mechanic who is most benefited by each and every new invention; not the farmer or consumer. After carefully examining the various agricultural implements there displayed, I bethought me to price some of them, so as to ascertain how near the full value of a small ranch it would require to stock it with a full set of improved working machinery. Let us for a minute consider this matter. From $225 to $240 is charged for a reaper, and $350 to $400 for a header. All parts of these implements are built by machine labor; probably the material in either one does not cost over one fourth of the price asked for them, and the actual labor another fourth. This would leave 50 per cent. of the sale price, after paying freight therefrom, of most all agricultural machinery as profit for some one; who that some one is—whether patentee, manufacturer or dealer, we can not tell, but probably about equally divided. Now, I know of many small farmers in the mountain districts who still use the old cast-iron 2 B plow because they can't afford to pay for a good steel plow the prices asked. I reasoned with them that the improved plows would do so much better work, that they would require less feed to keep up their teams, and consequently have more crops to dispose of. But, say that "we have not the money to pay down the price asked, and to run in debt for that which we can do without has ever been accounted poor economy by all wise men."

This view of the matter may be distasteful to you, as the exponent of the mechanical interests incorporated in the Fair Exhibition; but nevertheless I must speak of it as it looks to us. Does any mechanic for an instant suppose that the plows for which $15 and $20 are asked by the dealers here cost anything near that amount to build and transport to this market? Steel of the same quality can be bought in this market for 12½ cents per pound, cast iron for 7 cents, and the wood that enters into their construction would probably cost here about two dollars. The whole plow weighs from 40 to 90 pounds, and about equally divided between the three materials used; this would give us a cost for material of from four to eight dollars, if bought in this market, at prices charged by merchants here after putting on their tariff for freight and profit. This of course settles the cost of transportation on plow account, and only leaves the manufacture to be provided for. Now all the work upon the metal parts are done by machinery, even to drilling the holes and polishing the mouldboards. We know, then, that this is comparatively trifling beside the same labor by hand, and yet blacksmiths in the country towns make and sell plows just as cheap as the merchants sell a similar style. From these figures and the little knowledge we farmers have of the cost of machine manufacturing, we can not but think that all classes of farming implements can be produced and sold much more cheaply than is now the case. A man having a $3,000 farm in the interior can not afford to stock it with improved labor-saving machinery, for the reason that first cost, interest, repairs, and wear and tear of the same, would eat up all the produce of his labor and farm.

What we want is machinery adapted to many hundreds of small farms scattered through our glorious State. You may preach and theorise as much as you please about the superior value to the community at large of small farms, but so long as it costs more to stock a small farm than to buy it, just so long can the large farms produce the different crops at less cost than can the lesser ones. A farmer with 500 acres can perhaps afford to keep a good header, while he with only 100 must use a reaper, and he with only 40 acres must bow his back to the bending grain and cut it with a "Turkey wing" or "grape-vine."

Just so it is with wagons. Men in their prime relate how they used to put up the woodwork of a wagon for $25 (and the iron costs about the same); but the machine made wagons now sold here cost $100 and up, and the same built here are sold at $150 to $200. Therefore I say that it is not the farmer who is most benefitted by these many improvements in agricultural machinery. There; that is my growl, and the only one I have to make in consequence of visiting the Fair, and I hope that others have as little to find fault with as I have. Fare the well.

VISITOR.

A Durable and Economical Fence.

EDITORS PRESS:—As fencing is an important item of expense, the question is important—how to fence and what to fence with. Recent experiments have demonstrated the practicability of utilizing the chapparel so as to make it available for fencing on a large or small scale.

It is propagated from the seed, grows rapidly, the third year forming an impregnable, as well as an ornamental fence. It is indigenous to the soil and climate of California, and is therefore calculated perhaps, to supercede the use of other and more expensive materials. When properly appreciated its use will doubtless become quite general throughout the State. The time for sowing is immediately after the first rains. The ground should be prepared by plowing three furrows, making a width of about 2½ or 3 feet, then brush over carefully. The seed is sown moderately thick and the ground lightly brushed the second time.

It soon sprouts, needing no more care until the third year, when it is sufficiently grown to form an impenetrable barrier to both large and small animals. After this it needs only to be trimmed according to the taste of the proprietor. Proper attention to the trimming will prevent spreading. The preparation of the ground and completing the process of sowing forms but an insignificant item of expense in comparison with the expense ordinarily incurred in inclosing ground.

Farms, gardens and fields can be inclosed by this process, it needing only the patience to wait for two or three years when a fence is produced that will last a life time. Parties who have tested the chapparel with a view of substituting it as a fence, feel perfectly satisfied with the experiment. Several parties have been engaged in procuring the seed and extensive preparations are being made to adopt it in preference to any other kind of a fence. But little labor is required and there is no hauling of lumber, rails or other material. The expense is therefore but trifling—the time occupied being a small item. Parties who are skeptical in regard to the experiment or practicability of using the seed, can test the matter with trifling expense, as a small package of seed costing but four bits can be sent by mail. This can be sown in a corner of a field or garden.

E. H. S.

Clipper Gap, Placer County.

From Potter Valley.

EDITORS PRESS: Potter valley threshing is accomplished. The late-sown wheat atoned for the deficiency of the early-sown, so that the yield for quality and quantity is No. 1. Barley and oats are No. 1 crops, but the cornfields are more or less bleached with the frosts of the 9th, 10th and 11th of this month. Our fruit crop is very fine and abundant, wasting, indeed, for lack of hands and time to save it. The breeze reported to have shaken off all the fruit in the valley above Pomo was a slight exaggeration, there being a goodly supply left.

C. I. H. NICHOLS.

Potter Valley, Sept. 21, 1874.

The Trespass Law in Kern County.

EDITORS PRESS:—Knowing well the sentiments of the PRESS on the above-named subject, and not having seen anything in your paper in regard to the working of the law, I thought it might be of interest to you and many of your readers to hear how they manipulate it in *our* section. I will, therefore, just state a few truths and facts of occurences that have just been enacted here.

About one year ago, there was a young man, with a wife and two small childreu, landed in our parts, in search of a home. Said man was in very destitute circumstances, having absolutely nothing but a few dollars' worth of household goods, and after paying freight ou same, just $50 in money. Well, he located and filed on his 160 acres, and went to work and put up his log shanty, and moved in. Having no means. he was obliged to "work out" a good deal for the support of his family (and, by the way, they are considered very respectable folks); but by dint of perseverance and contrivance he managed to get the use of a team, and plowed seven or eight acres, and during the winter sowed a small lot of alfalfa, a little wheat, put out a garden, sent to San José and got forty or fifty choice fruit trees, most of which did well and grew nicely.

Well, so far, so good; but he was and has been all summer greatly annoyed by stock running over him, and after suffering the loss of a part of his trees, and his alfalfa, garden, melons, corn and wheat, he went at it and built a corral expressly for self-protection, as he could endure it no longer. He took up and kept some 30 head of cattle, and in due time he turned them over to the Justice (?) as the law directs. After having them in charge for fourteen days, devoting his entire time to their care, and having them stolen from him once while he was at his meal, and the next night thereafter having his only horse taken from him, the owners of said cattle made their open appearance with an order from the magistrate. The young man willingly gave up the cattle, and they were driven away.

The day of trial came on; plaintiff proved his damages by three competent witnesses; defendant brought in witnesses living 10 to 15 miles from scene of trespassing, entire strangers to plaintiff, and never saw his ranch till day of trial. Said witnesses swore plaintiff had not been damaged, and there was no sign that stock had been on the place. Now, for the judgment given; plaintiff was allowed $9 damages, $19 for keeping 30 head of cattle 14 days, and was required to pay about 5-6 of costs of suit. Having no money, it was impossible to take an appeal. He could not hire a lawyer for less than $50, so what could he do more than submit to the very unjust, illegal judgment, consequent for daring to cross the rich cattle nabobs; for trying to save his little all; for presuming to assert his rights and hold his own against the men who have grown rich (and consequently saucy) at the expense of every one who dared try to make an honest living by farming. He not only loses the labor of his hands for this summer, but has a heavy bill of costs to pay beside.

The law, in my opinion, is all right; but the officers of the law are corrupt; and poor, small farmers will have to "grin and bear it," till some wealthy farmer gets eaten up; then stockmen look out, "mouey makes the mare go," and justice stands no chance in the balance with gold. OBSERVER.

Bakersfield, Sept. 24th, 1874.

Quarter Evil or Black-leg.

EDITORS PRESS.—Having seen in your valuable journal that quarter evil or black-leg has been prevalent in some quarters, aud boing an old country grazier, and having seeu a good deal of the disease, I beg to offer a few suggestions. In the first place I think all treatment after the animal has been affected is quite useless, as mortification has already set in; but a good deal can be done as prevention. First, let the horse, when it has appeared, be removed to a different pasture; give some laxative such as linseed cake, in daily food; insert an issue in the dew lap, composed of a couple of cloves of garlick, and you will find the herd comparatively safe. RUFUS.

Oakland, Sept. 23d.

A NEW MECHANICAL SEPARATOR.—A new form of mechanical separator for the removal of fine particles of iron that become mixed with turnings and fillings of copper and brass from workshops, has recently been devised by M. Varin, of Paris. Two superposed hollow cylinders turn in the same direction, and upon them the material to be separated is scattered through a hopper. The surface of the cylinders consists in bands of soft iron which are kept in a magnetic state. The particles of iron are attracted to these cylinders, and at a certain period of revolution are brushed therefrom into a receptacle, while the scraps or other metal fall to the bottom of the apparatus. The machine is said to be capable of separating 1,100 pounds of material per hour. It has also recently been employed by M. Mangon, for detecting titanic iron in arable earth, with remarkable precision, the iron, iu such small quantities as 15 or even 7 grains in 22 pounds of earth, having been readily separated.

What Shall we do With our Fruit?

The great drawback to fruit culture in this State is the limited market for the product. A portion of the surplus of pears and grapes and a few early apples are shipped East by rail. But the cost of such shipment is very great, and whatever is so forwarded has to enter into competition with the products of other and nearer localities. Thus it is argued by many with all our boasted superiority of soil and climate, for this culture, we are laboring under such serious disadvantages that farmers are driven to the necessity of turning their attention from the orchard to growing grain, as a less perishable product, and one which can be allowed the fullest time to find a market.

We fear that our fruit growers are rather hasty in coming to the above conclusiou, for it is self evident that if our fruits can be put upon the same footing with wheat, so far as relates to holding them over or sending to a distant market, the gain to the producer would be nearly in the ratio which the value of the former raised on a given acreage, bears to that of the latter from a similar area—say from five to ten hundred per cent. All must agree that if such a result is possible, the legitimate deduction is startling, and should at once assist the attention of agricultural producers and capitalists generally.

That such is the case is fully shown by the display of fruits at the Pavilion and the Alden fruit and other processes. At the stand of the Alden Company the products of six distinct fruit drying companies are exhibited, as follows:—San Lorenzo, Sonoma, Centerville, Los Angeles, Vacaville and San Jose. At the former locality there are five evaporators employed; the three next named use three each; while the two last employ two each.

The valne of the product of each evaporator is about $100 per day. Allowing six months as the average run for each factory, 180 days will give $18,000 for each evaporator—aggregating $324,000 for the eighteen evaporators now in use. These eighteen machines make scarcely a ripple on the surface. One thousand would scarcely preserve the surplus fruit of California and Oregon. But if the eighteen now in use can produce fruit to the value of $324,000 a year, what would be the value of say 200 of these dryers. A better figuring will show the enormous value of this industry when properly developed.

California can produce in unlimited quantities the finest fruits and vegetables in the world, and we have an almost unlimitable market for such products. The fruit shown cannot be equaled by that produced in any other part of the world. This is true not only of apples, peaches, pears, etc., but of the semi-tropical prunes, raisins, etc., as well.

Samples of prunes have been left upon our desk, preserved at the San Jose factory, of a very fine quality. Although not so sweet as the imported German prune, the color and appearance of the fruit is much finer and the flavor excellent. The retail price of this fruit is 73 cents per pound, while that preserved at San Jose can be produced at a cost of 7 cents per pound, allowing 2½ cents per pound for the green fruit. The latter sell readily at 30 cents per pound. Careful weighing before and after drying shows that the loss is less than fifty per cent., 1,000 pounds of green fruit producing over 500 pounds of dried.

Experience has shown that fruits dried by this and simi'ar artificial processes is far superior to that prepared in the open air by the heat of the sun. The natural fresh color, texture and flavor of the fruit is closely preserved, and reappears by proper treatment in water, even after a lapse of years. The fruit is covered during the entire process of preserving, which requires only about five hours of time. Hence the offensive and unwholesome deposits of insects and dust are excluded—a great advantage, of itself, over ordinarily dried fruits. Their saccharine richness is also greatly improved, as well as their fitness for nourishment and digestion.

There are thousands of acres of land in California, where all the conditions are favorable for the production, in the greatest abundance and perfection, of the finer varieties of fruits, such as prunes, plums, apricots, and raisin-grapes—fruits which cannot be successfully raised east of the Rocky Mountains, and for which there is, and always will be, an uulimited demand; and, to show the profit of the culture of such commercial fruits in connection with the Alden process of preservation, we submit the following estimate: Take the prune, for example. At 14 feet apart, 222 trees may be planted to the acre. The writer has seen trees, of the Petite Prune d'Agen (an excellent) variety, five years old from the bud, bear 200 pounds to the tree. These prunes can be made into an article far superior to any imported prunes, at a cost not exceeding three cents per pound. This would give 15,200 pounds to the acre, of preserved prunes, which, at twenty cents per pound, would give $3,040 per acre, or about $14 per tree. Deduct from this the cost of curing, three cents per pound, or $456 for the product of one acre, and you have $2,580 net, less the cost of raising. Those who consider these estimates too high may reduce them one-half, and still it will leave a handsome return for the labor and capital invested.

The importance of this business cannot be too often or too persistently argued upon the attention of the fruit growers of this State. From the figures and facts here giveu it will been seeu that there is no uecessity, whatever, for allowing our fruits to go to waste, or to destroy our orchards or vineyards, with the view of employing the laud they occupy for some other agricultural product. There are various processes which may be employed for fruit drying. In addition to the Alden, we have also Ryder's Americau Dryer, one of which is now on exhibition in the machinery department, and which is said to turn out fruit equally as well as the Aldeu. Then we have a very fine show by Mr. E. D. Waters, whose exhibition in the hortieultural department shows what can be done by a single individual with little or no capital beyond five or six acres of fruit trees, and with an unpatented apparatus.

The best way possibly, to make fruit drying a success in California, on a commercial scale, is the adoption of the co-operation system, by which a nniformly good article may be more readily secured, and the reputatiou of California dried frnit be kept at the highest standard, and good prices be realized. This is the plan adopted by the cheese manufacturers at the East, and which has there proved so eminently successful.

A New Kind of Glass—"Bone Glass."

A new and most interesting kind of colored glass h s lately come into nse, which is known as "bone glass," of which very little has as yet been said in glass literature. It is a white opaque glass, and its name hints at its composition and nothing more, especially since cryolite has come to be used in the manufaeture of glass. This kind of glass is used for lamp shades and globes to protect the most important organ of the human body, the eye; and formerly it was both rare aud expensive. Cryolite, however, has effected as great a revolntion in the manufacture of white glass as petroleum has in the means of illumination. What part the chief constituent of the bone, the phosphate of lime, played in the manufacture of the bone glass was not exactly understood, and a still thicker veil is drawn over the actiou of the fluoride of lime, soda and alumina, known as cryolite. It is to offer some explanation of this action that Fischer takes up this interesting branch of the glass industry. Phosphoric acid is, at a high temperature, a very powerful acid—so much so that uo other acid is able to displace it. Hence we may reasonably suppose that the phosphate of lime remains suspended, as such, in the molteu mass of glass. This, too, is indicated by the fact that when an excess of bone dust is added to the glass, or on suddenly cooling it, it is rough on the surface; but if the glass has the proper constitution, it remains perfectly smooth. How may the action of cryolite be explained? The power of hydrofluoric acid to etch glass and render it matt is well known, and depends on the decomposition of the silicates, taking from them a part of the silica, and the soda or potash, so as to form a compound known as fluosilcate of soda or potash, and then flying off in form of a vapor. We all know that this takes place, to a greater or less extent, in every cold, completely formed glass; how much easier and better would this process take place under the ægis of heat?—*Scientific American.*

A NEW TIDE WHEEL.—Mr. Andrew Folsom of Warren, R. I., has recently devised and constructed a tide mill in that town, which is described as follows: The wheel is upright, and in hight or depth 7 ft., and 7 ft. across. The wings or arms are 28 in. in width, 62 in. in hight, and 39 in. in length, so that the flood tide, when the wings are open a depth of 7 ft. and a width of 39 in. is secured for the force of the tide to act upon for the purpose of power to move the wheel and load that may be attached thereto. On the flood tide the arms open on the west or left side, aud on the ebb on the easternmost or right side of the wheel as it now stands. After passing certain points the arms close and the resistance is only the thickness of the three-eighths of an inch iron. The wings are three tiers deep, and so arranged that a number of them are opened at a time, and add to the power and force of the wheel the full depth of the water. These wings are secured to the shaft by hinges that work very smoothly. A cast-iron circular plate seven feet across is at the bottom of the shaft or wheel, one at the top of the first tier or wings, one at the top of the second tier, and one at the third tier, with sufficient space betweeu so that the wings play entirely free. The wheel is not as yet loaded, but it moves very true and without noise or jar.

IMPERMEABLE PAPER.—By plunging a sheet of paper into an ammouiacal solution of copper for an instant, theu passing it between the cyliuders and drying it, it is rendered entirely impermeable to water, and may even be boiled in water without disintegrating. Two, three, or any number of sheets thus rolled together become permanently adhorent, and form a material having the strength of wood. By the interposition of cloth or of any kind of fiber between the layers the strength is vastly increased.

UTILIZING GRAPE-STONES.—It is usual to throw away grape-stones as a waste product, but it appears they can be turned to good account. When roasted and ground they possess an aroma very much like that of East India coffee, and the beverago obtained therefrom is about the samo as coffee in tasto, though inferior in quality. An acre of vineyard ordinarily yields 30 to 40 pounds of this seed.

DOMESTIC ECONOMY.

How to Make Soup.

A correspondent of the Springfield *Republican* says: I never buy fresh meat to make a soup, unless it bo for company. The bones and bits of meat left from the "roasts" and "broils" are sufficient.

I take a slice of salt-pork, and cutting it up small, I put it in the bottom of my soup kettle with three large or six small onions sliced, half a tea-cup of water, all my bones and scraps of meat (but no fat whatever), two heaping spoonsfull of salt and a small quarter tea-spoon of pepper. Let all these simmer ten minutes or over. Stir them often, but do not let them scorch, and, when just ready to dry up, pour on five pints of cold water. Add two good-sized carrots and a turnip cut in slices, and let all boil together moderately for an hour or two. (If you have a large proportion of meat on your bones, an hour will make it.) Strain it through a sieve, and skim off the fat, if any, and it is fit for the every day table. While boiling, the kettle must be covered tight, to keep it from boiling away. I like to make my soup after breakfast and set it away, as then, by dinner-time, the fat which may be on it will have hardened, and is easily skimmed off. Any grease floating on a soup is unpardonable. Send it to the table boiling hot, and if you add a little boiled macaroni, rice, or barley, or a few green peas, or slivers of string beans, or even of despised carrot, it will improve it. When you have tomatoes, celery-tops, parsuips, a bay-leaf, a bit of thyme, green-pea hulls—anything—put it in to eurich and complicate the flavor. As the wife of a distinguished Cambridge poet, who is very particular about his dinner, said to me, "Everything goes to make a soup—like cologne." Most housekeepers make awful preparations in getting up a soup—a whole shin of veal, boiled all day, etc. But after a few experimeuts, the housekeeper will find that the above recipe is cheaper, quicker and quite as good.

The Secret of Fried Potatoes.

"G. B. B.," writes to the Springfield *Republican* a bit of information that willl interest many: Saratoga potatoes, the poetry of common life, and costly charm of Delmonico's and Parker's, can be made in perfection in any kitchen, by the use of very simple apparatus, consisting of a sharp blade set slanting into a wooden trough with a narrow slit in the bottom, two wire screens or sieves, and a commou spider. Select eight large potatoes, pare them, and slice very thin with the cutting machine, soak them in cold water for two hours, and stir common table salt into the water, one teaspoonful to a quart, and allow them to remain in the brine half an hour longer. Pour them upon the screen to drain, and put on a spider, with a pound of clear lard, over a brisk fire. Wipe the sliced potatoes dry on a towel, wait until the lard is smoking hot, and pour a large plateful into the spider. The result is liko a small sea in a white squall; and now the cook shows the artistic soul which every votary of that noblest of the arts must possess to be worthy of the name. Patient and calm, with steady aud incessant motiou of the skimmer, she prevents adhesion of any too affectionate slices, aud watches carefully for the tender blush of brownness to appear. Slowly it creeps aud deepens until it outrivals the hue of the fragrant Havana. Haste then takes the place of caution, lest any martyrs burn for the protection of others; and they must be quickly spread upon another sieve to drain until dry and greaseless enough for the fairest fingers; then served hot, to melt away like a kiss on sweet lips, with a dying crackle, like the fallen leaves in autumn.

TO PRESERVE GRAPES.—Pluck the clusters carefully, remove those that are green or bitten by insects or blasted, and tie them to a pole abont 10 feet long and so firm as uot to bend much beneath the weight. Haug the poles with the clusters suspended in a loft or chamber where there is a free circulation, and there let them remain till freezing weather, looking over them occasioually and removing any that have begun to decay. Thou pack in dry sawdust in dry shallow boxes, and keep in a cool, dry cellar. The Freuch ofteu keep them a number of mouths by dipping them in a thick white-wash, which on drying covers stem and fruit with a thiu, white crust and excludes the air. Any one who knows a better way than these will confer a favor on our readers by communicating it to them.

BOILED BREAD PUDDINGS.—Crumb your stale bread in a pudding pail and cover with sweet milk, and set by the stove to warm and soften. Then to every quart of the mixture add two well beaten eggs, a cup of sugar, and a handful of raisins or sweet dried fruit of any kind. Do uot have your pail full, as it needs some room to rise. Put the cover on tightly and set it in boiling water, aud do not allow it to stop boiling till done. If you try that once you will never make a baked pudding again.

FRIED SWEET POTATOES.—The oveniug before they are wanted peel and slice them, lay them in a stew-pan and sprinkle sugar between the layers of potatoes; pour on water enough to cover them, and set the stow-pan on the stove. In the morning by the time you are ready to fry them, they will be cooked just enough; fry in hot lard to a light brown on both sides.

Patrons of Husbandry.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

ORGANIZING DEPUTIES.

Editors Rural Press:—As the commissions of the Deputies of this State are only for the term of one year, many of them will soon expire by limitation, and it will be necessary for those who wish to have their commissions renewed to inform me, so that new ones may be issued to replace the old. J. M. Hamilton.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appears on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Subordinate Granges required by Article 2, Section 1, By-Laws of National Grange, to be made on the first day of January, first day of April, first day of July and first day of October, include Secretary's as well as Treasurer's reports.

J. M. Hamilton.

State Grange Agency.

Patrons will please take notice that Bro. I. G. Gardner, State Grange Agent, the Farmers' Mutual Fire Insurance Company and the State Grange Secretary, Bro. W. H. Baxter, have removed to No. 6 Leidesdorff street, south side California street, next to Merchants' Exchange—rear of Grangers' Bank of California (415 California street). ecp5-tf

To Wool and Potato Growers.

All Subordinate Granges which are interested in raising Potatoes and Wool, are requested to elect two delegates to meet in convention, October 14th, at 10 o'clock A. M., in San Francisco, for the purpose of organizing Associations in the above interests.

W. H. Baxter,
ecp26-td Sec'y State Grange.

Pomeroy's Prize Grange Poem.

The following beautiful poem gained the prize, recently offered by "Brick" Pomeroy, for the best Grange poem:

Farmer John to His Brother.

BY H. N. REED.

The toil of the week is ended, and my team is now at feed,
Laura her work has finished and now sits down to read.
Our home is very quiet, the children are all at rest,
As I write this homely letter to the brother I love best.
I have much that's new to tell you, so do not think it strange
To learn by this bit of writing I'm Master of a Grange!
'Tis true, to secret societies opposed I've always been,
But this was before the good of co-operation I'd seen,
We meet once a fortnight now in Pomona Hall,
As we call the furnished upper rooms in the house of farmer Ball;
Some forty of us farmers, who there can take our wives
And by work and conversation harmonize our lives.
We ask each other questions in a social, kindly vein,
Learn how to lessen taxes and increase the yield of grain;
To whittle down our troubles; to build up for us joys;
To beautify our farmer homes—educate our girls and boys.
We look in each other's faces—we grasp each other's hands,
As farmers and as neighbors we protect each other's lands.
We watch each other's lambs from dogs and wolves that prowl,
And as Patrons vote together, while the politicians howl.
We agree no more to listen to the grand spread-eagle speech
Of the ring and monopoly agent, who takes all in his reach.
We are learning to live in harmony, and as flowers from the sod
Grow to meet the sunlight, so we're growing up to God.
Our home is now far happier than e'er it was before,
Again the bloom's on Laura's cheek, as in the days of yore.
Our house is better furnished than it was when you were here,
For co-operation a profit left for all of us last year.
Our neighbors now call socially when comes the eventide,
As peace, friendship, prosperity, does with us now abide.
This letter tells the story, so, brother, think not strange,
If I ask you soon to visit us, and then to join our Grange.

In Memoriam.

Whereas an all-wise Providence having seen fit to close by death, after a lingering illness, the earthly labors of our worthy brother, B. T. Jameson, who was a charter member and the first Master of Rohnerville Grange, No. 103, P. of H., members of said Grange desire to express their sympathy to his family in their great bereavement, and to pay a last tribute of affection and respect to a worthy brother. Therefore,

Resolved, That in the request of brother Jameson to be buried by the Grange, we recognize his respect for and faith in the Order. That in his death, the members of this Grange have lost a worthy brother; the Order an honorable and faithful member; his family a kind and provident husband and father; and his country a valued and respected citizen.

Resolved, That we recognize in sister Jameson a patient, true wife and mother; that in tendering our sympathy to her and her family for their great loss, we desire to add the hope that a kind Providence may long sustain her in life and health, and aid her in performing her increased duties to her fatherless children.

Resolved, That out of respect for the memory of Bro. Jameson, the usual badge of mourning be worn by the members of this Grange at all regular meetings, for the space of three months from this date.

Resolved, That the preamble and these resolutions be entered on the minutes of this Grange; that one copy be sent to the Rural Press, and one copy to sister Jameson and to each of the county papers for publication, and that the Secretary be requested to carry out these resolutions.

Approved Sept. 19th, 1874.

John W. Cooper,
Horace Drake,
Sam'l Strong,
Committee.

Out of Fix.

Brother Nicoles writes us from Tustin City, Los Angeles Co., as follows:

Dear Rural: Pulling beans and husking corn are the principal pursuits in our neighborhood this month. Pink and bayou turn out best, but most people raise the Navy, as they generally bring a better price.

Our vineyards and orchards have not generally commenced bearing yet; consequently we have to depend upon the commoner productions for a living.

Our homes are prosperous and happy; but our Grange languishes. How is this? It seems as if the benefits of the institution do not fall very thick around the small farmers. This war among the great wheat dealers and great wheat producers does not affect our condition, except in a very indirect manner, and there are those amongst us who do not have much faith in corporations and rings as a remedy for rings and corporations. I am afraid the Grange is too big for us small producers; we slip about in it like a small boy in a man's great coat; its big side-pockets are so deep that we can't tell whether there is anything in them or not. But we do not mean to complain, but will be content with what few crumbs we can gather. If by any fair means we could get our fruit cans and bean sacks a little lower, it would help us out wonderfully; and another thing that would add greatly to our prosperity would be a reasonable chance of improving our breeds of cattle. Somehow our cows run mostly to horn down this way. With a little help in these and a few other little matters we would be all right; but any way, we will manage to worry through as long as the Rural continues to furnish our mental appetites with so much that is palatable and satisfying. By the way, have you really such a writer as the author of "My Shop Mates?" I think it is the finest thing that has been written for a long time, and I am glad that it was written for our paper. I think the highest literary journal in the land might be proud of such a production.

Give us our weekly food and keep your columns as "rural" as you can, and the instincts of the people will cling to you.

E. R. Nicoles.

To prevent the cattle from "going all to horns" we would suggest to Bro. Nicoles that the farmers should stop going to Texas for breeding cattle. Surely we need not point out how the Grange may be made available to cure even this misfortune. But if the Grange be allowed to "languish," as the Bro. says it does down there, it will accomplish nothing. The Council fires must be kept burning brightly and regularly. Brothers and sisters must meet together and relate to each other their experience, their successes or failures, their joys and sorrows, and by taking counsel together, and united effort, assist each other in overcoming difficulties. But, says he, "The war among the great wheat dealers and wheat producers does not effect our condition except in an indirect manner." But is there not enough grand and glorious work pointed out by Grange teachings, outside of the wheat question, to enlist all the zeal and heart and mind of every true Granger in the land? The beautiful social feature alone should be sufficient to call forth the earnest efforts of every one, and feed the flames upon the Grange altar, that in its warm glow hearts might be united in sympathy and brotherly love. The error of the brother is only too common. We are all inclined to take a too narrow contracted and selfish a view of the great and noble work before us. But we quote again, "the farmers down here have little faith in rings and corporations as a cure for corporations and rings." If this be the light in which the brother looks upon the great movement among the farmers, and if his brother and sister Grangers down there think likewise, no wonder the "Grange languishes." If Grangers can not be educated to a more exalted view of this almost spontaneous uprising of the people of the rural districts than to call them a "ring" or "corporation," then might they as well close their Grange halls and return to their isolated homes, to struggle alone against adversity. The true Granger enters the work as a life work, not merely from financial considerations, but because the whole tendency of the teachings of the Grange is to make men nobler, wiser and better. Better farmers, better husbands and wives, better fathers and mothers and children and neighbors. To cast out dissentions and harmonize whole neighborhoods, and unite the people in one grand effort for mutual benefit. Go to work in this spirit, brothers, and if the Grange does not assist you to get a reduction on your "fruit cans" and "bean sacks," then call us a false prophet.

Grange Resolutions.—Turlock Grange has adopted the resolutions of Santa Barbara Grange with reference to the removal of Prof. Carr, with this amendment, "that we thank J. M. Hamilton, W. M., of State Grange, and all others who voted with sincere motives against the removal of Prof. E. S. Carr."

Resigned.—We learn that Bro. J. Walter Ward, the faithful and efficient deputy of Bro. Baxter, is about to return to rural life. He has served the Grange faithfully and as he now drops the pen for the "spade, plow and hoe" we wish him prosperity. Bro. Pittman, of Mayfield, takes his place as deputy.

Editorial Notes.

A correspondent from Gallatin county, Montana, writes for information concerning the Grangers' homestead association. Part of of his questions are answered in this issue in a communication from Bro. Abbott, and we will refer the whole matter to him, knowing that he will be more than willing to answer the inquiries in full. The columns of the Press are ever open for anything relating to this important question. The questions are these: What kind of land; hill, or valley? Is it timbered? Is it well watered? In what portion of the State? Is it adapted to fruit-raising?

Our correspondent is sorry no one "writes for the glorious cause from Montana." So are we—and invite Sister Bostwick to favor us often with a letter. She says "there are seven Granges in Gallatin county, all in good working order. Our Grange—East Gallatin, numbers over 60 members. The Worthy Master, Geo. W. Wakefield, and Worthy Overseer M. W. Penwell, are men in the right places." We wish our mountain friends prosperity, and hope to hear from them often.

Educational.

The interest taken by the Patrons of Husbandry in our public schools and in the establishment of institutions of learning is praiseworthy. To improve the facilities for the education of our children is of much importance, and we are gratified to see that the Grangers, wide-awake on most other questions of interest, are not asleep on this. The establishment of one or two seminaries by the Grangers, suggests the establishment of a Grangers' college. One in which a thorough scientific and business education may be acquired. Let it be for the State or coast; located in some rural valley, away from the excitements and temptations of large cities. Let there be ample facilities for gaining a *practical knowledge* of the most important branches of education, especially telegraphing, surveying, chemistry, natural philosophy, agriculture and horticulture. Let the college open its doors to our daughters and sons. Should this matter be taken hold of earnestly and enthusiastically by our brothers and sisters, especially the latter, the college may be established and magnificently endowed, while the burden would scarcely be felt by any of us. While our brothers are wrestling with the wheat question, insurance, homesteads, banks, etc., the sisters could take up this matter and make it a grand success, and erect a monument in one of our beautiful valleys which would carry their names down to posterity, as among the most noble of the land.

Granges on Text Books.

Healdsburg Grange.

Whereas, In accordance with an Act of our last Legislature, the text books of our public schools may be changed every four years, and

Whereas, the present Board of Education has already advertised for bids to furnish a new series of text books for public schools, therefore,

Resolved, by Healdsburg Grange, No. 18, P. of H., 1st, that we are opposed to any change whatever of text books at present used in our public schools. 2d, that if a change of text books in our public schools is unavoidable, we are in favor of patronizing home industry, 3d, That a copy of these resolutions be forwarded to the Pacific Rural Press and to A. L. Bancroft & Co., for publication.

William N. Gladden,
Secretary.

Lodi Grange on the Same.

Resolved, That we, the members of Lodi Grange, No 92, P. of H., do fully endorse the sentiments expressed in the Rural Press, by other Granges, in regard to the frequent change of text books for the use of common schools.

Mrs. Nellie Crouch,
Secretary.

Yuba City Grange.

At a meeting of our Grange held to-day, the following preamble and resolution were presented, and after some debate unanimously adopted, and the Secretary was requested to send a copy to the Pacific Rural Press for publication:

Whereas, The State Board of Education has invited proposals from publishers, with the view of changing the text books now in use in our public schools: Therefore,

Resolved, That if a change be made in good faith, to the lowest bidder, the books to be introduced gradually, as new classes are formed, it will meet our approval.

Resolved, That we are in favor of home manufactured books, if found as good and cheap as Eastern, thus encouraging California industry, and keeping our money at home for the benefit of our people.

S. R. Chandler, Secretary.

September 26th, 1874.

Interesting Grange Meeting.—Temescal Grange had a very interesting meeting last Saturday. Bro. O. L. Abbot, W. Overseer of State Grange, Sister Abbot and others were present and entertained the meeting with speeches. Bro. Abbot is taking a very active part in the Granger's Homestead Association, an important and worthy enterprise. The following resolution was passed: That W.M. Dr. E. S. Carr be requested to invite the State Grange to meet at Oakland next year. The basket picnic of Alameda county subordinate Granges was alluded to with interest and we expect a good representation at San Lorenzo Grove, Oct. 17th. At the next regular meeting Oct. 24th, election of officers of Temescal Grange will take place.

Dixon Grange has unanimously adopted the resolutions of Capay Grange, published in the Press of Sept. 19th.

Correspondence.

Editors Press:—The old adage that "All work and no play makes Jack a dull boy." I am thoroughly convinced, was enunciated by one who well understood the effect of constant labor without some play. I have just returned from a trip (which the necessities of business required of me) never to be forgotten, the memories of which are so pleasant that they will always be present in my mind. Pleasure attendant upon business is not often one's fortune.

The business of the Grange Agency has become so great, its duties are so varied, that I feel that even when the welfare of our noble Order calls me away that I must hasten to return and know that "all's well." After repeated invitations from Bro. Davis, of Santa Rosa, I found that the old plea of a "press of work" had worn itself out. I prepared myself as best I was able to attend the Harvest Feast held by Santa Rosa Grange, Saturday, Sept. 26th, 1874. Accepting the kind invitation of Bro. A. W. Thompson, (whose office adjoins the agency) my wife and I proceeded to Petaluma as guests of Bro. T., who promised that his lady and himself would accompany us and join in the "cheer of the day." Reaching Petaluma, we were met by the carriage of Bro. T., who was received by his family with radiant faces. Bro. T., being the Attorney of our Cal. Farmers' Ins. Co., is necessarily called to the city, while Sister Thompson with great tact and judgment directs the affairs of the farm; and the order, neatness and attention to detail there shown, is proof most positive that "woman is to the manor born." I question if many men are capable of managing a farm in all its details with one-half the ability shown by Sister Thompson. It seems perfection itself. After spending an evening long to be happily remembered and enjoying a good night's rest, we seated ourselves in the carriage and started on the road to Santa Rosa. To him who is dissatisfied with his location, I say see Sonoma valley and die, for certainly those to whom God has granted the boon of living there are thrice blessed! For 16 miles the scene was one calculated to bring pleasure to any one who can in the least degree appreciate the glories of Nature.

Reaching Santa Rosa we were met by Bro. G. W. Davis, his wife (Ceres of the State Grange) and their sons, E. W. and W. R. Davis. Need I say that our welcome was cordial, and that the Brothers and Sisters one and all extended to us the hand of friendship! escorting us to the Grange Hall. After conferring the 4th degree, information was asked concerning the workings of the State Agency, which I explained, the Brothers listening with apparent interest.

Bro. Thompson was called upon and responded in an interesting and instructive manner, giving many practical hints to Patrons in relation to co-operation in trade, harmony in our Order and patience under difficulties, until being admonished by the inner man that the satisfaction consequent upon a "Harvest Feast" was at hand, he closed his remarks. Adjourning to an adjoining room the worthy chaplain asked the Divine blessing, when trouble commenced and continued until dinner was over. I was informed when I sat down that they had chickens, etc.; it was a mistake, for I assure you that when we arose from the feast I noted particularly that they had no chickens.

That "Harvest Feast" at Santa Rosa, what shall I say of it; words cannot do it and the friends there assembled justice. Keep them up, Brothers, throughout the length and breadth of this broad land you till. They serve as peace-offerings and draw us nearer together. Evening coming on we went to a Grange meeting at Bennet valley. This Grange deserves great praise for the energy and fidelity displayed. Thrice honored in our Order may it stand forever. It has erected and dedicated a noble hall where hours of peace and success will crown its members for their devotion to the cause.

The address delivered by Bro. W. R. Davis, is in itself a gem. I have solicited and obtained permission to append it hereto in the hope that the ideas set forth may find a response in the breasts of many young Patrons just on the threshold of life, and excite a disposition of emulation.

Returning to Santa Rosa we spent a happy evening with Bro. Davis' family and returned next day to duty.

Yours truly, I. G. Gardner.

Calaveras Grange.—Editors Press:—We had a very pleasant time at our harvest feast on the 19th inst. After confering the fourth degree on a class of three; it being our first harvest feast, all present enjoyed not only the eatables, which the ladies of our Grange know how to get up so well, but the novelty and sociability of the whole proceeding. We are not progressing very fast on account of having organized in a busy season, but what we lack in number we make up in energy and zeal for the cause. Alexander Miles.

Jenny Lind, Sept. 28th, 1874.

EDITOR RURAL PEESS: Perhaps an item from Lynn's valley, Kern county, would not be amiss just at this time. Onr Grange has been in existence since June 18th, working very harmoniously, and making but little noise in the world. Our Worthy Master, A. D. Du Brutz, resigned bis seat as Master, August 15th, and S. W. Woody was elected to fill the vacancy, and Henry Pascoe was elected to the office of Lecturer, vice Woody resigned. Our increase in numbers is nine to the fourth degree, with two to the third and one to the first degree, and three applicants for admission. We had our first harvest feast last Saturday; and what a feast! Plenty of everything that was good; enough for each, enough for all, and some to take home again. How the hearts, heads and hands of our sweet sisters must have worked in the good cause to make so complete a success of our first harvest feast. Roast chicken, apple pies, cakes and everything that well-tilled farms can produce, were spread in profusion; and the ladies, God bless 'em, appeared in their sweetest smiles and most becoming manner, to make glad our hearts and cheer us on in the work. I have been trying to get some of our brothers to subscribe for the PRESS, and think that now, harvest and threshing over, farmers will be more flush of the needful and will want to read your very valuable paper. I cannot understand how farmers can get along without the RURAL PRESS.

Our grain crop was not very abundant, though sufficient for home consnmption; vegetables good and abundant. Fruits, wherever there were any trees, are simply wonderful; trees breaking down with the loads of it before it was half ripened; much of it had to be thinned out, to save the trees.

Yours fraternally, S. E. REED, Sec'y.

The State Grange Meeting.

At 10 o'clock on Tuesday, Oct. 6th, in Stockton, the second annual meeting of the California State Grange was opened by W. M., J. M. Hamilton. Nearly all the officers were present. Committees on Credentials and Order of Business were appointed. On motion of T. H. Merry, adjourned till two o'clock P. M.

Mozart hall, the place of meeting, is a large, new building, finely frescoed. Two immense sheaves of grain, reaching from floor to ceiling, are on the right and left of the Chaplain. Numorous specimens of other natural products of the soil adorned the walls on either side. Choice plants and shrubbery were neatly festooned. Flowers abounded in pyramidal bouquets and wreaths; and luscious fruits in caskets. These, with appropriate pictures, the American shield and the words, "Welcome Grangers," and "Faith, Hope, Charity and Fidelity," wrought in evergreen, made a very attractive and pleasing home for the session of the State Grange.

The Afternoon Session

Opened with a large delegation of brothers and sisters present. Bro. Haile reported from the Committee on Credentials. Bro. Wright reported on order of business, anticipating a five days' session.

The Grange from the start showed a strong, deliberative sense. The new representation is composed of a larger proportion of young members than has been present at former meetings.

In proceeding with the order of business, the Secretary and Treasurer were granted further time. Secretary Baxter read report of the Executive Committee meetings during the year. It showed in detail how the business of the Grange has been steadily advanced by the free and assiduous attention paid to it by the Committee—some of whom have never missed a meeting.

Sessions will be held daily at 1 and 7 P. M., giving the committees the entire morning to do their work thoroughly.

The fifth degree will be conferred on Thursday evening, and the sessions thereafter will open in the fourth and fifth degrees, as may be determined.

Master Hamilton's address, noble and practical, was heartily received. We hope to give it with a full report hereafter.

Committees.

The following committees have been appointed:

On Resolutions—Wright, Haile and Spencer; on By-laws — Dewey, Henning and Manlove; on Finance—Oliver, Earl and Sister Colby.

Before adjournment the roll was called and credentials presented. Eighty Masters, seven Past Masters, and twenty-seven Matrons were present. On the afternoon and evening meetings were held with closed doors. The fifth degree will be conferred Thursday evening.

GRANGE COUNOIL.—There was a large attendance at the meeting of the Council at Colusa on Tuesday last. The Council met at 1 o'clock P.M., and continued in session—only adjourning for supper—until 11 o'clock at night. Judge Merryfield, of the Executive Committee, A. F. Walcott, of E. E. Morgan's Sons, W. H. Baxter, Secretary of the State Grange, and several others from abroad were present. The conclusions of the Council will be sent to each Grange.—*Colusa Sun, Oct. 5.*

Declaration of Purposes of the National Grange.

Preamble.

Profoundly impressed with truth that the National Grange of tbe United States should definitely proclaim to the world its general objects, we hereby unanimously make this Declsration of Purposes of the Patrons of Hushandry:

General Objects.

1. United hv the strong and faithful tie of Agriculture, we mutually resolve to lahor for the good of our Order, our country, and mankind.

2. We heartily indorse the motto: "In essontials, unity; in non-essentiais, lihorty; ln all things, cbarity."

Specific Objects.

3. We sball endesvor to advanco our cause by lahoring to accomplish the following objects:

To develop s hettor and higher manhood and womanhood among ourselves. To enhance the comforts and attractions of our homes, and strengthen our attachments to our pursuits. To foster mutusl understanding snd co-operation. To maintain inviolate our laws, and to emulate each other in lahor to hasten the good time coming. To reduce our expenses, both individual and corporate. To diversify our crops, and crop no more tban we can cultivate. To condense the weight of our exports, selling less in the hushel and more on hoof and in fleece; less in lint, and morc in wsrp and woof. To systematize our work, and calculate intelligently on probabilities. To disconntenance the credit system, the mortgage system, the fashion system, and every other systom tending to prodigality and bsnkruptcy.

We propose meeting together, talking together, working togetber, huying together, selling together, and ln genoral acting together for our mutual protection and advancement, as occasion may require. We shall avoid litigation as much as possible hy arhitration in the Grange. We shall constsntly strive to secure entire harmony, good will, vitsl brotherhood among ourselves, and to make our Ordor perpetual. We shsll earnestly endeavor to suppress personal, local, sectional, and national prejudices, sll unhealthy rivslry, all selfish amhition. Faithful adherence to these principles will insure our mentsl, moral, socisl, and material advancement.

Business Relations.

4. For our bnsiness interests, we desire to hring producers and consumers, farmers and manufacturers into the most direct and friendly relations possible. Hence we must dispense with a surplus of middlemen, not that we are unfriendly to them, hut we do not need them. Their surplus and their oxactions diminish our profits.

We wage no aggressive warfare sgainst any other interests wbatever. On the contrary, all our acts and all our efforts, so far as business is concerned, are not only for tbe benefit of the producer and consumer, hut also for all other interests that tend to bring these two parties into speedy and economical contact. Hence we hold that transportation companies of every kind are necossary to our success, that their interests are intimately connected with our interests, and harmonious actiou is mutually advantageous, keeping in view the first sontence in our declaration of principles of action that "Individual hsppiness depends upon general prosperity."

We shall, therefore, advocate for every State the increase in every practicable way, of all facilities for transporting cheaply to the seahoard, or hetween home producers and consumers, all the productions of our country. We adopt it as our fixed purpose to "open out the channels in nature's great arteries that the lifehlood of commerce may flow freely."

We are not enemies of railroad, navigation and irrigating canals, nor of any corporation that will advance our industrial interests, nor of any laboring classos.

In our noble Order there is no communism, no agrarianism.

We are opposed to such spirit and management of any corporation or enterprise as tends to oppress the people and roh them of their just profits. We are not enemies to capital, hut we oppose the tyranny of monopolies. We long to see the antagonism hetween capital and labor removed by common consent, and hy an enlightened statesmanshlp worthy of the nineteenth century. We are opposed to excessive salaries, high rates of interest, and exorbitant per cent. profits of producers. We desire only self-protection and the protection of evory true interest of our land by legitimate trsnssctions, legitimste trade, and legitimate profits.

Education.

We shall advance the cause of education among ourselves and for our children, hy all just means within our power. We especially advocate for our agricultural and industrial colleges that practical agriculture, domestic science, and all the arts which adorn the home, he taught in their coursos of study.

The Grange not Partisan.

5. We emphatically and sincerely assert the oft-repeated truth taught in our organic lsw, that the Grange, Nationsl, State, or Suhordinate, is not a political or party organization. No Grange, if true to its obligations, can diacuss political or religious questions, nor call political conventions, nor nominate candidates, nor even discuss their merits in its meetings.

Yet the principles we teach underlie all true politics, all true statesmsnship, and, if properly carried out, will tend to purify tbe whole political atmosphere of our country. For we seek the greatest good to the greatest numbor.

We must always besr in mind that no one, by becoming a Patron of Hushandry, gives up that inalienable right and duty which belongs to every American citizen, to take a proper interest in the politics of his country.

On the contrary, it is right for every member to do all in his power logitimately to influence for good any political party to which he belonga. It is his duty to do all he can in his own party to put down bribery, corruption, and trickery; to see that none hut competent, faithful, and honest men, who will nnflinchingly stand by our industrial interesta, are nominated for all positions of trust; and to have carried out tbe principle which should always charactorize overy Patron, that

The Office should seek the Man, and not the Man the Office.

We acknowledge the hroad principle that difference of opinion is no crime, and hold that "progress toward truth is made hy differences of opinion," while "the fault lies in bitterness of controversy."

We desire a proper equality, equity, and fairness; protection for the weak, restraint upon the strong; in short, jnstly distrihuted hurdens and justly distrihuted power. These are American idcas, the very essence of Americsn independence, and to advocate the contrary is unworthy of the sons and dsughters of an American republic.

We cherish the helief that sectionaliam is, snd of right should he, dead and huriod with the past. Our work is for the future. In our agricultural hrotherhood and its purposes we shall recognize no North, no South, no Esst, no West,

It is reserved hy every Patron as the rigbt of a freeman, to affiliate with any party that will hest carry out his principles.

Outside Co-operation.

6. Ours heing poculiarly a farmers' institution, we cannot admit all to our ranks.

Many are excluded hy the nature of our organization, not because they are professional men, or artisans, or lahorers, hut hecause they have not a sufficient direct interest in tilling the soil, or msy hsve some interest in conflict with our purposes. But we appesl to all good citizens for tbeir cordial co-operation to assist in our efforts towsrd reform, that we may eventually remove from our midst the last vestige of tyranny snd corruption.

We hail the general desire for fratornal harmony, equitshle compromises, and earnest co-operation, as sn omen of our future success.

Conclusion.

7. It shall be sn ahiding principle with us to relieve any of our oppressed and suffering hrotherhood hy any means at our commsnd.

Last, hut not least, we proclaln it among our purposes to inculcate a proper appreciation of the abilities and sphere of womsn, as ls indicated by admitting her to membership and position in our order.

Imploring the continuod assistsnce of our Divine Master to guide us in our work, we here pledge ourselves to faithful and harmonious lahor for all future time, to roturn hy our united efforts to the wisdom, justice, fraternity, and politicsl purity of our forefathers.

ANNUAL ELECTION.—On the last regular meeting in October, it will be the duty of subordinate Granges to elect officers for the ensuing year. This is a matter of no small importance. On the efficiency of the officers of subordinate Granges, depends to a great extent the prosperity of the Order. See to it, brothers and sisters, that yonr best material is selected. Let all selfishness and personal ambition be kept in abeyance and select only those of superior ability to fill your offices. Most of the Granges have had several months experience and have learned who among their number are efficient, zealous workers. Our experience thus far has shown us that there is work to do in connection with Grange duties, and workers should be chosen to do it. For your Master, especially, be careful to select your very best man, or woman if she be the more competent, not only to conduct the business of your Grange, but to represent you at the State Grange. Remember this, that your best material may be formed among those who think themselves the least competent. True worth and ability being often joined with modesty. Let us make the coming year one of work and progress. While we have much in the past to congratulate onrselves upon, we have scarcely entered the threshold of the great work room before us.

GRANGERS IN THE UNITED STATES.—The publication of 25,000 additional volumes of Agricultural Reports for 1872 is now in progress and will be completed in about two weeks. From authentic sources it is ascertained that the number of subordinate Granges of the Order of Patrons of Husbandry, on the 1st inst., was 20,800. The increase of new Granges during the month of September was 409, which is several hundred less than for the corresponding period last year. In fact, for several months past, the number of subordinate Granges established has fallen off considerably since last year, owing to the fact that Grangers have been established in nearly every county in the United States. The nnmber of Grangers in the United States is estimated at 1,500,000. The States having more than 1,000 subordinate Granges are as follows: Iowa, 1,513; Kentucky, 1,425; Kansas, 1,350; Ohio, 1,031; Tennessee, 1,003. The next session of the National Grange will be held at Charleston, South Carolina, on the first Wednesday in February.

INTERESTING ADDRESS.—Bro. I. G. Gardner has favored us with the manuscript of the address of Wm. R. Davis, delivered before the Grange at Santa Rosa, Sept. 26th. As Bro. Gardner says, "it is a gem," and we regret that our space will not admit the publication of the entire address this week; and to make extracts would spoil it. Will be pleased to publish it as soon as we can spare the necessary space.

Contra Costa Fair.

We herewith give the list of premiums awarded at the fourteenth annual exhibition of the Contra Costa County Agricultural Society:

Dr. John Strentzel: For bost orchard, 1st premium, $10; do. heat vineyard, $10; do. best collection rose hushes, $1; do. best collection of blackberry bushes, $1.

Mrs. S. A. Sellers: For best exhihition illustrating the domestic silk culture, 1st premium, $25.

William Morgan: For exhihit of corn, premium recommended; do. do. corn meal, 1st premium, $2; do. do. potatoes, 1st premium. $3.

Walter Renwick: For exhihit of squashes, premium recommended.

W. Z. Stone: For best exhibit of hoots, three varieties, $2.

R. O. Baldwin: For best Mangel Wurtzel beets, 1st premium, $2; for squaabes, 1st premium, $2.

M. W. Hall: For bost sample of wheat for more than 20 acres, average of 46 hushels, 61 lbs. per bush., 1st premium, $5.

Fernando Pacheco: Best Chile peppers, premium recommended.

Abbott Sellers: For best exhibit of harley from more than 20 acres, yiciding 70 bushels per acro, 1st premium, $5.

Wm. Morgan: bost siugle variety of peachos, 1st premium, $2.50.

Walter Renwick: For collection of apples, 15 varieties, 1st premium, $2.50.

John Sherman: Best collection of apples, 1st premium, $5; bost collection of pears, 1st premium, $2.50.

R. O. Baldwin: For soedling plums, the "San Ramon," special premium recommended.

M. W. Hall: For host single variety of apples. 1st premium, $2.50.

M. Gregory: Best quinces, 1st premium, $2.50.

Dr. John Strentzel: For best collection of grapos, 1st premium, $10; best foreign white grapes, 1st premium, $1; do. do. black, do $1; collection of California grapos, do. $1; do. figs, do. $1; do. almonds, do. $1; do. watermelons, $2.50. For oranges, lemons, olives, walnuts, quinces, etc., special premiums recommended.

Dr. John Strontzel: For hoat exhibit of native, red, snd white wines and vinegsr, 1st premium recommended.

Mrs. Alex. Boss: For best exhibit of fresh can or jar fruit, 1st premium, $10.

Miss Jennie Boss, 13 years old: For exhibit of can or jar fruit, special premium recommended.

Mrs. P. G. Loucks: For best exhibit of jellies, special premium recommended.

Miss Nelly Lyle: For exhibit of jelies, 2d premium; for best variety of pickles, 1st premium, $5.

T. Z. Witton: For hest strained honey, 1st premium, $2.50.

Mrs. I. J. Smith: For hest honoy in comb, 1st premium, $2.50.

Mrs. S. W. Johnson: For exhibit of preservos, premium recommended.

Mrs. S. A. Sellers: For best oxhihit of dried apples, pears, Fiher Zagos, and Malaga rsisins, premium commended.

Mrs. P. G. Loucks: Best loaf cake, two kinds, 1st premium; hest pics, two kinds, 1st premium.

Miss Emma Black: Bost domestic hread, 1st premium, $5.

Mrs. Alex. Boss: Loaf cake two kinds, 2d premium; for cookies, premium recommended.

Mrs. S. W. Johnson: For domostic bread, 2d premium, $2.50.

Miss Sarah Stoue: For feather wroath, 1st premium; for wax cross, 1st premium.

Mrs. W. G. Stone: For moss work, 1st premium; for paper frames, 1st premium.

Miss Nellie Lyle: Leather work frames, 1st premium, $5.

Miss Ida Hall, 13 years old: Hair work, 1st premium, $5.

Mrs. Octavia Rice: Sheli work screen, 1st premium, $5.

Miss Mary Smith, 16 years old: specimen of penmanship, 1st premium, $10.

Mrs. S. A. Sellers: For "peach leather," premium recommended. [Belongs to class of preserved or dried fruits.]

Miss Louisa Strentzel: Best floral design, 1st premium, $2.

Miss Annie Howard: Best collection of fancy and useful needlework by a Miss under 16, 1st premium, $10.

Miss HattioVan Patten: Best collection fancy and useful needlework by a Miss under 18, 1st premium, $10.

Miss Clara Stone: Best worsted work by a Miss under 16, 1st premium.

Miss Lizzie Johnson: Best collection crochet work by a Miss under 18, 1st premium.

Mrs. R. Sanford: Best fancy needlowork, 1st premium. $10.

Miss Nancy Clark: Tatting collar, 1st premium, $5.

Mrs. E. W. Hiller—Worsted tidy, 1st premium, $5.

Miss Octavia Rice: Transferred work, 1st premium. $5; braided work, 1st premium.

Mrs. H. M. Hollenbeck: Bed quilt, 1st premium, $5.

Mrs. R. Sanford: Child's skirt, premium recommended; netted collar, 1st premium.

Mrs. Alex. Boss: Boy's suit, 1st premium, $5; for boys' hat, special premium recommended.

Mrs. P. G. Loucks: First premium for childs' dress $5; premium recommended for blouse waist; and award of first premium for best exhibit of needlework and household products, $25.

Mrs. Walter Renwick: First premium for oxhihit of fresh butter, $10.

Mrs. I. J. Smith: Second premium for fresh butter, $5.

S. Soto: Recommended premium for four-months' old Buff Cochins and Brahmas.

Walter Fenwick: recommended premium for eight-months' Buff Cochin chickens and for geese.

S. S. Johnson: Bluestoning machiue, creditable mention.

James Hardy: First premium for two or four horse wagon, $10.

Ned Murray: First premium for thoroughbrod stallion, Overland, $10.

F. Galindo: Recommeuded premium for roadster stallion, Young Bell.

David Van Patten: First premium for roadster stallion, Prince, $5.

Alex. Boss: Second premium for roadster, Charley, $5.

Theodore Downing: Recommended premium for two-year-old roadster filly.

S. J. Tennant: Recommonded a premium for Kato and Nannie Patchen, one and three year old.

Julian Catuna: Recommended premium for two yearling colts.

Paul Ganway: First premium for carriage horse Rattler, $5.

J. E. Durham: First premium for mare Fleet, $7.

G. P. Loucks: First premium for 4-year-old stallion Sargent.

F. A. Walley: First premium for 5-year-old mare Molly, $7.

J. H. Troy: Recommeuded premium for yearliug colt Frank Patchen.

John Rodgers: Recommonded premium for 3-year-old gelding Alexander.

Wm. Mason: Second premium for drsught stallion John Mason, Jr, 6 years old. $5.

Arthur Pennington: First premium for 6-year-old draught mare Beck Brown, $7.

R. O. Baldwin: First premium for half Clydesdale draught stallion Ben Butler, 5 years old. $7.

John Murphy: First sweepstakes premium for 2-year-old gelding George, $7; second promium for 3-year-old mare Nellie, $5; first premium for yearling Buck, $7.

Walter Renwick: First sweepstakes premium for 6-year-old Young Bellfounder, $7.

R. H. Nason: Second premium for Lesther-foot, 2 years old, $5; also for yearling Alarm, $5.

A. Miller: First premium for 3-year-old Amanda.

S. J. Tennent: First premium for suckling colt Prince, $5.

Ned Murray—Recommended premium for family of 5 Overland colts.

M. W. Hall—Second premium for 4 and 6-year old horses Peter and Robert, $5.

R. O. Baldwin—First premium for 7-year old work horses Mike and Charlie, $7.

James Curry—Second premium for mare Dolly Varden, 4 yrs old, $5.

Roland Lewis—First promium for brood mares Kitty and Maggie, $7.

Mm. Mason, second premium for 5-year old stallion Midnight, $7.

I. J. Smith, first premium for pair of mules Bill and Fanny, $7.

Munson Gregory, first premium for jack Joe Biglor, $10; also, recommended premiums for jennica Rose and Dinah, and yearling mule Judy.

John Murphy, first promium for 2-year old bull Ben Butler, $5.

Fernando Pachcco, first promium for 4-year old Cotswold buck, $10; also, promium for Cotswold buck, 2 years old, $5.

W. Z. Stone, second premium for yearling Southdown buck, $5; also, second premium for yearling Southdown ewe, $5, and recommended promium for wee lamb.

Geo. P. Loucks, first premium for 2-year old Southdown buck, $10; first premium for 2-year old Southdown ewe, $10; also, first premium for gradod Southdown buck nd ewe.

Samuel Moore, first promium for China and Poland sow and pigs, $4; also, first premium for 2-year old Poland, China boar, $4.

CHART OF THE INDUSTRIAL EXHIBITION.—The proprietors of the San Francisco *Journal of Commerce* have published, as a supplement to their paper, a chart giving the interior of the Mechanic's Institute during the Ninth Industrial exhibition. The plan was well conceived and is executed in a tasteful and workmanlike manner. A perusal of this chart will give to those who were debarred from the pleasure of visiting this great fair a just conception of its interior arrangement; while the more fortunate visitors will recognize at a glance its truthfulness.



A Literary Foundling.

[The following poetical fragment was picked up on Folsom street near the Mission, by a lady friend of ours—all the ladies are our friends—and sent it to us with a request that we give our opinion concerning its merits. Our opinion is that less meritorious verses are lying on the tables and shelves of the parlors and libraries of San Francisco, enclosed in costly bindings, while this waif was being blown along the sidewalks of Folsom street. Will the writer please send us the balance? —EDS. PRESS.]

Pescadero.

Like a bird's nest in an oak tree,
Or a pearl within a shell,
Lies the village Pescadero,
Near where restless sea waves swell.

Round her rise the rugged hill tops,
And beside her runs a stream,
Where the silver brook-trout graceful
Glides along like loves young dream.

Every object has its shadow,
Pleasure's haunted oft by pain,
And upon the hillside yonder,
In the sunlight and the rain,
Lie a little group of earth-mounds;
Telling plain, as mute things can,
That our dearest joys are fleeting!
Even life is but a span!

* * * * * *

From the Kitchen, Compulsory Education, Etc.

[Written for the PRESS by MRS. C. I. H. NICHOLS.]

Eleven o'clock A. M., with the thermometer at 92 degrees in the shade, I bethink me of the poet who arranged his writing materials under a wide spreading tree and having written—"The fishes beginning to sweat"—strolled away into the woods to find the rest of his ballads.

Yonder, among the shadows of the oaks, the breeze creeps up from the cañon to pet its favorites; telling no tales, inviting no confidences, but soothing into dreamy content weary souls escaped from the grasshopper burdens and petty worries of daily life. More restful to such than the oppressive silence of night, is the noonday quiet in which the spirit may float upon sound without shipping its billows, and lulled by the monotonous hum of insect life, commune with the past and question the future.

And why may not *I* stroll into the fields to hunt a paragraph? Or dreaming in the shadow of a century's growth, apostrophize the chances and changes of the centuries? Or challenge the cynics, who, pointing to the grand old chroniclers of time, would check fresh growths? As if growth, progress, could be arrested and healthful life remain! As if, with the sinned against and suffering, lifting, pleading hands, we could ground our arms and cry, "All's well! The past suffices for the present, the present for the inture." (Ay, ay, I have it!)

"It Sounds Dreadful!"

Exclaimed the snobbish wife of a leading republican in the city of New York, during the political campaign of '56, to a lady who proposed to introduce her to an eminent Virginian, adding, "she is a black republican." "A black republican!" exclaimed this wife of a member of the [black] republican committee of the city "why, what is *that?* It *sounds dreadful!*" And so with

"Compulsory Education."

To ears vulgar and ears affectedly democratic, it "sounds dreadful." But to practical common sense, it sounds hopeful; to the thoughtful, earnest worker for human progress, it has the ring of a glorious future.

Surely the State, which assumes the right to imprison and hang the adult criminal, is under a corresponding obligation to see that its children are educated—I should say *trained*—for a trade, or industrial skill in some useful and remunerative pursuit, should be included in the education of every child. The right to protect itself against vagrancy and crime, implies a corresponding obligation on the part of society, to prevent vagrancy and crime by such provisions as will ensure the formation of honest and industrious habits in its youthful members. To this end, public schools, libraries, workshops and lyceums, should enlist the pride and care of every community; and girls, as well as boys, should participate in their benefits. A little girl instructed in the use of appropriate tools, could manufacture work-boxes, bookshelves, a cabinet for curiosities, and later in life, construct models of the inventions of her brain perhaps, or build a closet and rehinge a door, which "men-folks" can't find time for.

Schools and workshops, and libraries are cheaper than even self-supporting prisons, which represent the costs of arrests and convictions. To support teachers, is less expensive than the salarying and feeing of sheriffs and prosecuting attorneys; and their duties are more congenial to a pure, social atmosphere, than courts, whose vocation involves the dissemination of scandalous and polluting details of crime, damaging to good morals and disgusting to pure tastes.

The right of the parent to the child's services, is limited by the paramount right of the child to that physical and mental development, which is essential to life in its best sense, a development involving the knowledge that is power, and the discipline and skill to use it for good. If for any reason the parent fails in this training for the child, the obligation is morally transferred to the State; and it is to the interest of the State, financially as well as socially, to accept the responsibility and discharge the obligation. As the case stands it is compulsory education vs. compulsory fines, imprisonment, death, or compulsory education in alliance with individual enjoyment, general prosperity and good neighborhood.

"The Resources of California"

Are the burden of the press, the song of the poet, and the oft threshed sheaf of the ubiquitous "correspondent." But what are all the mineral resources of California compared with the unquarried wealth hidden in the little black, brown and tow heads of her children? What wealth of life and health and capital, has been expended in utilizing the mineral deposits of the State. And but for the appliances of art and science and inventive genius, how utterly wasted would have been the herculean labors, the terrible sufferings of the determined men and women who pioneered the enterprise, that has made California—in more senses than one—the Golden State of the Union!

Inventive genius, burrowing in the restless brain to make or mar the man, is of more worth to any community than its natural resources—so called—*en masse*, if turned to account in the development and conversion of those resources to the common benefit. In view of this fact, the State cannot afford to neglect the education of its youth. In some one of those mischievous little heads—only teaching can discover which—is an embryo Fulton, Stephenson, Field, or a greater, possibly, than either. On the girls form may be sitting a Maria Somerville, destined to bring heaven to earth and light it with yet undiscovered glories. The widow of General Greene, of revolutionary fame, invented the cotton-gin. Eli Whitney, who boarded in her family, constructed the model, which her education had not included the mechanical skill to do, and patented the invention, dividing with her the profits of the same. The cotton-gin, as a source of incalculable wealth, and a beneficent labor-saving machine, ranks among the happiest achievements of inventive genius. But suppose that in those mischievous little heads there is only the capability to use the invention or apply the principle which another has discovered. More heads and hands are needed in the manufacture and use, than in the invention of machinery. And to avail itself of all the possible benefits of any invention, the world must have plenty of skilled operators, as well as manufacturers and artizans. The extension of the electric telegraph was made practicable by the instruction of young men and women as operators.

Workers of every class should have a good practical education. The mechanic among his tools; the miner in his shaft; the farmer among his seeds, and soils and stock, being the first to feel the needs of his vocation would naturally be the first to apply his faculties to the construction and use of mechanical and chemical aids. Instead of patient submission to remediable hindrances, or unavailing discontent, these workers would, with the conscious power which a practical education instils, achieve ways and means for the better prosecution of their business details.

Said the wife of Hon. C. C. Clay (U. S. Senator for Alabama in 1860,) in reply to my expressed surprise at her revelations of the rude utensils of Southern kitchens; "Why Mrs. Nichols, our slaves could do nothing with your cook-stoves and other Yankee labor-saving contrivances. I once bought a tin bake-oven of a Yankee peddler, but when I attempted to introduce its use, my cook, with evident disgust; exclaimed: "What's dat? I dunno nossin 'bout it. I can't do nossin wid de ting! I got no use for de Yankee fixup." And despite all my efforts to the contrary, she persisted in using her heavy iron bake-pan. And added this intelligent woman, whose Northern observation and Southern experience had taught the fact. "To secure the benefits of labor-saving machinery our laborers must be educated."

Little did she then dream, that we were on the eve of events which should carry to "old cook" and her fellow slaves as to the white laborers of the South, the education to appreciate the "labor-saving contrivances" which simultaneously found a market on every plantation and in every kitchen of the South, illustrating another fact, viz—that educated labor extends the area and increases the demand for machinery, giving employment to inventors, mechanics and capital.

SENSITIVE bather to bathing attendant. "Listen! If I am drowned, or nearly so, I want it to be distinctly understood that I am not to be stood on my head, or rolled on a barrel, or any such ridiculous exhibition made of me. If I can't be revived without these performances, I prefer to be let alone."

THIS brief chronicle was written by the editor of the Philadelphia *Ledger:* "Lowell—Saturday. Two little boys and a pistol. Now, only one little boy and a pistol."

"WELL, John, I'm going East; what shall I tell your folks?" "Oh, nothing; only if they say anything about whiskers, just tell them I've got some!"

Scottish Anecdotes.

IN a very entertaining work, entitled "Reminiscences of Scottish Life and Character," from the pen of Dean Ramsay, we find the following humorous illustrations:

"Some years ago, when it was not an uncommon thing, even in Scotland, for challenges to be given and accepted for insults, or supposed insults, an English gentleman was entertaining a party at Inverness with an account of the wonders he had seen and the deeds he had performed in India, from whence he had lately arrived. He enlarged particularly upon the size of the tigers he had met with at different times in his travels, and by way of corroborating his statements, assured the company that he had shot one himself considerably above forty feet long. A Scottish gentleman present, who thought these narratives rather exceeded a traveler's allowed privileges, coolly said that no doubt those were very remarkable tigers; but that he could assure the gentleman there were in that northern part of the country some wonderful animals, and as an example he cited the existence of a skate-fish captured off Thurso, exceeding half an acre in extent. The Englishman saw this was intended as a sarcasm against his own story; so he left the room in indignation, and sent his friend to demand satisfaction or an apology from the gentleman who had, he thought, insulted him. The narrator of the skate story coolly replied, "Weel, sir, gin yer freend will tak a few feet aff the length o' his tiger, we'll see what can be done about the breadth o' the skate."

The parishioners of a clergyman in Scotland, in expressing to him their aversion to the use of manuscript sermons, urged: "What gars ye tak up your bit papers to the pu'pit?" He replied that it was best, for really he could not remember his sermon, and must have his paper. "Weel, weel, miuister, then dinna expect that *we* can remember them."

The old generation of Galloway lairds were a primitive and hospitable race, but their *conviviality* sometimes led to awkward occurrences. In former days, when roads were bad, and wheeled vehicles almost unknown, an old laird was returning from a supper party, with his lady mounted behind him on horseback. On crossing the river Urr, at a ford at a point where it joins the sea, the old lady dropped off, but was not missed till her husband reached his door, when, of course there was an immediate search made. The party who were dispatched in quest of her arrived just in time to find her remonstrating with the advancing tide, which trickled into her mouth, in these words, "No anither drap; neither het nor cauld."

It seems that a certain country girl in Scotland thought it quite possible that there might be an excess in scrupulous regard to appearances. On her marriage-day, the youth to whom she was about to be united said to her, in a triumphant tone, "Weel, Jenny, haven't I been unco ceevil," alluding to the fact that during their whole courtship he had never even given her a kiss. Her quiet reply was, "Ou, ay, man; senselessly ceevil."

A Gentleman.

He is above a mean thing. He stoops to no mean fraud. He invades no secret in the keeping of another. He betrays no secrets confided to his keeping. He never struts in borrowed plumage. He never takes selfish advantages of mistakes. He uses no ignoble weapon in controversy. He never stabs in the dark. He is ashamed of inuendoes. He is not one thing to a man's face and another behind his back. If by accident he comes in possession of his neighbor's counsel, he passes upon them an act of instant oblivion. He bears sealed packages without tampering with the wax. Papers not meant for his eye, whether they flutter at the window or lie before him in unguarded exposure, are sacred to him. He invades no privacy of others, however the sentry sleeps. Bolts and bars, locks and keys, hedges and pickets, bonds and securities, notices to trespassers are none of them for him. He may be trusted alone out of sight, near the thinnest partition—anywhere. He buys no office, he sells none, he intrigues for none. He would rather fail of rights than win them through dishonor. He will eat honest bread. He tramples on no sensitive feeling. He insults no man. If he have rebuke for another, he is straight-forward, openly, manly; he cannot descend to scurility. In short, whatever he judges honorable, he practices toward every man.

AT a meeting in London, to receive a report from the missionaries sent to discover the tribes of Israel, Lord H—— was asked to take the chair. "I take," he replied, "a great interest in your researches, gentlemen. The fact is, I have borrowed money from all the Jews now known, and if you can find a new set I shall feel very much obliged."

A "BIG INDIAN" strayed away from his camp and got lost; inquiring the way back, was asked, "Indian lost?" "No," said he disdainfully, "Indian no lost; wigwam lost;" striking his breast, he exclaimed, "Indian here!"

MERIT is never so conspicuous as when coupled with an obscure origin, just as the moon never appears so lustrous as when it immerges from a cloud.

HOW long can a goose stand on one foot? Try it—that's the way the goose found out.

A Touching Story.

The following affecting narrative purports to have been given by a father to his son as a warning derived from his own bitter experience of the sin of grieving and resisting a mother's love and counsel:

What agony was visible on her face when she saw that all she said and suffered failed to move me. She rose to go home and I followed at a distance. She spoke no more to me until she reached her own door.

"It's school time now, she said. "Go, my son and once more let me beseech you to think upon what I have said."

"I shan't go to school," I said.

She looked astonished at my boldness, but replied firmly:

"Certainly you will go, Alfred. I command you."

"I will not!" said I, in a tone of defiance.

"One of these two things you must do, Alfred, either go to school this morning or I will lock you in your room and keep you there till you are ready to promise implicit obedience to my wishes in future."

"I dare you to do it," said I; "you can't get me up stairs."

"Alfred, choose now, " said my mother, who laid her hand upon my arm.

She trembled violently, and was deathly pale.

"If you touch me I will kick you," I said in a terrible rage. God knows I knew not what I said.

"Will you go, Alfred?"

"No!" I replied, but quailed beneath her eyes.

"Then follow me," she said, as she grasped my arm.

I raised my foot—oh, my son, hear me! I raised my foot and kicked her—my sainted mother! How my head reels as the torrent of memory rushes over me. I kicked my mother—a feeble woman—my mother! She staggered back a few steps and leaned against the wall. She did not look at me. I saw her heart beat against her breast.

"Oh! Heaveuly Father," she said, "forgive him—he knows not what he does."

The gardener just then passed the door, and seeing my mother pale, and almost unable to support herself, he stopped. She beckoned to him,

"Take this boy up stairs, and lock him up in his room," she said, and turned from me.

Looking back as she was entering her room, she gave me such a look of agony, mingled with intense love! it was the last unutterable pang from a heart that was broken.

I found myself a prisoner in my own room. I thought, for a moment, I would fling myself from the open window and dash my brains out, but I was afraid to do it. I was not penitent. At times my heart was subdued; but my stubborn pride rose in an instant and bade me not yield. I flung myself on the bed and fell asleep. Just at twilight I heard a footstep approach the door. It was my sister.

"What may I tell mother from you?" she asked.

"Nothing?" I replied.

"Oh Alfred, for my sake, and for all our sakes, say that you are sorry. She longs to for give you."

I would not answer. I heard her footsteps slowly retreating, and again I threw myself upon the bed, to pass another fearful night.

Another footstep, slower and feebler than my sister's disturbed me. It was my mother's

"Alfred, my son, shall I come? she asked.

I cannot tell you what influence, operating at that moment made me speak adverse to my feelings. The gentle voice of my mother thrilled through me, melting the ice of my obdurate heart and I longed to throw myself upon her neck, but I did not. But my words gave the lie to my heart when I said I was not sorry. I heard her withdraw. I heard her groan; I longed to call her back; but I did not.

I was awakened from my uneasy slumbers by hearing my name called loudly, and my sister stood at my bedstead.

"Get up and come with me mother is dying."

I thought I was yet dreaming, but I got up mechanically and followed my sister.

On the bed, pale and cold as marble, lay mother.

She had not undressed. She had thrown herself on the bed to rest; rising to go again to me, she was seized with a palpitation of the heart and borne senseless to her room.

I cannot tell with what agony I looked upon her; my remorse was more bitter from the thought that she would never know it. I believed myself to be her murderer; I fell on the bed beside her. I could not weep. My heart burned in my bosom; my brain was on fire. My sister threw her arms around me and then commenced to weep in silence. Suddenly we saw a slight motion of mother's hand; her eyes unclosed. She had recovered consciousness, but not speech. She looked at me and moved her lips. I could not understand her words.

"Mother, Mother!" I shrieked, "say only that you forgave me!"

She could not say it with her lips, but her hand pressed mine.

She smiled upon me, and lifted her thin white hand she clasped my own within them, and cast her eyes upward. She moved her lips in prayer, and thus she died. I remained kneeling beside that dear form, till my gentle sister removed me. The joys of a youth had left me forever.

Boys who spurn a mother's control, who are ashamed to own that they are wrong, who think it manly to resist her authority, or yield to her influence, beware! Lay not up for yourselves bitter memories for future years.

Honest Compliments.

We have heard of a lady of rare beauty who said, upon a certain occasion, that the only real, disinterested compliment she ever received was from a coal-heaver, who asked permission to light his pipe in the gleaming of her eyes.

Another compliment, true and genuine, was paid by a sailor who was sent by his captain to carry a letter to the lady of his love. The sailor, having delivered the missive, stood gazing in silent admiration upon the face of the lady, for she was very beautiful.

"Well, my good man," said, "for what do you wait? There is no answer to be returned."

"Lady," the sailor returned with humble deference, "I would like to know your name."

"Did you not see it on the letter?"

"Pardon, lady, I never learned to read. Mine has been a hard, rough life."

"And for what reason my good man, would you know my name?"

"Because, answered the old tar, looking honestly up, "in a storm at sea, with danger or death afore me, I would like the name of the brightest thing I'd ever seen in my life, There'd be sunshine in it even in the thick darkness."

The Flower of English Youth.—A writer says: "The finest British type in Hyde Park is, as Emerson noted in his English traits, that of certain young men. The rock upon which the modern English most frequently run is, among women, a *setness*, rigidity, conventionality; among men, a self-assertion tending towards dogmatism and brutality. But the flower of the race escapes both. Up to the group described above rides a young man of pronounced Saxon characteristics. His hight, his broad chest and large proportions, make him a very substantial figure; but he rides as if he and his horse were one, with free and graceful movements. His head is like that of a Greek athlete, but larger; and short, brown curls cling close to his open forehead. He has clear gray eyes, what Wiuthrop calls a 'clipper nose,' and the complexion of a sun-burned blonde. The regularity of his features and the great seriousness of expression give his face too grave a character in repose; but this is dispelled by the good humor of his smile, and the unaffected gentleness and frankness of his address. Is it the prejudice of race which gives him so great an advantage in your mind when you compare him with the brilliant exquisities of the Bois, the gentle, gay yonng Florentin of the Cascine, or the handsome soldiers of the Pincion Hill? Not wholly. You have an inward conviction that he can ply an oar and handle a gun as well as he rides his horse, and that it would not prevent him from wielding a pen or treading a measure in a lady's drawing-room. Most of all, you have a feeling that those steady eyes of his would not blench before any danger, however imminent, but might easily cloud with the dew of quick and strong emotion."

Finger Rings.—Among the Romans plain rings were worn origiually on either hand at option, but when gems and precious stones were added they were worn by preference on the left, and it was considered exceedingly effeminate to wear them on the right hand. At first only one ring was worn, then one on each finger, and lastly one on each joint. Charinus, according to Martial, wore sixty rings daily, or six on each finger, and did not take them off at night, but slept in them. This was an extreme case, but rings were often worn on every finger and also on the thumbs. In Germany, rings were frequently worn upon the joints, as was the Roman custom. The wife of Sir Humphrey Stafford (1450) is sculptured in Bromsgrove Church, Worcester, with a ring on every finger but the last one of the right hand. Massive thumb rings were supposed to tell of wealth and importance, and Falstaff declared that when young he could have crept into an alderman's thumb ring.

The Gift of Tact.—What a wonderful oil upon the machinery of human affairs tact is. To know just what to say, and when to say it; to know when to be silent, and when deferentially to listen, is a great gift. No one can fully appreciate this quality who has not had the misfortune of living with a blundering person, who never moves nor speaks without unintentionally wounding or offending somebody. Contiguity with such an one is fearful to the nerves, and temper too. We doubt whether tact, in any remarkable degree, can be acquired. It is born with some, and is as natural to them as the color of their eyes or hair. We have seen little children who were perfect in it, without the slightest idea, of course, of the diplomacy they were enacting.

Japanese "Baby Wagons."—An American in Japan has had a new sensation. He has gone back to the days of his youth. The Japanese porters have put him in a baby carriage and trotted him around the streets. A two-wheel baby wagon drawn by a coolie he found to be the usual mode of conveyance. In Yeddo there are about one hundred thonsand of these vehicles in public use. To ride in them is like using push carts, but the pace made is very different. Ten miles an hour is the customary travel, and a coolie will make forty miles a day with one passenger in the hottest sun.

A fashionable clergyman speaking of homicide, said it might or might not be a crime, but it was certainly a breach of etiquette. Sound.

Adversity to a man is like training to a pugilist. It reduces him to his fighting weight.

Young Folks' Column.

Mollie's Troubles.

I am little Mollie,
Eight years old to-day,
Never have done noffin'
Only just to play;
Gran'ma says that idleness
Worstest kind o' sin;
Got to learn to work, I s'pose
Might as well begin.

So I hemmed a towel—
Real well, mamma said—
Had a dre'ful time, though,
Losin' out my thread;
For somefin' ailed the needle,
Don't knew zac'ly what,
Till mamma took and tied it,
In a little knot.

Don't like hemmin' towels,
'Taint a bit of fun;
I was dre'ful thankful
When the thing was done.
'Cause then I sewed for dolly,
Made a little dress,
An' made it just as nice, too,
As you could, I guess.

Made it wiz two ruffles,
Overskirt and basque!
Now, what more, I wonder,
Could a dolly ask;
'Twas much more interestin'
Than hemmin' towels, too,
I wonder why the good things
Are so hard to do?

Then I pared some apples,
Helpin' Kate, the cook,
Then I read my lesson
In the old spellin' book.
Now, spellin' books are awful
Ev'rybody knows;
Just made to try our patience—
Good for that I s'pose.

When night comes, I often
Hear my mamma say:
"Didn't 'pect, this mornin',
Such a busy day.
Seems to me I never had
Quite so much to do."
Tell you I can sympafize—
Feel just that way, too.

Letters to Boys—No. 6.

Dear California Boys:—Now we will start if you are all ready, this bright, beautiful morning, for Old Orchard beach. This beach is in Saco, Maine, and years ago there was an apple orchard there which gave it its name, but now there is but one stump of one tree left. I had this excursion in mind yesterday, and as a result here are sandwiches, snaps, crullers, frosted fruit-cake, pies, etc., all nicely packed with napkins, knives and forks. After some hurrying, we find ourselves on board a long excursion train, and the iron horse with groans and snorts, carries us swiftly past villages and and forests, green fields and farm houses, until we catch a glimpse of the Atlantic, and taking up our line of march from the cars, we are soon in the grove. It is not a fine one, but valuable because only a few steps from the beach. After lunch No. 1, we sing, but have to shut our mouths in the middle of a song, while a photographer who came with us, takes us in two stereoscopic views. Then we start for Fern park, half a mile away, beyond the big hotels. This park was fitted up some years since by a gentleman who is now dead. There is a beautiful arch over the entrance, and within there are avenues shaded by trees, and a number of arbors, each having a name and verses of poetry painted upon boards, placed near them. Very fine poetry is placed upon the trees in great abundance. See this arbor upon our left; and *do* look behind it! See that handsome deer with wide, open eyes and head thrown back, just as though he we were running at full speed, and had stopped suddenly at sight of this work of man's device. Poor little deer! just so he has stood and gazed for years. Notice that bold eagle perched upon a tree almost within our reach, and this baby one on the next tree. Though they cannot use their wings, I suppose they are rising in the world as the trees grow under them. Beneath them is a tall bird, stretching its neck into a short tree. Here is a charming view from the "Artist's Retreat." There is the old Atlantic, the beach, twelve or fifteen hotels and the green forest beneath our feet. But after taking a look at Old Orchard camp-ground, we hasten to the beach where hundreds are bathing. Oh! how the boys and girls enjoy taking off shoes and stockings and wading into the water for shells and moss. See the white sails dotting the water, the glittering beach, the grove; take the picture all in, and do not forget it until you visit Old Orchard again.

Jennie E. Jameson.

Moral Courage in Daily Life.—These maxims, under the head of "Moral Courage" are posted on the office door of a New York merchant, who gives them to *The Evening Mail* for publication: Have the courage to discharge a debt while you have the money in your pocket. Have the courage to do without that which you do not want, however much your eyes may covet it. Have the courage to speak to a friend in a seedy coat, though you are in company with a rich one, and richly attired.

A school-girl in Davenport was overheard trying to convince a schoolfellow that she liked him better than she did some other urchin, of whom he seemed jealous. "Of course I like you better than I do Bill," she said; "for don't I miss words in my spelling lesson on purpose, so as to be down to the foot of the class where you are?"

Good Health.

Unaired Chambers.

I pass some houses in every town whose windows might as well be sealed in with the walls for any purpose they have had but to let in the light. They are never opened, summer or winter. In winter it is too cold; in the summer the flies stray in, or, if they are netted, the dust sifts through the nets. Now I can tell a person who inhabits such chambers when I pass him in the street—there is such a smell about his clothing. I always wish for a sniff of cologne or hartshorn or burnt feathers, or something of the sort, to "take the taste out." A house that is never aired has every nook and corner filled with the stale odors of cooked meats, boiled vegetables, especially cabbage and onions, which, as the weeks go by, literally reek in their hiding places. Who has not wished sometimes to hang a new servant's clothing out of doors some frosty night until it should be thoroughly aired? But I have seen the fine ladies come sweeping into church, with their velvets and silks, when said velvets and silks gave unmistakable evidence of having been housed in just such shut-up chambers. Oh, what a tale that odor of cabbage and pork tells about the lady's style of housekeeping! The very garments of the children tell the same story of uncleanliness. It is bad to have unwashed clothes, but there may be an excuse for it. But what excuse can there be for unaired ones, when air is so cheap and free? There is death in such unaired chambers. Better a swarm of flies or a cloud of dust, better frost and snow in a room, than these intolerable smells.

Dear girls, the first thing in the morning, when you are ready to go down stairs, throw open your windows, take apart the clothing of your beds, and let the air blow through it as hard as it will. There is health and wealth in such a policy. It helps to keep away the doctors with their long bills. It helps to make your eyes sparkle and your cheeks glow, and to make others love your presence. Girls who live in these close, shut-up rooms, can only be tolerated at the best in any circle.—*Country Gentleman.*

Wear and Repair of the Brain.—The notion that those who work only with their brains need less food than those who labor with their hands has been the cause of untold mischief. Students and literary men have often been the victims of a slow starvation, from their ignorance of the fact that mental labor causes greater waste of tissue than muscular. According to a careful estimate, three hours' hard study wears out the body more than a whole day of work on the anvil or on farm. "Without phosphorns, no thought," is a German saying; and the consumption of that essential ingredient of the brain increases in proportion to the amount of labor which the organ is required to perform. This wear and tear of the brain are easily measured by careful examination of the salts in the liquid excretions. The importance of the brain as a working organ is shown by the amount of blood it receives, which is proportionally greater than that of any other part of the body. One-fifth of the blood goes to the brain, though its average weight is only one-fortieth of the weight of the body. This fact alone would be sufficient to prove that brain-workers need more food and better than mechanics and farm laborers.

Overworking the Brain.—Softening of the brain is becoming a more common disease than formerly; as it is utterly incurable, attention should be given to its causes. The softening is caused by an inflammatory condition or a gradual degeneration of the substance of the brain, arising from intense mental excitement, as a result of study, of the use of spirituous liquors, or allowing the mind to dwell on one subject unpleasantly, especially when there is no real cause, or conjectured injuries, or injustices and the like, moping over them, cherishing thoughts of them. This lamentable malady comes on at one time with a sudden head or ear ache, at another with difficulty of speech, or numbness, or convulsions, or paralysis, or actual insensibility; at other times there is simply a decline of the power of the senses, sight, hearing, speech, and the mental powers generally. The same disease is caused by the want of something to do, when there is no compulsion to mental effort or muscular exertion. To ameliorate a malady arising from causes so diametrically opposite, antipodal means should be employed—less work to the overworked, more work for those who have nothing to do.—*Hall's Family Doctor.*

Sunshine and Sleep.—Sleepless people—and there are many in America—should court the sun. The very worst soporific is laudanum, and the very best, sunshine. Therefore, it is very plain that poor sleepers should pass as many hours as possible in sunshine, and as few as possible in the shade. Many women are martyrs, and yet they do not know it. They shut the sunshine out of their houses and their hearts, they wear vails, they carry parasols, they do all possible to keep off the subtlest and yet most potent influence which is intended to give them strength and beauty and cheerfulness. Is it not time to change all this, and so get color and roses in your pale cheeks, strength in your weak backs, and courage in your timid souls? The women of America are pale and delicate; they may be blooming and strong, and the sunlight will be a potent aid in this transformation.

Useful Information.

How the Eye is Swept and Washed.—For us to be able to see objects clearly and distinctly, it is necessary that they should be kept clean. For this purpose it is furnished with a little gland from which flows a watery fluid (tears) which is spread over the eye by the lid, and is afterwards swept off by it, and runs through a hole in the bone to the under surface of the nose, where the warm air, passing over it while breathing, evaporates it. It is remarkable that no such gland can be found in the eyes of the fish, as the element in which they live answers the same purpose.

If the eye had not been furnished with a liquid to wash it, and a lid to sweep it off, things would appear as they do when you look through a dusty glass. Along the edges of the eyelids there are a great number of tubes and glands, from which flows an oily substance which spreads over the surface of the skin, and thus prevents the edges from being sore and irritated, and it also helps to keep tears within the lid. There are also six little muscles attached to the eye, which enables us to move it in every direction; and when we consider the different motions they are capable of giving to the eye, we cannot but admire the goodness of Him who formed them, and thus saved us the trouble of turning our heads every time we wish to view an object.

A Simple Mode of Analysing Soils.—M. Schlosing gives the following simple process for separating the clay in soils from other constituents, and consequently for determining the quantity of the former present. The earth is thrown in water and the calcareous matter eliminated by means of hydrochloric or other suitable acid. The carbonate of lime and humic acid found in nearly all vegetable earth, hinders the clay from remaining in suspension in the water and it is hence precipitated. By treating the liquor with ammonia, the humic acid is removed. The residue is composed of sandy matter and clay; but the former falls to the bottom, leaving the clay in suspension in the liquid, from which it may be separated by decantation. This method, though almost mechanical, it is said will prove of much value to agriculturists. M. Schlosing has found that earth, considered argillaceous, in some cases contained little over 2 or 3 per cent. of clay, while others, supposed to be composed almost entirely of that substance, contained but 30 per cent.

Hardening Steel Tools.—The following composition, suggested by the chemist Kulicke, has been employed with success at Saarbrucken for restoring burnt steel to its primitive condition; and as it affords a peculiarly hard metal, it is also used for tempering steel tools that are too soft, or may have become so by use, as chisels, saws-blades, etc. Burnt steel, heated to a cherry red, and forged somewhat on an anvil, is plunged in a well-mixed doughy mass (in a box near by) composed of tartaric acid, six ounces; cod oil, 30 ounces; charcoal power, two ounces; bone black, eight ounces; beef tallow, 10 ounces; yellow prussiate of potash, five ounces; and burnt hartshorn, three ounces, and is then completely treated. Small articles of cast-iron such as wheel-boxes, axle-bearings, etc., may be successfully case-hardened by being plunged red-hot into a mixture of 10 buckets of urine, five pounds of whiting and four pounds of salt.—*Scientific American.*

To Render a Cesspool Inodorous.—The contents of a cesspool may be rendered comparatively inodorous by frequent addition of plaster, or ground unburned gypsum, or diluted oil of vitriol, or solution of copperas. Probably the easiest way of using the contents for manure is to throw fine earth into the vault until a semi-liquid mass is formed, and to scoop this out and cover it with a quantity of dry soil gathered in readiness for it. The earth absorbs all the liquid and all the gaseous matter, and if kept covered from rain for a few days, it will be in excellent condition to spread over meadows or fallows to be prepared for fall crops.

An Alcoholic Varnish that will Adhere to Metal.—In order to make alcoholic varnish adhere more firmly to polished metallic surfaces, A. Morell adds one part of pure crystallized boracic acid, to 200 parts of the varnish. Thus prepared it adheres so firmly to the metal that it cannot be scratched off with the finger nail; it appears, in fact, like a glaze. If more boracic acid is added than above recommended, the varnish loses its intensity of color.

To Restore Paper.—It is often a source of annoyance, in using forms that have been printed on writing-paper, to find that the ink from the pen will not flow in certain places, owing to grease-marks from the printer's finger in laying on the sheet. If a piece of common white india-rubber be lightly rubbed over such places, the grease will be taken away, and the writing done as easily as on any other part of the sheet.

A correspondent asks how can molted glue be kept liquid when cold. Ans. Take best pale glue 2 lbs., soft water, 1 quart, dissolve in a warm bath; after cooling add (slowly) 7 ozs. nitric acid. When cold, bottle off.

To make an imitation of coral, color prepared chalk with sesquioxide of iron or rose pink, pass through a sieve, and make into a paste with white wax.

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SAN FRANCISCO:

Saturday, October 10, 1874.

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CORRECTION.—In our list of premiums awarded at the State Fair, published last week, we made an error in the list referring to premiums given in the sheep awards. Under the heading-"Sweepstakes" we should have said that Sevrance & Peet, of Niles station, Alameda county, received $75 for "Big Leg" and five of his lambs; and that Wm. Blacow, of Alameda county, received $35 for "Gamester" and five of his lambs. This error was corrected in the latter part of the edition printed, though the first part contained a different statement.

CORRECTION.—Among the notices of harvest fires which we published in the PRESS a few weeks since, was one which occurred in Potter valley, and which was reported to have caught from a "smoke pipe." In our notice it was stated to have been from the "smoke pipe" of a threshing machine, whereas the machines in use were of horse-power; and the fire, we have since ascertained, was believed to have originated from a tobacco pipe.

ON FILE. — "About the word Viniculture," F. G.; "Do Bees Eat Grapes," J. C. M.; "A Henpecked Husband's Soliloquy," E. E. A.; "Where There's a Will There's a Way," C. I. H. N.; "Sister Giles—the School Ma'ams Abroad," C. I. H. N; "Live and Hope," J. S. C.

OREGON STATE FAIR.—Our thanks are due to the officers of the Oregon State Agricultural Society for complimentary tickets to the fair of the society which commences on Monday of next week.

ON SHARES.—We would call the attention of such as have ranches to rent on shares to the advertisement of "W.," in another part of our paper.

THE HUASCO GRAPE.—Will some of our readers inform us where cuttings of the Peruvian Huasco grape can be obtained?

Why the "Rural Press" is Popular.

It is because it is fresh, vigorous and candid in its general tone, preserving individuality in itself and recognizing the same in each of its readers. Because, as an agricultural paper, it is up to the needs of the progressive period in which we are living; coming to the farmer as an experienced and faithful co-worker, and carefully looking after the interests of every department of farming; and while it avails itself of the experience and suggestions of Eastern and European agriculturists, it fully recognizes and appreciates the peculiar advantages and needs of the Pacific coast.

The RURAL PRESS is popular as a family paper because, while it adheres to propriety in its strictest sense, it is never dull, and in its lighter portions is spicy without being coarse. It concedes the possession of judgment and taste by its readers, and endeavors to furnish both the strong meats and the strawberries and cream for the weekly feast of sense and sentiment which it brings to its readers. It has not been led into the very common error of supposing that some things may be up to the standard of taste in the country, though they may fall below that of the city. In proof of this we assure our rural friends that our paper is a decided favorite in the cities and villages of this coast. Not only do our city readers peruse with satisfaction our "Home Circle" and "Young Folks" departments, but with the charm of freshness and candor which we have succeeded in throwing about all departments of agriculture, we have created an interest in the wide range of subjects which it embraces, and are thereby aiding in the development of mutual respect and sympathy between country and city life.

We again call upon our friends to assist us in extending our sphere of usefulness. Speak a good word for us, dear reader, to those who want a good agricultural and family paper. Show copies of the RURAL PRESS to your friends. If you are acquainted with the paper you can safely assure them that its success is certain, and its character permanently established; and by thus helping to increase the number of our subscribers you will increase our facilities for making the RURAL PRESS still more popular.

Our Fruit and its Disposal.

It is with extreme gratification that we find other prominent papers of California taking the position which the RURAL PRESS has espoused all along in regard to the fruit question. The San Francisco *Examiner*, of September 4th, contains a communication from P. J. M. on the subject of California fruits, which treats this important matter in a thorough manner, giving a history of its introduction and growth, a reliable estimate of its present condition, and lending a helping hand to clear away the rubbish that is still in the way of a satisfactory disposal of our surplus. Following are some extracts from the *Examiner* correspondence. Alluding to the earlier efforts of fruit-growing in California, the writer says:

The Results

Of these early and continued efforts are, that at present we have about one million and five hundred thousand apple-trees growing throughout the State, with a producing capacity of about fifty pounds to each tree. The number of peach trees will probably exceed one million, yielding fully one box per tree, or an average of thirty pounds; while the number of pear trees is but little short of five hundred thousand, with a capacity equal, at least, to that of other fruit trees. The number of plum trees is not less than three hundred thousand, but the average number of pounds will fall a little short of peach and pear. The number of cherry trees will reach nearly two hundred thousand, and for quality and size they are unequaled in any part of world. Our apricots are among the favorite fruits, commanding a good price either in their natural condition or placed on the market properly dried and packed; and it is only to be regretted that our entire number of these trees only amounts to about one hundred thousand.

The Quality of Our Figs

Is not surpassed by the product of any country in the world. But this fruit, notwithstanding its delicacy of flavor and the high order of perfection it has attained in our soil and climate, thus far has not reached the commercial value it merits, simply for want of being properly prepared for market.

The Cultivation of Quinces,

Also, has not received the attention this fruit deserves, as the small number of trees readily shows; there being probably not to exceed fifty thousand in the State. Nectarines and prunes are less cultivated than any other of the pitted fruits, as only sixty thousand are being grown.

The Olive Trees

As yet have only reached about fifteen thousand in number, and consequently occupy but a small share of attention at present.

In the county of Los Angeles, and through the southern portion of the State, the principal

Orange Groves

Are located. About seventy-five thousand trees are now bearing, producing, probably, this season between four and five millions of merchantable oranges. This locality also produces the principal part of the lemons grown in this State; the crop for this season being estimated at about one million in numbers. I presume it will readily be admitted that, with a few exceptions, up to this time, the production of fruits has simply been

A Matter of Experiment

Rather than a business for anticipated profitable results; and if we have accomplished so much in fifteen years as an experiment, viz: the successful production of five millions of first-class fruit trees, whose annual products amount to two hundred and fifty millions of pounds. What, let me ask, will be the extent of our producing capacity even one century hence? Let the wonderful past serve as an instructor for

The Coming Future.

The results already achieved force the most important question upon us, namely, as to the profitable disposition of these products. It is not enough that our soils produce in luxuriant abundance a large surplus. Let me say to the producers in all the earnestness that this momentous question demands, that it is your duty to place your products economically and safely upon

A Paying Market.

Do you ask how this can be done? In reply let me say that it is a fact, patent to every producer, throughout the State, that we must look abroad for a market for the surplus of these already immense products; and the only way you can reap the reward for your energies and capital invested is to.

Dry Your Fruits.

You say you cannot afford to hire the work to be done, it will not pay. This will pay; let your wives, your children go out into the fresh air, and nature's first promoter of health, bright sunlight, to such work, and we shall have a posterity prepared by mental and physical development, together with well formed habits of industry and economy, to carry forward, the opening up of a country deserving of such a people. Let us offer upon the altar of an honorable self-denial that which alone can make us nature's truthful representatives. Let us take the

Homeless and Half-Fed Children

From the streets of our cities and make men and women of them; a work for which the world shall bless us. Not until then can you add dimes to dimes and dollars to dollars, thus building up the fortune you seek. We must save what we have as well as produce. The next important question in connection with our various industries is that of

Transportation.

Those whose homes and interests are situated remote from a market, and thereby compelled to use the different railroad and steamboat lines for transporting their products to market, readily understand the importance of this question. And justice to these great interests and their representatives demand at the hands of the Grangers throughout the State, that these public highways should be owned and controlled by the men who, by direct taxation and patronage, have built and sustain them. They should no longer allow this combination of their own capital and interests to be arrayed against themselves. The Chief Executive officer of the Republic, our Judiciary, our Representatives in Congress, and our legislators should be chosen by and from the producers. These are the only mediums through which our free institutions and our republican form of government can be perpetuated."

How to Dry Figs.

A correspondent requests information in regard to drying figs. For the benefit of our friends who wish to be informed of some practicable method of preparing figs for market we give the following from the Florida *Agriculturist:*

"To dry figs in the sun or in kilns, dip the fruit in boiling lye, made from wood-ashes, strong enough to bear an egg. They should be placed in shallow trays or pans and put in the sun, covering carefully at night. If a kiln is used, care must be taken to maintain a steady, gentle heat. When dried they may be packed carefully in boxes, with a layer of powdered sugar between.

"Figs may be preserved by dipping them in boiling lye, placing them in cans or jars, and covering them with boiling syrup, filling them full, and sealing while hot. Care must be taken to prepare the glass jars before pouring in the hot syrup, by heating them gradually in an oven or boiling them; for excluding the air, common sealing-wax answers the purpose admirably.

"The fruit should be picked before it is over-ripe, placed in a coarse sieve, and dipped in boiling lye to remove the furze; let them drain a few minutes and place them in a kettle of hot syrup, to bring them to a boil; afterward remove carefully and place in glass jars, covering with hot syrup, seal tightly, and set away in a cool, dark room. They may be flavored with lemon, ginger, or anything to please the taste. All fruit preserved in syrup can be easily converted into crystallized fruit by simply draining off the syrup, covering the fruit with powdered sugar, and gradually drying in an oven, turning them frequently, sifting fresh sugar over them every time. They must be kept in a very dry place. They make a handsome and delicious desert dish."

"For the Editorial Table."

Mrs. S. S. Pence, of Pentz, Butte county, sends us a beautiful bouquet—which arrived in good order—and which, as stated in its accompanying note, is intended expressly "for the editorial table." This is the first present of flowers that has been sent to this sanctum within six months, at least; and here we have been, all this time, wearing out dozens of editorial pencils in "writing up" the ladies of California in the most chivalrous manner. We have declared that in beauty, in gaiety, and in good sense, they excel all other women; for all this we have received no reward except that which comes from a consciousness of having told the truth. Now to what, we would ask, are we to attribute this neglect? Is it because they suppose there are no good looking men in the office? If such be the case we can only request that they come and see for themselves, and have the unaccountable error dispelled at once. Or, are we the victims of some ring or conspiracy? Is it possible that there are any middle-women in the land who are working to our disadvantage? This thing has gone about far enough. If the next Legislature proves to be anything like an approximation to honesty, we shall probably lay this matter before it.

Our treatment from women having been as above described, our feelings may be imagined on the receipt of a tasteful floral gift, with the accompanying note;

EDITORS PRESS:—Please accept for editorial table a few varieties of coelosia and amaranthis, gordoni, and white and variegated balsams. The coelosias I send are of my small ones, only given as sample of variety. Can furnish seed if any desire. MRS. S. S. PENCE.

With regard to the closing sentence, we would say that one of the editors, who has a small flower garden, would be pleased to receive some of the seed alluded to, as he, with all others who have examined these flowers, was pleased with their beauty.

We have always adhered to the old maxim, which says: "Take care of the pence and the pounds will take care of themselves." Hereafter we shall have a still higher regard for the "Pence."

Close of the Great Industrial Exhibition.

At eleven o'clock on Saturday night last the fair of the Mechanics' Institute was brought to a close. A few moments before the closing scene President Hallidie appeared on the orchestral platform, and in his pithy, practical manner, made some remarks appropriate to the occasion. Presenting the financial aspect of the enterprise as follows: The building cost $77,625.57; the fitting up $26,456.68; and the running expenses amounted to $22,221.71; making the total disbursements $126,306.96. The receipts were as follows: Season tickets, $37,867; single admission, $41,533; privileges, 4,507.76; donations, etc., $75, making a total of $83,982.76. This leaves a deficiency of $44,321.20.

The attendance on this occasion was more numerous than at any time since the opening of the pavilion, over 17,000 people being present. During the day and evening of Saturday, 29,500 visitors entered the doors of this great industrial temple. At the close of Mr. Hallidie's brief address, the band played the Star Spangled Banner, according to programme, and from this glided into the genial strains of Auld Lang Syne, at the conclusion of which their instruments, for the last time, assured the crowd of visitors that "there is no place like home." The assembled throng took the hint—as they have at each closing of the pavilion—in the best possible humor and departed accordingly.

Mr. Hallidie stated in the course of his remarks that the next fair of the Institute would be conducted on a premium basis.

More from the Local Fairs.

The Contra Costa fair of last week exhibited a fine display and was liberally patronized. The exhibit of live stock was especially satisfactory; more particularly as it was almost exclusively owned in the district. The community in general, as well as the farmers, deserve commendation for the spirit and enterprise manifested in getting up and sustaining this successful agricultural exposition. Our readers will find in our present issue the official list of premiums awarded.

THE SANTA CLARA FAIR is being held this week; the exhibit and attendance being satisfactory. Both exhibitors and visitors speak very highly of the able and courteous manner in which the officers have fulfilled their duties. We will give the premium awards in our next.

SAN JOAQUIN VALLEY FAIR.—The fourteenth annual exhibition of the San Joaquin Valley Agricultural Society was held at Stockton, last week. The delayed closing of the State Fair had some influence in retarding the appearance of some entries. The obstacle, however, was soon overcome, the exhibit proving to be of a superior character. The entries in the stock departments were not as numerous as anticipated, but in quality the display was superior to that of any previous fair of the society. Want of space makes it necessary that we defer the publication of the award of premiums until next week.

Plates for Testing Seeds.

In a recent nnmber of the PRESS we published a request for information on the subject of testing seeds; asking our friends to send us snggestions or descriptions of methods whereby this desirahle object might he attained. In compliance with this request, Mr. E. C. W. McDonald sends us a description of plates for testing seeds, engravings of which we have caused to be executed and herewith given for the benefit of our readers. These plates will probably prove satisfactory in what is claimed for them, namely to test the germinating power of seeds; and in this respect they will be useful to the seedsman in ascertaining the value of what he is selling or buying. Intereeting experiments may aleo be performed with their use by the botanist; but, as an adjunct to this, we need some method by which we may ascertain the age of such seeds as are injured by age. To expect an accurate test, of general application, would be asking too much of the present state of knowledge on the subject; but there are some seeds, which, by their external appearance, or on an internal examination, betray evidence of age. These simple rules may be made available to some extent; and we would like to have any of our friends, where observations have dcveloped any rules on whose they can rely, furnish us with such information, no matter to how limited a class of seeds their observations may have been confined. Meanwhile we may he allowed to hope that soience will in time furnish some means by which we can ascertain the age of seeds.

We give below the accompanying note, with the address of the gentleman who kindly furnished the information in regard to these plates, following which is a description of their construction and method of nsing, copied from the circular of Krelage & Son, Haarlem, Holland:

EDITORS PRESS:—After reading yonr editorial about seed tests in a late number of the RURAL PRESS, I at once thought that hy sending you the description of these plates, manufactured hy my friend Mr. Krelage, I should comply with yonr request for information on this important snbject.

I have two plates in my possession, one for small and one for large seeds, and am willing to send them to you for inspection. I admit that these plates do not give all the information you ask, but they are without doubt of practical use, and deserve to be introduced in this conntry as well as in Holland or England, where they are in use. With the assurance that I will gladly give yon any further information on this point if you may want it.

I remain respectfully yours,
E. C. W. MCDONALD.

"These plates are manufactured of fine potters' clay. The figure here given conveys an exact idea of their construction. The numbered holes are destinated to be filled with an equal number of sorts of seeds. E. H. Krelage & Son have convinced themselves, by repeated eseays, of the excellency in every respect of these plates, and are happy to say that the most competent anthorities agree with them on this point. For this reason E. H. Krelage and Son have thought it convenient to have manufactnred these plates on a more large scale, in order to be able to offer them at a price acceptable to every one.

Use.

The plate is laid dnring 24 hours in water, before it is used; then it is placed in a table-plate and water is turned on the table-plate, as much as to fill the space between the edge of this and the testing plate, taking care not to cover it with water. Then in every one of the holes one of the seed sorts is laid, of which the germinating power is to be examined. Seeds which germinate difficultly or slow, like grass seeds, etc., are covered with a little earth; this is not necessary for seeds germinating quickly, such as cabhage, etc. There must he taken care to turn fresh water on the table-plate daily in order to have the space hetween the edge of this and the testing-plate always filled with water. To advance the germination of the seeds it may he well to cover the table-plate with the testing-plate by a hell-glass; this, however, is not absolutely necessary. It is clear that an elevated temperature of the room where the operation takes place, equally promotes the germination. Sometimes it may happen that the testing-plates begin to grow mouldy; in such cases they ought to be washed clean, and then heated glowing; thereby every vestige of mould will be destroyed.

Sorts.

There are two sorts of testing-plates: testing-plates with 24 numbered holes (No. 1—24), as figured here above, for testing small or medium-sized seeds; and plates with 5 numbered holes, (No. 1—5), for testing large seeds, like beans, peas, mangold-wurtzel, etc. The use of both is the same.

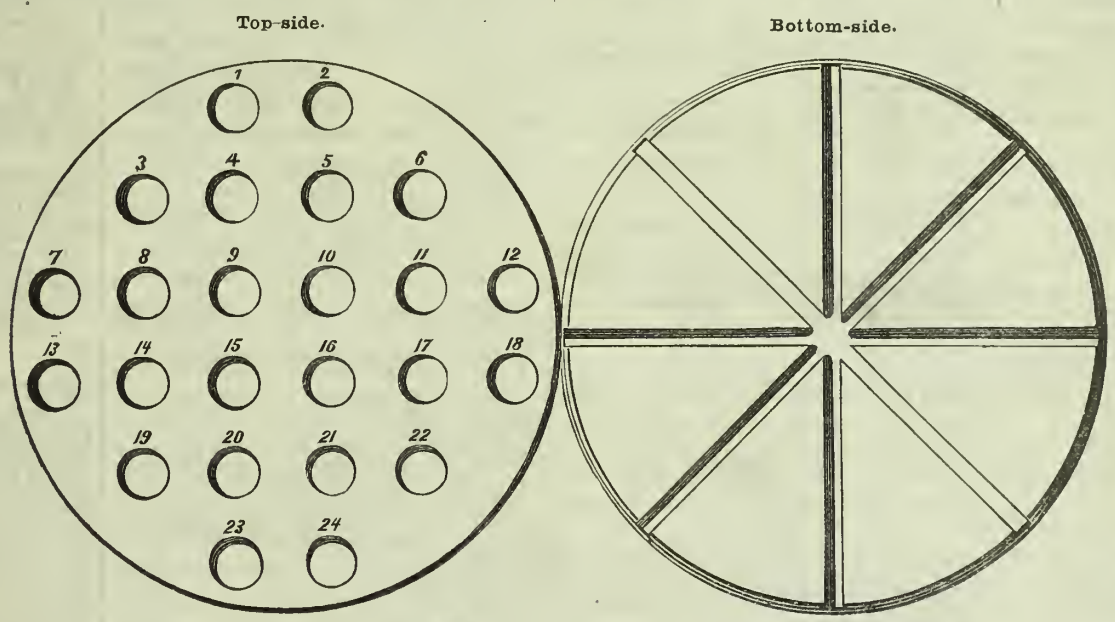
Utility.

It needs no demonstration to prove that in many cases it is useful, in some a necessity, to test the germinating power of the seeds. At an expense of a few shillings the seedsman may on a spot of one square metre test at once nearly one thoueand sorts of seeds. Besides there is easily found a place in every seedshop to place a plank with testing-plates. The agriculturist and every posseesor of seeds may by these testing-plates control on a simple manner the vitality of the seeds he buys or which he wishes to sell. Besides the testing-plates may be of use to study the germinating process of the seeds, for schools, botanists or lovers of nature in general.

Exposition.

The teeting-plates have excited much interest at the shows in 1870 at Amsterdam and Arnhem, and in 1871 at those at Haarlem, Ameterdam, the Hague and Hoorn. At the last named show a premium was awarded to them. The testing-plates have been exhibited at Carlsruhe, at the permanent show of agricultural education-materials, on request of the committee.

The principal Dutch and German Agricultural Journals have treated on the great advantage of these testing-plates."



PLATES FOR TESTING SEEDS.

California Hops.

To those who have drifted along in the ebh and flow of the wheat or stock raising tide, and given no thought to the matter, the magnitude of the hop growing interests of the State are neither known nor appreciated. The bellowing kine, the prancing and snorting steeds, and even the plantive bleating of the meek and humble tenants of the sheep fold, each and all attract the attention of the traveler by voice and motion, and their numbers and condition becomes the subject of praise and disparagement according as their merits strike the eye or enlist the sympathies of the passer by. But the clinging, silent, and seemingly useless hop vine, quietly creeping on its slow, and winding way up the rough crooked poles provided by the careful cultivator for its support, making no noise to indicate its advance towards perfection, rests comparatively unheeded in the busy walks of life, save hy the few who know of its value in the commercial world, or who may feel a desire to know more of it, from a hope to find something more remunerative than the production of food for the toiling millions of the earth.

We were led to these reflections and furnished with the facts for this article, hy a conversation occurring between some Mendocino hop-growers, and a large dealer in the article in this city. From these sources we learn that Mendocino county will this year ship about 900 bales of hops prodnced from about 125 acres, or a little more. The largest hop field in the county only covers a little over 20 acres, most of this yield heing grown on small yards of from three to seven acres. The crop of '74 has been an extraordinary one, both for yield and quality, far exceeding anything heretofore known in that locality. We give a few figures to verify this assertion. W. D. White, of Ukiah valley, had 2,340 pounds of cured hops from 1¾ acres of vines set out the present season. L. M. Ruddick, of the same place, cured 8,700 pounds from four acres, partly new vines. E. H. Duncan, of Sanel valley, cured 14,000 pounds from seven acres. We think those of our readers who are conversant with the ordinary yield of the hop will concede that these figures indicate a good season, first-rate land, excellent cnltivation, and a climate especially adapted to the vine.

The Russian River country bears the reputation of producing the best hops that come into market, and that portion of it lying in Mendocino county has the name of being A 1 in the hop market with its crop. In this connection, and somewhat in support of the assumption, we would here mention that Mr. J. B. McClure has a special stencil plate brand for his hop hales, reading as follows: "Russian River Hops, raised by J. B. McClure, Ukiah." On inspecting the stock on hand in one of the dealer's warehouses in this city, the other day, Mr. McClure found hops marked with a *facsimile* of his brand, with the exception that the name L. McClue had been dimly inserted in the center of the stamp in place of his own. Now this gentleman, named L. McOlne, lives in the Mokelumne country, and most probably has no knowledge of the fraud that was thus sought to be perpetrated in his name. Suffice it to say that there is no such hop-raiser in Ukiah valley or vicinity as L. McClue.

When we consider that the seemingly countless herds of sheep roaming over the hills of Mendocino number over 100,000, and only produce a revenue of about a dollar per head, for wool, and think of the millions of acres they occupy, and then turn to the comparatively insignificant area cultivated in hops, and find that they produce a revenue of $50,000 the present year, we can only wonder that more farmers do not enter the hop field.

But it is a crop that requires careful, timely and persistent labor, and will not return a per cent. nnless it has it. Neither can one go into it without capital, for hops to reach the perfection that ineures ready sale and good prices must be well cnred; and to do this requires a good hop-house in which to kiln-dry, bale and press them into shape for market. But in every neighhorhood several farmers may unite and pnt up one dry-house for the use of all; or one man who has the capital, experience and ability may put up a commodious hop-house, and purchase or cure on percentage the hops of a whole neighborhood.

The prices realized this year in our market for the Mendocino hops are from 28 to 31 cents per pound. Many of them were engaged some time since at 20 and 25 cents, but the higher quotations were obtained for the same grade where no contract had heen entered into previous to their delivery here.

Several of those now in the business there have once plowed up their lands on account of the low prices that ruled some years since. John Knight of Sanel, W. D. White and L. M. Rnddick of Ukiah, are among those who were once thns discouraged. The two latter gentlemen each saved a small patch, and from them have realized from fair to large profits.

The Philadelphia brewery of this city uses a bale of hops each day, and produces 30,000 barrels of 31 gallons each of beer per annum. The other breweries here probably produce aggregately somewhat more. From this it is readily seen that the bnlk of the hop crop of this State must be exported to find a market. It is only when the crop fails partially or totally in foreign conntries, that our farmers can realize the small fortunes that have occasionally been received from this source of industry. England produces ahout 400,000 hales, but is very subject to failure. Germany raises ahout 375,000 bales, and Bavaria also rasies quite an amount. These are the principal hop-producing countries, and Bavarian hops are accounted the best in the world. But all foreign countries are more subject to vicissitudes in this crop than the United States, and California is more certain than auy other section of the world to produce a fair crop. The The yield of the Pacific Coast is this year estimated at 80,000 bales.

THE RURAL PRESS AND THE STOCK BREEDERS.—It has afforded us no small amount of gratification in our attendance at tho agricultural fairs of the season to find on conversing with the exhibitors of stock that the course of the RURAL PRESS in connection with this department meets with their hearty approval. We find that the keepers as well as the owners of stock, read this department of ours with special interest. The PRESS was not slow in recognizing the wants of the country in this direction, and has done all in its power to assist in supplying these wants. One of the stock exhibitors says "you stand by the stock men and they will stand hy you." Another romarks that "what we like the RURAL PRESS for is, that in this, as in other agricultural matters, it is fresh and vigorous, thorough, sound and orthodox. It evidently has no hobby, which it is over fond of riding; and we do not want it to make a hobby of stock-breeding. All we ask is a fair share of attention and space." Such ondorsements of our course are extremely gratifying.

The Eucalyptus and its Mission.

Those who have olaimed for the encalyptus remarkable anti-malarial influences, will he pleased to hear a reliable report of its proved efficiency in this respect in our own State. Some items have been circulated through the press of this country, declaring that the eucalyptus at home, in Australia, is not credited with the possession of the properties which have been claimed for it by its friends in this country; and many who do not go so far as to make this sweeping denial, are still inclined to treat the current reports of its anti-malarial influences as exaggerations. So that we might very naturally look for a reaction of the enthusiasm for planting this tree here. But to counteract these discouraging influences we are receiving fresh assurances of its efficacy. French scientists claim that in Algeria malignant fevers have disappeared from districts where the eucalyptus tree has been extenoively planted. An essenco similar to camphor has been extracted from its leaves by a French chemist, to which he gives the name of "eucalyptol," and which, he states, exercises upon the human system the same beneficent effects as other essential oils. In the island of Mauritius the leaves of the eucalyptus are used as an antidote to malarial fever.

Later accounts from Australia confirm those of an earlier date, in regard to its healthful influence. A Melbourne chemist makee the dried leaves of the eucalyptus into cigars, the smoking of which is declared to be highly beneficial in bronchial and pulmonary complaints. It is also claimed that it has been the means of introducing the honey bee into Australia. When the English began to colonize Australia, there were no honey bees there, so it is said, and the swarms that were introduced there and turned into the forests where the eucalyptus tree greatly predominated, at once commenced honey making; and it is now demonstrated that the flowers of this tree are very productive of honey.

But the most satisfactory accounts from the eucalyptus tree are those that come from nearer home. We find in the Kern County *Courier* an endorsement of claims of this tree, which we copy, being confident that it will inspire confidence in what we have on former occasions said on this subject. The editor of the *Courier* derives his information from personal observation; he being the owner of a farm upon which the matter was tested. He states his observations and experiences as follows:

"We speak somewhat positively in regard to the sanative or anti-malarial influence of the eucalyptus. If all, or even part of the evidence we have read on the subject coming from sources entitled to the utmost confidence, is true, we are certainly justified in so doing. But we are not accustomed to speak positively or to say in effect we know, unless we have the evidence of our own observation or personal experience. In regard to the anti-malarial influence of the encalyptus, we have this conclusive evidence. We have given it what we regard as a reasonably fair test on our own farm. This is cultivated by two families or companies of Chinese. One company lives near the north and the other the south end of the premises, about three-fourths of a mile apart. The localities both parties inhabit are favorable to the development of malaria. The soil is rich, moist, and teeming with vegetable life, and the free sweep of the prevailing wind is obstructed by the intervention of dense thickets. As might be expected, they have, every year, during the heated term, suffered with malarial fever. Last winter we determined to test the much vaunted virtues of the eucalyptus. In February we gave to the party at the north end two ounces of the seed, with directions that it should be planted near the house. It germinated finely and produced several thousands of young plants, but the frost killed most of them. About twelve hundred, however, survived. These, when the heated term commenced, had attained an average height of two feet, and emitted a strong aromatic or camphorous odor perceptible at a distance of a hundred yards. In due time the party at the south end were visited by their usual mildly-distressing fever, but up to the present time we have looked in vain for the first symptoms to develop in the other. They are all, to their own astonishment, in the most robust health. These trees now average more than three feet in height, and the atmosphere of the house is strongly impregnated with their odor. We have investigated in vain for other causes to which to attribute the anomalous state of health of the inmates and can find none but the reputed sanative properties of this tree. We have finally become convinced from the evidence of our own senses that it will do all the current accounts given of it allege, and propose, the coming season, to plant it on all the waste places and corners on our farm we can spare from other purposes. If everybody would do likewise the great valley of Kern county might soon take rank among the sanitariums of the State, because as yet no disease except a mild type of malarial fever has shown itself. Every land-owner, he his possessions large or small, should put it in the light of a duty to plant more or less of eucalipti.

Awards of Premiums at the State Fair.

We give below a continuation of the official list of premiums awarded at the Fair of the State Agricultural Society:

FIRST DEPARTMENT—CLASS I—AYRSHIRES.

Best cow 4 yrs old and over, Robert Beck; Kitty Clyde, $40.

Second best cow 4 yrs old and over, L. A. Upson; Flora McIver, $20.

Best cow 1 yr old, L. A. Upson; Bonnie Jean, $15.

CLASS I—POULTRY.

Bassett & Millor, Sacramento; best lot of light Brahmas, $5.

F. S. George, Sacramento; best let black Spanisb, $5.

Peter Burns, Sacramento; best lot black Polands, $5.

Bassett & Miller, Sacramento; best lot black-red games, $5; best lot Brahmas, special premium recommended.

John Herring, Sacramento; best lot dark Brahmas, $5.

W. J. Pratber, Woodland; best lot Bronzed turkeys, $5.

J. C. Mills, Centerville; best lot Narragansctt turkeys, $5.

W. J. Prather, Woodland; best lot Rouen ducks, $5.

E. B. Gilbert, Sacramento; best lot gray ducks, $5.

Bassett & Miller, Sacramento; best lot Brabma cblcks, $5; best lot duck-winged game Bantams, $5.

John F. Friggins, Woodland; best let Hondans, $5.

W. J. Prather, Woodland; best buff Cocbins, $5; white Cochins, $5; black Cocbins, $5; partridge Cocbins, $5; wbite Polands, $5; bearded golden Polands, $5; golden Sebright bantams, $5.

C. H. Theis, Sacramento; best let black Javaa, $5.

J. B. White, Sacramento; best lot golden spangled Hamburgs, $5.

Jerome Davis, Sacramento; best lot silver spangled Hamburgs, $5.

A. Greer, Sacramento; best lot frizzled fowls, $5.

R. Cownc, Sacramento; best lot Domluique fowles, $5.

Bassett & Miller, Sacramento; best lot light Brahma cblcks, $5.

Bassett & Miller, Sacramento; silver duck-winged game bantams, $5.

SECOND DEPARTMENT—CLASS I.

J. M. Keeler & Co., San Francisco; one Krlpp engine, honorable mention and dip.

Huntington, Hopkins & Co., Sacramcnte; one saw gummer, $2.

George H. Grant, Sacramento; best fire extinguisher, dip.

Treadwell & Ce., San Francisco; portable steam engine, dip.; best Imported engine, dip.

Baker & Hamilton, Sacramento; best display general machinery, geld medal recommended.

CLASS II.

Laufkotter Bros., Sacramcnto; sweep borse-power, $10.

Baker & Hamilton, Sacramento; St. Lonis corn sbelier, dip.; lawn mewer, dip.

Byren Jackson, Sacramento; self-feeder and elevator, $50 recommcnded.

M. C. Hawley & Co., Sacramcuto; thresbing machine, dlp.

Huntington, Hopkins & Co., Sacramento; one lawn mowcr, dip.; gopber trap, $5; post hole augur, dip.; vegetable cutter, dip.; lawn sprinkler, $5.

Baker & Hamilton, Sacramento; Pitt's Buffalo tbreshing macbine, cider mllls and press, lock lever hay and grain rake, four bay and straw cutters, two corn sbe lers, two lawn mowers, one lawn sprinkler, one cbampion post hole augur; first premium awarded by tho committee.

Baker & Hamilton, Sacramento; one beader—California manufacture—Gem broadcast seed sower, sweepstakes barrow, Grange cultivator, wrought iron cultivator, sweepstakes road scraper, Eureka sweepstaks gang plow, spring market and road wagon; first premium awarded by the committee.

Baker & Hamilton, Sacramcnto; Buckeye cider mill and press, dip.

M. C. Hawley & Co., Sacramento; Buckeye cider mill and press, dip.

Baker & Hamilton, Sacramento; horse rake, dip.

Kellcr & Co., Sacramento; Continental straw cutter, dip.; Eagle bay press, $40; circular saw mill, dip.

CLASS III.

Baker & Hamilton, Sacramento; Sweepstake Plow Co.'s headers, $50.

W. Guttenberger, Sacramento; field roller and crusher, $10.

Baker & Hamilton, Sacramento; Sweepstake Plow Co.'s barrows, $50.

M. C. Hawley & Co., Sacramento; two-horse broadcast sowing macbine, dip.

Keller & Co., Sacramento; broadcast seed sower and cultivator, dip.

Baker & Hamilton, Sacramento; self-raking and reaping macbine, dip.; Sweepstakes Plow Co.'s Gem broadcast sowing machine, $10; Buckeye reaping and sowing machine, dip.; one-horse cultivator, dip.

Mattison & Williamson; cultivator, California manufacture, $10.

Keller & Co., Sacramento; double shovel plow, dip.

Treadwell & Co., San Francisco; beaders of Eastern manufacture, dip.

CLASS IV.

Baker & Hamilton, Sacramento; French burr stone farm feedmill, dip.

Nash, Miller & Co., Sacramento; grain separator and fanning mill, dip. and $5.

W. C. Nelson; windmill $25.

A. Hart & Co.; farm gate, $15.

V. S. W. Parkhurst, San Francisco; best platform and counter scales, dip.

John Wilkie, Sutter county; machiue for applying blnestone to seed grain, dip.

H. M. Cameron, Cbicago; champion beehive and combined feeder and ventilator, dip.

Huntington, Hopkins & Co., Sacramento; platform scales, honorable mention.

CLASS V.

J. M. Keller & Co., San F ancisco; Sluthonr pump, $20.

Laufketter Bros., Sacramento; double acting deep force pump, $20.

Huntington, Hopkins & Co., Sacramento; farm road scraper, $5; cabbage cutter, $2.

F. J. Wbipple, Placer county; rectangular chnrn, dip. and special mention.

A. Parker, Hicksville; Crano's wasbing machine, $5.

A. Callahan, San Francisco; complete wasbing machine, bonorable mention.

M. K. Barrow, San Francisco; double acting wasbing machine, dlp.

Baker & Hamilton, Sacramento; Swcepstakes Plow Co.'s farm road scraper, $5.

Keller & Co., Sacramento; best hay seeder, $50, recommended.

Hawley & Co., Sacramento; churns, diploma.

Laufkotter Bros., Sacramento; apparatus for raising water for irrigating purposes, $20.

A. P. Smith, Sacramento; step-ladder for picking fruit, special premium recommcnded.

J. M. Keller & Co., San Francisco, Ryder's American fruit-dryer, special premium recommended.

CLASS VI.

Baker & Hamilton, Sacramento; Sweepstakes Plow Co.'s gang plow, best on exhibition, $100.

C. Myers, Marysville; sub-soil plow, $20.

Wm. B. Reedy, Sacramento; stubble plow, $10; gang plow, dip.

M. C. Hawley & Co., Sacramento; one John Deer's gang-plough, dip. and special premium rccommcnded.

Treadwell & Co., Sacramento; sod plow, $10.

M. C. Hawley & Co., Sacramento; side-hill Plow, dip.; one-horse plow, dip.

Baker & Hamilton, Sacramento; Scotch clipper steel plow, dip.; Monitor cast-iron plow, dip.

CLASS VII.

Daniel Mason, Sacramento; trotting wagon, $15 and diploma.

Doland & Co., Sacramento; one top buggy, one phæton, one sulky; special premium recommeuded for each.

Huntington, Hopkins & Co., Sacramento; assortment of carriage material and trimmings, dip.; carriage springs, $10.

Carville Manufacturiug Co., San Francisco; one two-berse family carriago, $30; one one-horse family carriage, $25; tep buggy, $20, and dip. to each.

M. Kesler, Sacramento; farm wagou for general purposes, Califoruia manufacture, $15.

J. F. Hill, Sacramento; thoroughbrace market wagon, California manufacture, $15.

Baker & Hamilton, Sacramcnto; Sweepstakes Plow Co.'s street goeds wagon, $5; best imported (Bain) farm wagon, dip.

E. A. Amea, Sacramento; best display of carriage wheels, dip.

Keller & Co., Sacramento; carriage or wagon brake, diploma.

J. McRoss; two-horse truck, California manufacture, special premium, $20, recommeuded.

J. F. Hill, Sacramento; best two-horse family carriage, $30.

THIRD DEPARTMENT—CLASS I.

Joseph Green, Oakland; best exhibit of silk goods by one factory, $25, and silver medal recommended.

Capital woelen mills, Sacramento; best display of woolen goods by one factory, $100; best Mackinaw blankets, $5.

Alex. McKay, San Fraucisco; best 10 yards rag carpet, $10.

M. Kraker, Sacramento; best display shoulder braces and corsets, silver medal; best display fancy goods, $20.

Mrs. J. S. McDerman, Sacramento; best bearth-rug, $5.

Miss A. Hubbard, Sierra valley; one hearth-rug, special premium recommended.

Mrs. J. F. Hill, Sacramento; five rag-rugs, special premium recommended.

E. Ruisman, Sacramento; two rag-rugs, special premium recommended.

JUVENILE DEPARTMENT.

Miss M. B. Arnold, 11 yrs of age, Sacramento; 1 gent's sbirt, napkin ring.

Kate Vau Veorhies 12 yrs of age, Sacramento; worsted embroidery, butter knife.

Bell Knex, Sacramento; cotton crochet, napkin ring.

Emily Tbompsen, 11 yrs of age, Sacramento; leaf and moss work, napkin ring; worsted embroidery, special premium recommeuded.

Pauline Morrill, 13 yrs of age, Sacramento; decalcomanie picture, special premium recommended.

Grace Morrill, 12 yrs of age, Sacramento; werk box, special premium recommended.

Katie Jackson, Elk Grove, 1 log cabin quilt, napkin ring.

Nancy Jackson, Elk Grove; 1 log cabin quilt, special premium recommended.

Emma Hartwell, 11 yrs of age, Sacramento; hand sewing, special premium recomuended.

Katie Allmond, 11 years of age, Sacramento; plain and ornamental penmanship, napkin ring; pencil drawings, special preminm recommended.

Minnie McNeil, 6 yrs of age, Sacramento; 2 tidies, special premium recommended.

Mary H. Moore, Sacramento; modley picture, special premium recommended.

Mary Heilbron, 6 yrs old, Sacramento; 1 crocbot tidy, special premium recommended.

Carrie E. Usper, Sacramento; pen-drawing, napkin ring.

Nellie Dunlap, Sacramento; pen-drawings, special premium recommended.

Eloise Marvin, 12 yrs of age, Sacramento; best cotton embroidery, butter knife; best braid work, napkin ring.

Nellie Lansing, 11 years of age, Sacramento; dried fruit, special premlum recommeudod.

CLASS II.

Huntington, Hopkins & Co., Sacramento; best display rubber bose aud belting, silver medal; best display leather bose and belting, silver medal.

Frazer & Scullion, Sacramento; best lot carriage harness, $10 and silver medal.

R. Stone & Co., Sacramento; best farm harness, $10; best display saddles and bridles, $10; best display hames, $3.

S. S. Kast, San Francisco; best pair gent'a dress boots, $3; best pair gent's heavy boots, $5; best pair gent's dress shoes, $5; best pair gent's Congresa gaiters, $5; best pair ladies' slippers, $3; best pair ladiea' gaiters, $3; best pair ladies' bootess, $3.

J. C. Meussdorffer, Sacramcnto; best genta' silk bat, $5; best exbibit men's bats and caps, silver medal.

D. H. Quinn, Sacramento; best soft bat, $5.

CLASS III.

M. Kraker, Sacramcnto; best display ladies' and children's clothing, $25; best silk embroidery, $5; best specimen braid work, $5.

Miss Jovete M. Pierce, Sacramcnto; best table cover, $5.

Miss C D. Alden, San Francisco; best chenille embroidery, $5.

Mrs. H. Kuhl, Sacramento; best crocbet shawl, $5.

Mrs. W. E. Wood, Oakland; best fancy cbair cusbion, $5.

Mrs. D. W. Welty, Sacramento; best embroidery with beads, $5.

Mrs. L. Howe, Woodland; embroidered sofa cushion, $5.

Mrs. H. Kuhl, Sacramento; knit cloak, $3.

Mrs. R. W. Murpby, Sacramento; best display of millinery, $20; best velvet bonnet, $5; best silk bonnet, $5; best display of artificial flowers, $10.

Mrs. H. Kuhl, Sacramento; lamp-stand mat, $3; one case zephyr goods, special premium recommended; silk embroidery, special premium recommended.

Mrs. E. W. Wilson, Elk Grove; best crocbet affghan, special premium recommended.

Mrs. Mary Cbambers, San Francisco; embroidered affghan, special premium recommended.

Mrs. J. H. Winn, Sacramento; child's affgahn, $5.

Mrs. M. E. Scott, Moore's station, El Dorado county; best display of tatting, special premlum recommended.

Mrs. W. M. Lyons, Sacramento; best embroidered handkerchief, $3; best specimen of leaf work, $5.

Mrs. M. E. Miller, Sacramento; best embroidered picture, $10.

Mrs. Anna Getz Lucas, San Francisco; best preserved natural flowers, silver medal; best wax statuary, $10; best specimen wax flowers, $10; best specimen wax fruit, $5; largest variety wax fruit, $10.

Mrs. C. N. Hartwell, Sacramento; best moss and lichen work, $5.

Mrs. L. A. Barton, Sacramento; best specimen shell work, $5.

Miss Jovette M. Pierce, Sacramento; feather wreath, special premium recommended; tatting collar, $3.

Miss Isabella Licbentbater, Sacramento; best white quilt, $5.

Miss N. J. Favers, Sacramcnto; best patchwork quilt, $5.

Mrs. C. W. Clark, Sacramento; best silk quilt, $5.

Mrs. H. J. Jacksen, Sacramento; best log cabin quilt, special premlum recommended.

G. D. Almond, Sacramento; best assortment leather gloves, and mittens, silver medal.

D. H. Quinn, Sacramento; best collection furs, $25.

Mrs. E. M. Wilson, Elk Grove; 1 buggy robe, special premlum recommeuded.

Mrs. M. Gerrish, Sacramento; patcbwork quilt, special premlum recommended.

M. Kraker, Sacramento; best display fancy goods, special premlum recommended.

Mrs. C. M. Jenkins, Los Angeles; Mohair opera cloak, special premlum recommended; wool boqnet, honorable mention.

Mrs. C. Nebrbass (70 years old), Sacramento; knit work, special premium recommended.

Miss Irene Felter, Sacramento; sofa cushion cover, special premlum recommended; silk lounge affghan, special premium recommended.

Mrs. Dr. H. H. Piersen, Sacramento; sofa cushlon cover, special premium recommended; crochet affghan, special premium recommended.

W. A. Smith, Florin; dried grasses and flowers, special premium recommended.

Mrs. Dr. Logan, Sacramento; crochet cloak, special premium recommended.

Mrs. A. Tbeiss, Sacramento; display of lace work, special premium recommended.

Mrs. R. H. Haskell, Sacramento; knit stockings, special premium recommended.

Mrs. James Lansing, Sacramento; down spread and pillow, special premium recommended.

Mme. Cecil Romer, Sacramonto; dressed figure, special premlum recommended.

Mrs. Wm. M. Lyon, Sacramento; cetton embroidery, special premium recommended, display of fancy werk, special premium recommended.

Mrs. G. Howlett (age 75 years), Sacramento; cotton embroidery, special premium recommended.

Mrs. Mary A. Beck, Sacramento; waxwork, special premlum recommended.

Mrs. J. Joleins, Sacramento; tarlatan wreath, special premium recommended.

Mrs. Mary Barnes, Truckee; best specimen worsted flowers, special premium recommended.

A. Manning, Sacramente; fruit and seed wreath, special premlum recommended.

Miss Gussie M. Wilcox, Sacramento; snow-flake basket and beadwork, special premium recommended.

Mrs. F. N. Fish, Sacramento; crochet work, special premlum recommended.

Mrs. J. B. Storcb, Sacramento; hair werk, bonora ble mention.

Mrs. Geo. Cox, Sacramento; waxwork, honorable mention.

Mrs. E. M. Wilson, Elk Grove; tidies, honorable mention.

Mrs. Charles Arnold, Sacramento; embroidery, honorable meutlon.

Mrs. J. R. Quinn, Sacramento; beadwork, honorable mention.

Mrs. R. W. Murphy, Sacramento; display of featbers, bonorable mention.

Mrs. Wm. Kendall, Sacramento; knit stockings, special premlum recommended.

Mrs. L. H. Howe, Woodland; bead cushion, honorable mention.

Miss Gussie M. Wilcox, Sacramento; tidies, honorable mention.

Mrs. Dr. Cluness, Sacramento; pbantom bouquet, honorable mention.

Mrs. Dwight Pierce, Sacramento; one quilt, honorable mention.

Mrs. Josepb Idiens, Sacramento; alnm basket and crystalized flowers, honorable mention.

Mrs. Robinson (age 74 years), San Francisco; embroidered pin-cusbion, special premium recommended.

FOURTH DEPARTMENT—CLASSES I AND II.

Sol. H. Davis, Sacramento, 1 case mecbanics' tools, dip.; one California Farmers' tool chest, dip.

J. F. Harrison & Co., Sacramento, 1 case plated ware, dip.

Bush Bros., Sacramento, display of gas chandeliers, glass shades, portable lamps, gas toddy kettle and flatirons, dip.

Wick & Clark, Sacramento, burial caskets, dip.

J. Hurtell, Rocklin, models for stone-cutter's tools, $5 and dip.

Warren Holt, San Franciaco, I set double-acting gate hinges, dip.; I set single-acting gate hinges, dip.; Norton door butts, dip.

Gillig, Mott & Co., Sacramento, Jewett's water cooler and filter, dip.; coach lamps, dip.; miner's safety candlestick, dip.; metal lined wooden pails, dip. and special mention; Ratbbone ranges, $10.

Warren Holt, San Francisco, improved pattern folding desk and seat; dip. and special premium recommended.

G. Heilge, Sacramento, locks for store and house, and padlocks, $5.

G. Thomas, Reno, Nevada, automatic car coupling, honorable mention.

J. M. Keeler & Co., Sacramento, 1 "chase" pipe-cutting macbine, dip.

C. B. Brown, Placerville, 2 hydraulic mining lamps; dip. and special premium recommended.

G. A. Potter, San Francisco, tbe Excelsior cooking materials, bonorable mention.

Huntington, Hopkins & Co., Sacramento, best display of brass work, $20 and dip.; best display of axes, $5; best display of general bardware, $10; best display of iron and steel, $5; best display of mecbanic's tools, $10 best display of pocket cutlery, $5; best display of circular saws, $5; best display of mill saws, $5; best display of hand saws, $5; best display of files, $5; best display of pruniug knives, $5; best display of ahet, $5.

Wm. Friel, San Francisco, the Paragon vapor stove burner; $5 and diploma.

P. J. Chrisler, Vallejo, can openers; honorable mention.

Mansfield, Wing & Co., Sacramento, assortment of fancy mouldings, $5.

CLASS III.

Kohler, Chase & Co., San Francisco; Decker's grand piano, $20; Decker's parlor piano, $10.

T. W. Strobridge, Jr. Sacramento; Hallett, Davis & Co.'s grand piano, $20; Hallet, Davis & C.o's boudoir piano, $20; George Woods' parlor organ, special mention; George Woods' small organ, special mention.

J. F. Cooper, Sacramcnto; Estey organ, special mention.

A. Menke, Sacramento; best display of small musical instruments, silver medal; 2 inlaid boxes, California manufacture, $5.

Rickoff & Clark, San Francisco, spring beds, dip.

John Breuner, Sacramento, best dressing bureau, $10; best sofa, $10; best lounge, 5; best extension table, $5 best office cbair, $5; best set parlor cbairs, $10; best center table, $5; best pair side tables, $5; best set parlor furniture, $10; best display of furniture $10; best display of mattresses, $5; best writing desk, $5; best book case, $5; best wardrobe, $10; best set bedroom furniture, $10; best display of upbolatery, $10; best office desk, $5; best sick chair, $5; best display of hair and feather pillows, $5, best spring mattresses, dip.

Warren Holt, San Francisco; scbool furniture, $10.

I. J. Hatturbough, San Jose; wire suspension spring bed, dip.

Rickoff & Clark, San Francisco; Crandall's improved spring bed, diploma and special premlum recommended.

J. B. Sherburn & Co. Sacramento; spring bed cover; special premlum recommended.

Kendall, King & Co.; wool mattress, "Lane patent," special premlum recommended.

A. Menke, Sacramento; assortment of brushes, special premium recommended.

CLASS IV.

John Becker, Sacramento; best display willow-ware, $10; best display osier willow, $5.

Nichols, Felvey & Co., Sacramento; display of cedar ware, $5; display of pine ware, $5; display of wooden ware, $25; assortment of coopers' ware, $15.

J. F. Harrison & Co., Sacramento; display of split-wood baskets, $3.

Robinson, Fowler & Co., Vallejo; patent socket brooms and brushes, special premium recommended; best display of broom-corn, brooms and brushes, $5.

CLASSES V. AND VI.

W. C. Harding, Sacramento; specimens of deutistry very meritorious, gold medal recommended.

C. Jurgens, Sacramcuto; best glue, $5 and dip. recommended.

Bowen Bros., San Francisco; best exhibit of yeast powders, $5,

J. F. Fugazi, Sacramento; best exhibit of hair restorative and hair dye, perfumery and toilet articles and perfumery fountain, silver medal recommended.

Carlton Newman, San Francisco; best demijohn, dip.; fruit jars, special premlum recommended.

John Brenner, Sacramento; best mirror, dip.

Witbington & Bagley, Sacramento; best bleaching soap and best washing powder, special dip.

CLASS VII.

Aitken & Luce, Sacramento; display of California marble, $20.

Bergman Bros., Sacramento; best specimen of Rockingham ware, dip.; best specimen stoneware, $10; best specimen roofing tile, $5; best specimen flooring tile, $5; best display queensware, $5; best display terra cotta, dip.; best display pottery, various kinds, silver medal; best display firebrick, $3.

Withington & Bagley, Sacramento; best display of soap, silver medal; best display washing powder, dip.

Huntington, Hopkins & Co., Sacramento, best stove-polish, $5.

A. Henley, Yolo County; samples of building brick, dip.

CLASS VIII. AND IX.

B. E. Gogings, Sacramento; best stuffed animals and birds, silver medal,

B. R. Sweetland, Sacramento; one case minerals and shells, silver medal.

G. D. Allmond, Sacramento; one case minerals, silvor medal.

G. Griffith, Rocklin; one piece dry-dock stone, honorable mention.

F. E. Davis, Sacramento; one framed Masonic emblem in marble, and one framed Odd Fellows' emblem in marble, honorable mention.

Robert Moore, San Francisco; best design of an engine or machine of any kind, gold medal.

J. K. Firth, San Francisco; second best design of an engine or machine of any kind, silver medal.

FIFTH DEPARTMENT—CLASS I.

D. R. Prince, Oroville; best exhibit silk cocoons, $25; best exhibit silk in skeins, dip.

CLASS II.

M. Byrte, Sacramento; best exhibit chiccory, premiums recommended.

M. Biggs, Butte County; best exhibit wheat, $20; best exhibit Nepul barley, $10; best exhibit Chevalier barley, $10; best exhibit common barley, $10.

W. S. Manlove, Sacramento; exhibit of bearded Chile wbeat, $20.

Wm. Kendall, Sacramento; exhibit of mulatto corn, $10.

W. M. Haynie, Sacramento; best exhibit hops, $10.

James Black, Suisun; exhibit white Mediterranean wbeat, $20.

A. T. Hatcb, Sulsun; exhibit Excelsior Club wbeat, $20; exhibit Touzelle wheat, $20.

P. H. Fisher, Sacramento; best exhibit wbite corn, $10.

John Smith, Sacramento; best exhibit sugar-beet seed, premium recommended.

T. L. Chamberlin, Lincoln; best exhibit of Tappahanock wbeat, $20.

Wm. Van Wort, Butte County; best exhibit of pride of Butte wbeat, $20.

Goss & Co., Butte County; exhibit of flour, Durham Mills, silver medal.

John Bidwell, Chico; exhibit of Chico Mills flour, silver medal.

A. B. Gilbert, of Sacramento; exhibit of yellow corn, $10.

CLASS III.

Peter Burns, Sacramento; best exbibit of Sweet potatoes, $5.

F. Gabrielle, Sacramento; best half bushel sweet potatoes, $5; best 12 parsnips, $3; best 12 carrots, $3; best six long blood beets, $3; best six drumbead cabbage, $3; best six heads of red Dutcb cabbage, $3; best six beads of any other variety, $3; best tbree heads cauliflower, $3; best three heads of brocoli, $3; best six beads of lettuce, $2; best half-peck of red onions, $3; best half peck of yellow onions, $3; best half peck of wbite onions, $3; best half peck of peppers for pickling, $3; best 12 roots of salsify, $3; best six stalks of celery, $3; best half peck Lima beans in pod, $3: best half peck kidney bush beans, in pod, $2; best half peck polebeans, other than Lima, in pod, $2; best three purple egg plants, $5.

F. Gabrielle, Sacramento; second best table of varieties of vegetables, $20.

G. W. Fern, Sacramento; best and greatest variety of potatoes, $10.

Peter Burns, Sacramento, variety of turnip beets, $3; variety of Valparaiso squash, $3.

John Smitb Sacramento; best six sugar beets, $3: best Tromlay tomatoes, $3.

A. B. Gilbert, Sacramento; best six mammoth squasbes, $3; best sweet corn, $3; best tbree mountain watermelons, $3; best six cucumbers, $3.

P. H. Fisber, Sacramento; best and largest pumpkin, $3.

C. W. Hoit, Sacramento; best tbree green-fleshed melons, $3.

W. S. Manlove, Sacramento; best wbite beans, $3.

Wm. Kendall, Sacramento; best field peas, dry, $2.

B. F. Alken, Sacramento; best garden peas, $2; best castor oil beans, $5; best and greatest variety peas, $5.

Mrs. Cronkite, Sacramento; best gherkin cucumbers, $3.

W. D. Ficket, Yolo county; best cranberry beans, $3.

De Bernardi & Selna, Sacramento; best table of vegetables, $30.

CLASS VI.

Miss Hattie E. Spragne, Sacramento; best butter in bulk, $15.

Miss S. M. Burns, Sacramento; best butter in rolls, $10.

Miss A. J. Gerrish, Sacramento; best brown bread, $5; best white bread, $5.

CLASS VII.

J. S. Harbison, San Diego; best honey, $5.

Capital Sugar Refinery, Sacramento; best sugar from beets, $10.

Mrs. S. M. Hoover, Elk Grove; best brandied fruit, $5; best fruit in jars, $20; best salad, $5; best spiced fruit, $5.

Mrs. H. Cronkite, Sacramento; best exhibit of jellies, $20; best exhibit of preserved fruits in glass, $10; best exhibit of pickles, $15.

SIXTH DEPARTMENT—CLASS I.

Ira S. Bamber, Placerville; best display of apples, $20; best 12 varieties apples, $10; best display of pears, $20; best 12 varieties pears, $10; best six varieties peacbes, $10; best single variety peaches, $5; best display plums, $10; best five varieties plums, $5; best single variety plums, $3.

W. S. Manlove, Sacramento; best three varieties of apples, $3: best display figs, $5.

T. K. Stewart, Sacramento: best three varieties pears, $3: best display tropical fruit, $10: best display oranges, $5.

Josepb Putnam, Mokelumne river: best six varieties apples, $5.

J. M. Madden: single variety apples, special premium recommended.

E. M. Smith, Coloma: display six varieties pears, $5: best display peaches, $5.

C. H. Swift, Sacramento: best display of quinces, special mention.

CLASS II.

Mrs. H. Cronkite, Sacramento: dried berries (11 varieties), $5.

Miss F. M. Smith, Sacramento: display of sundried apples, $5.

Mrs. A. Cohen, Sacramento: display of sundried pears, $5.

Mrs. E. F. Aiken, Sacramento: display of sundried peaches, $5.

Miss F. M. Smith, Sacramento: display of sundried plums, $5.

Mrs. E. F. Aiken Sacramento: display of dried apricots, $5.

Miss Nellie Lansing, Sacramento: display of raisins, dried apples and almonds, $5.

Miss Hattie F. Sprague; display of dried pears, plums and corn, $5.

J. M. Purington, Sacramento; display of dried fruit, special premium, $20 recommended.

G. W. Deitzler, San Francisco; display of dried and preserved fruit, dip. recommended.

Mrs. A Crowne, Sacramento; variety of dried fruit (appies, peaches, aimonds, etc.), $15.

Ira S. Bamber, Placerville; best 25 pounds of raisins, $25 and premium recommended.

J. A. Rose; display of almonds, $5.

J. R, Nickeson, Lincoln; best 12 varieties wine grapes, $26; best 6 varieties wine grapes, $20; best 3 varieties wine grapes, $15; best 2 varieties wine grapes, $10; best single variety wine grapes, $10; best and greatest variety wine grapes, $25; second and greatest variety of wine grapes, $15. Gold medal recommended for this display.

J. H. Carrington, Sacramento county; best 12 varieties table grapes, 10; best 6 varieties table grapes, $5; best 3 varieties table grapes, $3.

B. N. Bugbey, Folsom; best brandy of 1870, $25; best white wine of 1873, $25; best red wine of 1872, $25.

Robert Chalmers, Coioma; best sweet wine from Green Hungarian of 1872, $25.

Mrs. H. Cronkite, Sacramento; best California port, $25.

B. N. Bugbey, Folsom; best California sherry of 1870, $25.

Robert Chalmers, Coloma; best Angelica wine of 1872, $25; Catawba wine bitters, special mention.

SEVENTH DEPARTMENT—CLASS I.

Norton Bush, San Francisco; best landscape painting in oil, $25; best exhibit by one artist, $150.

F. Jay Lewis, Sacramento; best painting by any ex hibitor, $100.

Charles Warren, Sacramento; best painting in oil by minors, $20.

Mrs. George D. Stewart. Sacramento; best specimen landscape painting in water colors, $25.

Mrs. M. E. Hayden, Sacramento; exhibit of oil paintings, special premium recommended.

P. J. Hopper, Sacramento; best monochromatic drawing, $25.

Mrs. George D. Stewart, Sacramento; best crayon drawing, special premium recommended.

Mrs. George Cox, Sacramento; one crayon drawing, special premium recommended.

Miss Helen M. Brooks, Sacramento; best display of crayon portraits, silver medai recommended.

F. J. Lewis, Sacramento; one pen drawing from nature, special premium recommended.

Al. Smith, Sacramento; best exhibit of photographs, $50.

Mansfield, Wing & Co., Sacramento; display of chromos, special premium recommended.

H. S. Beals, Sacramento; exhibit of photographs, special premium recommended.

C. C. Brown, Sacramento; display of ornamental penmanship, special premium recommended.

E. C. Atkinson, Sacramento; specimen of plain penmanship, special premium recommended.

CLASS II.

Aitken & Luce, Sacramento; best exhibition of sculpture, $25; best exhibition of statuary busts in plaster, $25; best collection of marbie-work, $75.

MISCELLANEOUS.

Mrs. Hoover, Elk Grove; display of nine varieties of candied fruit, special mention; also, one silver tree, honorable mention; one lead tree, special premium; one tin tree, honorable mention.

Mrs. Cronkite. Sacramento; two jars pear syrup, hon orable mention.

Leland Howe, Sacramento; one scrap-book, honorable mentiou.

R. S. Thompson, Napa; one Adam's chart of history, honorable mention.

C. H. Allmond, Sacramento; collection California bird-eggs, honorable mention; also, one newspaper printed in 1800, honorabie mention; collection of ancient coins, honorable mention.

Mrs. E. Wilson, Elk Grove; pair of blankets woven and spun by a lady 65 years old, honorable mention; also one bedspread, honorable mention.

Joseph Purrington, Sacramento; crystallized fruit, six varieties, special mention.

Miss S. Abbey, San Francisco; grand excelsior American chart, for dress-cutting, special mention.

W. P. Sherwood; one utility adjustable tabie, special mention.

P. McCarty; cage of Irish thrushes, honorable mention.

J. Lindo, San Francisco; one case of fancy shell work, special premium.

A. Menke, Sacramento; one fancy baby carriage, "The Bon Ton," English manufacture, special premium; also one fancy baby carriage, "The Bon Ton," American manufacture, special premium.

H. C. Harrison, Sacramento; rustio cone table, special premium.

E. R. Kesner, Sacramento: confectionaries and candy ware, special premium.

Mrs. J. R. Quinn, Sacramento; two hanging satchel bags and one bag, special premium.

Mrs. Idiens; one wax picture frame and one leather bracket, honorable mention.

Stewart & Hamilton, Dixon; one door and fancy panels, special premium.

Henry Fisher; one case of confectionary and 24 jars candy, honorable mention.

V. S. W. Parkhurst, San Francisco; one money drawer, honorable mention.

J. H. Corliss, Reno, Nevada; vessel for measuring and drawing liquids, diploma.

G. Thomas, Reno, Nevada; automatic car coupling, honorable mention.

M. C. Hawley & Co., Sacramento; fuse for mining purposes and exploders for mining purposes, diploma.

Pacific Jute Company, Oakland: grain and wool bags California manufacturo, silver medal.

A. Callahan, San Francisco: combined vice and anvil for farmers' use, diploma.

Headrich & Dirvin, Sacramento: axle grease, diploma.

John Hibbert. Nevada County: section of square tree, honorable mention.

Dr. L. Moore, Santa Cruz: one Knowiton's universal bath, special mention.

Thos. A. Wand, San Francisco: California sardines, special premium.

Mrs. M. T. Griffin, Sacramento: chart for cutting dresses, (Taylor's,) special premium.

Dr. Lyford, San Francisco: apparatus for embalming dead bodies, apparatus for ventilating and disinfecting burial vaults, apparatus for propagating oysters, special premium recommended.

REPAIRING MIRRORS.—To replace the small patches of quicksilver often found removed from the back of looking-glasses, clean the damaged spot by very careful rubbing with fine cotton until there is no trace of grease or dust; then with a point of a knife cut the size of the required piece of the silvering off another glass; a small globule of mercury (the size of a pin's head for a surface the size of the finger nail) is dropped upon the cut piece. The mercury penetrates as far as the cut, and allows the piece to be removed. It is then gently pressed on the spot with a piece of cotton.

No pillar or support of brick or stone should ever exceed in hight twelve times its least thickness at its base.

Singular Facts in Regard to Electricity.

The London *Philosophical Magazine* for July contains a synopsis of a recent communication made to the Royal Society by George Gore, Esq., on a new and remarkable phenomenon in the action of electricity upon iron, which consists in the very perceptible twisting of a bar of this metal by the joint effect of currents passing through it longitudinally, and passing round it in the insulated wire of an enveloping helix. The twist may be made so great as to exceed even a quarter of a revolution, and its amount is rendered very conspicuous by means of an index twenty inches long, suitably attached to the end of the bar. The combined influence of both currents is necessary to produce the torsion. Either current singly produces only the ordinary effect of magnetizing the bar, either transversely or longitudinally, without altering its figure. The direction of torsion is definitely related to the directions of the currents producing it. Calling the twist of an ordinary screw a right-handed torsion, the following law may be stated: When the axial current flows from a south pole toward a north pole, the torsion is right-handed; when from a north pole toward a south pole, the torsion is left-handed. If both the currents be reversed, therefore, the torsion remains unaltered; but if either be reversed separately the direction of the torsions is reversed likewise.

When the currents are not simultaneous but successive, torsion is produced, but in a lesser degree. This appears to be owing to the fact that the first current leaves a residuary magnetism in the bar, which conspires with that produced by the succeeding current; the effect being similar to that which would be due to a very much feebler simultaneous current. The torsion produced by a coil current may thus be used as a test of the residuary effect of an axial current, and that produced by an axial current may similarly serve to detect, and perhaps to measure, ordinary magnetism in a bar. The torsional influence is uniformly distributed throughout the length of the bar subjected to experiment.

No torsional effects were observed with rods of platinum, silver, copper, tin, lead, or, in general, any metal or other substances not magnetizable; but nickel rods appeared to be susceptible to the influence, though by no means to the same degree as rods of iron.

Another singular fact has been noticed in relation to the behavior of the steam engine employed to drive one of Mr. Wild's electro-magnetic engines. It appears that whenever pieces of iron rods or wires are placed in the circuit to be heated, the engine slackens speed when the metal begins to redden, the resistance to the action of the engine perceptibly increases in proportion as the heat of the metal increases, and it is only by constant care of the engineer that a uniform rate of motion can be secured.

THE ACTION OF TIDES ON THE SEA-BOTTOM. Mr. Reade communicates to the Geological Society of Liverpool the result of a series of novel investigations on the action of tides on the sea bottom. He shows that at various points in the St. George and English channels and in the Irish sea, tidal currents were capable of destructive erosive action on the sea-bottom, and that the materials of the Irish seabottom are principally composed of rearranged glacial drift, either eroded off the bottom or off the coast by the sea itself, or poured into it by the many rivers. These materials, notwithstanding the oscillatory character of the tidal streams, have in the main a slow, progressive motion down the channel and far out into the Atlantic. It was shown that there are pits or gullies excavated in the bottom in both the English and Irish channels, and that these depressions generally have their major axis conformable in direction with the set of the stream tide. In conclusion, Mr. Reade expresses his conviction that the diurnal and semi-diurnal motion of the tides acting down to the profoundest depths of the ocean, accounts for the preponderance of life in it over that exhibited by the fauna of the Mediterranean.

A CURIOUS bronze is produced in Japan, which, when made in thin plates, resemble slate, and is covered with designs in silver. M. Morin has lately analyzed and examined the properties of the alloy, and finds that it contains, in addition to copper, from four to five per cent. of tin, and on an average ten per cent. of lead. The combination is easily moulded into thin plates. These are varnished, and through the covering the designs are scratched with a graver. The plate is then plunged in a silver bath, when the silver is deposited on the unprotected portions. Lastly, it is placed in a muffled furnace, when the copper blackens and the silver remains bright.

SCHOOL OF MILLWRIGHTS.—Professor Isham Walker, of Lexington, Tenn., suggests that various State organizations of millers and the National Association unite and subscribe funds for the building (at Chicago, Ill.) of a model school flouring mill, at a cost of $150,000. He shows that such an institution, supplied with the best examples of modern machinery, and exhibiting the latest improvemeuts and examples of practical science in milling, would be of immense instructive advantage to millwrights throughout the country, while the stockholders he thinks, would realize handsome dividends every year.

PLATES of polished steel may be used as a substitute for boxwood for engraving, aud is said to be better as it does not warp, and is not at all affected by oil or water.

TECHNICAL SCHOOLS.—Where our future skilled workmen are to come from is a question which is crowding for a solution. The decline, or rather the total abrogation of the apprentice system has deprived the youth of the opportunity of learning trades. The result is that there are few who are learning, so that skilled labor is getting scarcer in every department of industry. It is therefore a matter of urgent importance that some method should be devised to remedy this difficulty. Of all the plans discussed there seems to be but one which promises success; that is, the establishment of technical schools. The large degree of success which has followed the introduction of these schools in some departments of our activities is strong proof of their utility in all branches. We might refer to our various schools of design and art, to our medical schools, and schools of mining and engineering.

IT is estimated that, in its course through the chalk districts, the river Thames annually removes from its bed and banks 140 tons of carbonate of lime for every square mile of surface with which its waters come in contact.

The Second International Exhibition of the Republic of Chile, to be opened at Santiago de Chile, September 16, 1875.

The undersigned herewith announces, on behalf of the Republic of Chile, that a second Grand International Exhibition, open to all the world, will be held in the city of Santiago de Chile, on the 16th of September, 1875, and for which Producers and Manufacturers on the Pacific Coast are respectfully invited to prepare such natural or industrial products as they may deem desirable to exhibit.

Unusual facilities will be afforded for the transportation of goods to and from the Exhibition—the Pacific Mail Steamship Company carrying to Panama for one dollar in gold per package (unless over 2,000 pounds in weight or measuring more than 20 cubic feet), the South American Steamship Company carrying all exhibits free to Valparaiso, while the Government railroads between Valparaiso and Santiago will carry all packages at the rates of $2 50 per ton. On the return journey from Santiago to Valparaiso exhibits will be returned free, unless sold.

This Exhibition has a peculiar interest for the producers and manufacturers of the Pacific Coast, who should be especially well represented, seeing that the result would undoubtedly be to give birth to a great and mutually beneficial trade between California and her sister States and Territories and Chile.

Keeping this in view, I would respectfully suggest to manufacturers, mechanics, producers, and all others interested, the advisability of at once calling a public meeting, so as to determine how and in what manner California and the Pacific Coast should be represented.

The Board of Directors of the Exposition give assurance that the greatest care will be taken of all articles sent for exhibition, and that all possible facilities will be afforded to intending exhibitors. The American Committee in Santiago will give particular attention to securing the safe delivery and return, and the proper placing of all articles intended for exhibition. I will here specially inform exhibitors as follows: They will be charged no rent either for space allotted them either in the Exposition building or on the grounds outside. The Exposition will provide—free of expense to the exhibitor—all water and steam required for machinery, and in his application he should mention the power required; will also provide storage for the preservation of boxes and other articles used in packing, but will not be to the expense of locating, regulating, and taking care of the articles on exhibition. All special preparations, however, and such accessories as show cases, and the like, must be at the expense of the exhibitor; will also see that careful watchmen are secured to guard the property on exhibition, but will not be responsible for any losses resulting from accident.

For the accommodation of such exhibitors as may have no agent iu Chile to attend to the exhibition or sale of their articles and may not find it convenient to attend in person, I will recommend to them the services of Senor Domingo Morel, Santiago, who will faithfully and efficiently execute, at most reasonable cost, all the duties intrusted to him.

The undersigned will most probably visit the Exhibition, and will take great pleasure in sceing that articles sent for exhibition from California and sister States will receive particular care and attention. He will also, if requested, take charge of any premiums, medals, etc., awarded by the management of the Exhibition.

All applications for space must reach Santiago by the 1st of January, 1875, and it should be borne in mind that forty days are required for communications from San Francisco to reach Santiago.

Rules and regulations and much other valuable information for exhibitors will be found in a pamphlet, which may be obtained of the undersigned, who may be fouud at stand No. 820 in the Pavilion, between the hours of 3 and 5 P. M. and 7 to 10 P. M.

F. 2o CASANUEVA, Consul-General of Chile,
And Sole Manager of the Exposition for this Pacific Coast.

California to be Represented.

The proprietors of the JOUENAL OF COMMERCE have engaged space for a display of California Products, etc., at this Exhibition, which will be simiiar to that which they have made at the present Exhibition in this city, only much fuller and on a larger scale. The grains and other agricultural products of California will be exhibited. The California Consolidated Tobacco Company; the Sacramento Beet Sugar Company; the California Cracker Co.; the San Francisco Glass Works, among others, have already made arrangemeuts for their exhibits. Merchants, Maufactuiers and Producers geuerally are invited to unite in this first effort to secure a representation of California Products among our sister Republics of South America, with whom we are now becoming most closely unitcd in commercial and social intorcourse. For further information apply to W. H. MURRAY, Business Manager of the S. F. JOURNAL OF COMMERCE.

OFFICE OF THE CONSUL GENERAL OF CHILE.
SAN FRANCISCO, SEPTEMBER 29, 1874.

To Wm. H. Murray, Esq., Busiuess Manager of the San Fraucisco JOURNAL OF COMMERCE.

DEAR SIR:—Having witnessed with much pleasuro the very complete display of Pacific Coast products, exhibited by you at the Niuth Industriai Exhibition of the Mechanics' Fair in this city, I have great pleasuro in informing you that your proposition to exhibit the same at the Second Internatioual Exhibition of Chile, meets with my hearty approval, and that I consider the selection of articles pertaining to this, the Pacific Coast, now on exhibition by you iu the Mechanics' Instituto Fair of Sau Francisco, will form a valuablo addition to the attractions of our exhibition.

I remain your most obedient servant,
F. 2o CASANVEVA,
Consul General of Chile.

DEWEY & CO.

American & Foreign Patent Agents,

OFFICE, 224 SANSOME STREET, S. F.

PATENTS obtained promptly; Caveats filed expeditiously; Patent reissues taken out; Assignments made and recorded in legal form; Copies of Patents and Assignments procured; Examinations of Patents made here and at Washington; Examinations made of Assignments recorded in Washington; Examinations ordered and reported by Telegraph; Rejected cases taken up and Patents obtained; Interferences Prosecuted; Opinions rendered regarding the validity of Patents and Assignments; every legitimate branch of Patent Agency Business promptly and thoroughly conducted.

Our intimate knowledge of the various inventions of this coast, and long practice in patent business, enable us to abundantly satisfy our patrons; and our success and business are constantly increasing.

The shrewdest and most experienced Inventors are found among our most steadfast friends and patrons, who fully appreciate our advantages in bringing valuable inventions to the notice of the public through the columns of our widely circulated, first-class journals—thereby facilitating their introduction, sale and popularity.

Foreign Patents.

In addition to American Patents, we secures with the assistance of co-operative agents, claims in all foreign countries which grant Patents, including Great Britain, France, Belgium, Prussia, Austria, Victoria, Peru, Russia, Spain, British India, Saxony, British Columbia, Canada, Norway, Sweden, Mexico, Victoria, Brazil, Bavaria, Holland, Deumark, Italy, Portugal, Cuba, Roman States, Wurtemberg, New Zealand, New South Wales, Queensland, Tasmania, Brazil, New Grenada, Chile, Argentine Republic, AND EVERY COUNTRY IN THE WORLD where Patents are obtainable.

No models are required in European countries, but the drawings and specifications should be prepared with thoroughness, by able persons who are familiar with the requirements and changes of foreign patent laws—agents who are reliable and permanently established.

Our schedule prices for obtaining foreign patents, in all cases, will always be as low, and in some instances lower, than those of any other responsible agency.

We *can and do* get foreign patents for inventors in the Pacific States from two to six months (according to the location of the country, SOONER than any other agents.

Home Counsel.

Our long experience in obtaining patents for Inventors on this Coast has familiarized us with the character of most of the inventions already patented; hence we are frequently able to save our patrons the cost of a fruitless application by pointing them to the same thing already covered by a patent. We are always free to advise applicants of any knowledge we have of previous applications which will interfere with their obtaining a patent.

We invite the acquaintance of all parties connected with inventions and patent right business, believing that the mutual conference of legitimate business and professional men is mutual gain. Parties in doubt in regard to their rights as assignees of patents, or purchasers of patented articles, can often receive advice of importance to them from a short call at our office.

Remittances of money, made by individual inventors to the Government, sometimes miscarry, and it has repeatedly happened that applicants have not only lost their money, but their inventions also, from this cause and consequent delay. We hold ourselves responsible for all fees entrusted to our agency.

The principal portion of the patent business of this coast has been done, and is still being done, through our agency. We are familiar with, and have full records, of all former cases, and can more directly judge of the value and patentability of iuventions discovered here than any other agents.

Situated so remote from the seat of government, delays are even more dangerous to the inventors of the Pacific Coast than to applicants in the Eastern States. Valuable patents may be lost by the extra time consumed in transmitting specifications from Eastern agencies back to this coast for the signature of the inventor.

Confidential.

We take great pains to preserve secrecy in all confidential matters, and applicants for patents can rest assured that their communications and business transactions will be held strictly confidential by us. Circulars free.

Engravings.

We have superior artists in our own office, aud all facilities for producing fine and satisfactory illustrations of inventions and machinery, for newspaper, book, circular and other printed illustrations, and are always ready to assist patrons in bringing their valuable iscoveries into practical and profitable use.

DEWEY & CO.,

United States and Foreign Patent Agents, publishers Mining and Scientific Press and the Pacific Rural Press, 224 Sansome St., S. F.

Agricultural Notes.

California.

ALAMEDA.

Rain.—*Enterprise*, Oct. 3d: The first rain of the season fell last evening. A local water company bas been formed for supplying the town of Livermore with water for domestic as well as public use. The plan and work is all laid out and under the management of thoroughly competent men. Robert Livermore and V. Alviso are among the principal projectors and Mr. Aylward, of San José Mission, will be the superintendent.

Wheat.—The large warehouse of Mr. Edmondson having been filled to the roof, the workmen are now storing grain in the one just opposite the Farmers' Exchange. It is well worth a visit to see the inside of these granerics. An immense quantitiy of wheat is being piled around the new warehouse of Mr. Esdon's, awaiting the completion of the building.

COLUSA.

Fine Cattle.—Colusa *Sun*, Oct. 3d: Twelve of the Bridgeford herd of cattle, the finest ever brought to this State, were purchased by citizens of Colusa county. A. J. Scoggins bought six of the choice ones. He also got the cows Jenny McLean, Flora Hastings, Nelly Bly, Ellen 2d, and Essa. For the bull, Mr. Scoggins paid $1,500, and for the first of the cows named, $1,000. These prices, by stockmen, are called remarkably low. In fact Mr. Bridgeford struck a time when farmers had not much money. Dr. Glenn purchased Cora Lee and Flora Hastings 7th. E. A. Bridgeford bought the yearling bull Cornell, Nannie 3d, and Lady Meldon, and Ed. Fore bought Ellen 3d. Besides those brought to this county, D. M. Reavis, of Chico, bought four cows, and Gardner of that place two.

A few days ago, while at the State fair, Mr. Boggs bought the celebrated mare Albatross, sister of the renowned stallion Blackbird. Albatross is a fast trotting animal just out from the East.

Mr. Boggs also purchased four Shropshire sheep—a buck and three ewes—recently imported from Europe by Pierce & Hoyt, the noted sheep breeders of Solano county. This is the only importation of this kind of sheep to the State.

Angora Goats.—These goats produce from seven to ten pounds annually, which brings from 40 to 80 cents per pound, and sometimes one dollar and a quarter per pound. At the late State Fair at Sacramento, there was a fine display of these beautiful animals. Thomas Harlan, of this county, purchased three thoroughbred bucks of N. Gilmore, of El Dorado county, for one of which he paid $260 and $300 for the other two. On Tuesday last Mr. Harlan passed our office with these noble animals on his way to his ranch, and they attracted much attention. We examined some of the wool taken from them, which we found to resemble the finest silk, very glossy, and measnred exactly fifteen inches in length.

EL DORADO.

Mountain Gardening.—*Mountain Democrat*, Oct. 3: Rev. H. B. Sheldon has placed on our table three tomatoes, raised on the parsonage lot. They measure, respectively, 14, 14¼ and 15½ inches in greatest circumference, and the three weigh four pounds, down weight. Nothing finer in the tomato line can well be imagined. They are exhibited and noticed to show what can be done, even in most unfavorable localities, in these mountains. The ground on which these tomatoes grew is not more than shovel deep to the bed rock. In the same locality are other productions which even more strongly testify to the capabilities of our section. When Mr. Sheldon took possession of this lot, two years ago, the place was sadly out of repair and in piteous plight. He immediately put it in order; and among other things cultivated some old grape vines that had been neglected and browsed down. Last season a fine growth of new shoots was the result. Last spring he grafted some 50 odd of these old stumps with a number of choicest varieties of foreign grapes. Already, on one graft are two bunches of magnificent flame Tokays, which will probably jointly weigh not less than six or seven pounds. On one of the ungrafted old vines it is estimated that there will be not less than 150 pounds of Mission grapes this season. And this plat of ground is shallow, rocky, and has the least favorable exposure. These facts speak volumes. Many of our people are oblivious to the lesson.

FRESNO.

Cotton.—The Fresno *Expositor* reports that cotton picking is in full blast in that county, and that the yield will be fully as good as was anticipated. We are pleased to hear that the experiments in growing cotton in Fresno are so eminently successful that we look forward to the not distant time when we will see the plains of Fresno, Merced and Tulare counties dotted with thrifty cotton plantations, offering employment the year round for thousands of industrious white men, experienced in the culture of the staple. In this county, too, the cotton crops are good, the yield being fully up to the average of former seasons. Here, cotton growing has become a permanent business with some of our farmers, who find that it pays.

MARIN.

The Tomales Farmers and the Railroad. Marin county *Journal*, Oct. 1: The farmers of Tomales say that by the way the railroad is being built as it passes the wharf at Ocean Roar, their previous facilities of shipping by water will be materially interfered with; and many of them think the railroad men have done this with design. The railroad men say that where the road is being built is the only place it can without an enormous expense; they believe many places tearing open the straw-ticks on their facilities of shipping by water are not interfered with, as the railroad is now being constructed, except that teams hauling to ship by water will have crossings of the railroad to make, and will have the annoyance of the locomotives and cars frightening them—an annoyance which railroads always bring. A meeting was held at Ocean Roar, on the 26th ult., about the matter. Mr. Dutton, identified with the interests of Tomales, and at the same time a railroad man, is endeavoring to bring about a compromise, which he thinks both parties will accept, by limiting the railroad company to a charge of two dollars a ton for freight from Tomales to the City Front.

MONTEREY.

Grain, Etc.—Cor. S. J. *Mercury*: Perhaps no section of the State has made such material progress as that portion of Monterey county about Salinas, whose resources were comparatively unknown a few years ago. Every warehouse at all the points above and Moss Landing, M. & S. V. R.R. depot and Castroville are filled with grain; and much of the grain is still unthreshed. There is certainly one-fourth more grain in the valley than ever before, and the prices ruling at present have a tendency to discourage farmers who rent their lands and paid large rents therefor. We know of a man who has been paying $7 per acre, and has been doing so well that his landlord this year told him he must pay $10 an acre. He offered to buy but could not, and seeks other localities where rents are cheaper.

The narrow-gauge railroad will be in running order next week, and then we may expect most of the grain that is shipped to Monterey to be loaded and sent direct to Liverpool.

NAPA.

The Vintage in Napa and Sonoma Counties.—Napa *Register*, Oct. 3: In Napa valley the grapes are ripening rapidly, and the wine-makers have their hands full. Mr. Groezinger, of Yountville, is making on an average 5,000 gallons per day. The yield, this year, promises to be very large, and the grapes of excellent quality. In and about Sonoma City we failed to notice any grape picking in the vineyards last Monday, but learned that wine was being made in other portions of the valley. Owing to the exposure of the vineyards nearest to the town of Sonoma to the cool breezes from the bay, the grapes ripen slowly. Still the crop promises to be large, and, as in Napa, the prospect is more flattering to the wine-grower than to the wine-maker.

PLACER.

Fruit Drier.—*Herald*, Oct. 3: A. Fougeron, of Auburn, has conceived an idea of his own for a fruit drier. He has completed the drawings of the machine, from which one can get a pretty good idea of how it will work. Without attempting a description, we will say that it looks as though it would be very practical. It can be built any size desired, from a family drier, with a capacity of say one hundred pounds a day, to a factory drier with a capacity of several tons per day. It is so arranged that it can be taken apart, boxed up and shipped to any part desired. Its cost, in proportion to its capacity, is very reasonable. $50 will buy one of these driers of medium size. Thus, if it proves a success, which we think it will, this most important adjunct to the fruit interest, will be placed within reach of all.

SACRAMENTO.

Cotton.—Folsom *Telegraph*, Oct. 3: Dr. Manlove has a fine field of cotton on his ranch in Brighton Township in this county. The plants are about four feet in hight; and each will average about 75 bolls. It is of the Georgia upland variety, and proves that an excellent article of cotton can be grown in this county.

SAN DIEGO COUNTY.

Profits of Bee Culture.—San Diego *Union*, Sept. 30: Some days since we gave the results of a year's operations in the bee business by Ritchie & Son. We now give a statement of the business of another and larger apiary the present year, omitting the names of the parties engaged. The apiary began business March 1st. The income and expenses are stated as follows: 550 cases comb honey, 60 lbs each, worth in San Diego 15 cents ₩ lb., $4,950; strained honey and wax, $550; increase 400 stands bees, worth $10 each, $4,000—total gross income, $9,500. Expenses—400 Harbison stands, at $2 each, $800; 550 new section boxes, at 30 cents each, $165; wages of one man 12 months and one man six months, at $25 per month and board, $630; hauling lumber for stands, $30; hauling honey to town, $165; sundry expenses, $45; packing cases for shipping, $165—total expenses, $2,000. Net yield, cash $3,500; increase of stands, $4,000. Total net yield, $7,500. We may add that the average net yield per stand of bees each season is stated at from $10 to $12.

SIERRA.

Sierra Valley.—Mountain *Messenger*, Sept. 26: The recent severe winter, and unparalleled backward spring and cool summer, has affected the agricultural interests of this usually prosperous section of the county, to such an extent as to cause hard times among the farmers. The hay crop, however, is larger and better than ever, in most portions of the valley. The severe frosts have, in most places, seriously injured the grain. The stock suffered more last winter than ever before, the farmers in beds to feed their starving animals. They will not be caught in such straits again very soon.

Everybody is harvesting and getting crops to market. An immense amount of butter is being made, which finds ready sale at prices varying from 33 to 35 cents per pound to the wholesale trade, and its production, it is asserted, pays better than any other industry in the valley. The Turner Bros. showed me a ton or so of the sweetest and nicest butter one needs to look at. The churning, in most places, is done by water-power. Three hay-baling machines are at work here, one of which has a capacity of 12 tons per day. The rates are $2.50 per ton, the farmer boarding the balers.

SANTA CLARA.

Drying Prunes.—Cor. S. J. *Mercury*: I noticed a statement in your paper a few days ago, that the Alden fruit drying house was the only fruit drying establishment in the State that was drying prunes of any amount. L. A. Gonld, of Santa Clara, has dried over 80,000 pounds of prunes this season, in addition to other kinds of fruit in proportion. If that is not of some amount, I would like to see the Alden's figures.

The Consolidated Tobacco Co.—The consolidated tobacco company of Santa Clara county, being burdened by a floating debt which had been incurred in growing and curing large crops of tobacco, in running the factories and in putting their crops on the market, have decided rather than to allow so promising a business to languish for the want of ready funds, to pay off the debt by levying an assessment of $10 per share. This was done, and the sum of $75,000 realized—an amount sufficient to place the company in a most prosperous condition. The company is now accumulating an enormous amount of property, and next summer will be in a position to sell to other manufacturers here or in the East, 300,000 or 400,000 pounds of superior leaf, graded suitably for the wants of manufacturers. The crop now being cured and growing is not only much the largest, but is far superior in quality to anything yet obtained under the new process. Altogether the future of the enterprise is more promising than ever, and the wiping out of the debt hastens the desired day when dividends will be in order.

SONOMA.

A Fine Orchard.—The Russian River *Flag* says that Mr. Chas. Alexander has an orchard of 12 acres seven miles from Healdsburg, toward Calistoga, on which he has lived and supported a family for 20 years. It will produce this season 5,000 pounds of peaches, 3,500 pounds of apples and 2,000 pounds of plums. He expects to dry four tons of peaches and two and a half of apples. He is now drying from 45 to 55 bushels of fruit a day. The Ryder machine dries about 10 bushels a day. The orchard will net $1,000—$83⅓ an acre. This estimate is based on the previous average price of dried fruit, say six cents all around. Besides the orchard there is a fine vineyard of 100 old-fashioned Isabella grape vines, which is just beginning to bear well. To furnish water for irrigation, Mr. A., at an expense of $200, has put in the Maacama creek a hydraulic ram which raises the water a perpendicular distance of 85 feet.

TEHAMA.

Wheat.—The Tahoe *Independent*, Sept. 26: About 25 teams are now engaged in hauling wheat from different ranches into town. Most of the grain is being stored, the farmers not being willing to take the price now offered.

TULARE.

Vacant Land—Visalia *Delta*, Oct. 1: Mr. Wm. Askew, of Clark valley, informs us that in the region south of Kings river, near the foothills, there is enough good government land to afford suitable locations for 50 families. The railroad land in the section referred to cannot be acquired until a track is extended from Goshen in the direction of Panoche Pass. The building of this line at the present time is highly improbable.

There is no doubt that Tulare county presents a larger area of good government land, open to pre-emption and homestead, than is to be found in any other locality in the State. It is the best watered and timbered; and we shall soon begin to realize that, considering its natural advantages, the cheapness of land and the natural influx of population, we will be the most favored county in the State.

On the ranch of Mr. Harding, on the plains a little south of Lower Tule, we lately noticed some experiments in gardening which are worthy of mention. He has an enclosure of an acre or so, and a windmill of his own construction. From this place he has obtained a wonderful amount of vegetables, alfalfa and other products which were planted to test the climate and soil. At the time we were there he had watermelons, the second growth of potatoes full half grown, washtubs full of cucumbers and some squashes which we should judge would weigh 120 pounds each. And this is what grows in a country which many of our large stockmen have for years told the outside world could never be a farming country.

An opinion has prevailed among the owners of moist land on our river bottoms that a big price would soon be obtained for their ranches. We fear they are destined to disappointment. The plain lands that have been irrigated have proven fully their equal, being more free from weeds, and safe from the great curse of the moist land, malarious diseases.

Washington Territory.

The Grain Crop in Lewis county is considerably above an average. The worst feature is, nearly one-third of the wheat was slightly damaged by rain. All things considered, the farmers have done about as well as in former seasons. Very few settlers in that county have taken any trouble to raise grain, fruits or vegetables for the fair, though many will exhibit samples from their average yields. The grain raised in Lewis county is always considered good, but it might be improved.

Agricultural Items.

Four thousand tons of wheat is stored at Redwood city.

The Sacramento Woolen mill will be immediately rebuilt.

The new warehouse at Santa Barbara is about completed.

The first shipment of hops from Los Angeles was made on Monday.

San Jose on Saturday shipped a car load of fruit to Philadelphia.

The Stockton Farmers' Union shipped 415 tons of wheat on Thursday.

A new levee is being erected to reclaim the farm lands in Marysville township.

Considerable grain was damaged in the fields of Merced county by the rain of last week.

The Alden fruit-drying factory is almost completed, and will be turning out raisins by the last of next week.

Several citizens in Colusa county have recently embarked in the enterprise of rearing Angora goats.

Sacramento shipped 1,022 tons of fruit and 263 tons of vegetables East during the past three weeks.

A number of farmers in the vicinity of San Diego are preparing to engage in the cultivation of tobacco.

Buckley & Co., of Hopeton, Merced county, on Friday received 275 Spanish Merino sheep from Vermont.

Chas. E. White has sold to James Fogarty 337 acres of the Pala Rancho, near San José, for $23,133.

A number of farmers in the vicinity of San Diego are preparing to engage in the cultivation of tobacco.

A large area in Yuba and Sutter counties is being summer-fallowed this season. All farmers who possess the requisite land adopt this system of grain raising.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Oct. 6th, 1874.

For Week Ending Sept. 22d, 1874.*

Auger.—Benjamin Forstner, Salem, Oregon.

Breeching Stay for Harness. — Eugene Croughwell, Augustus Tillman and E. L. Vanderberg, S. F., Cal.

Compound Implement. — Linda H. McNair, Oakland, Cal.

Revolving Harrow.—Henry N. Dalton, Pacheo, Cal.

Elevator.—Philip Hinkle, S. F., Cal.

Ditching and Embanking Machine.—Wm. B. Hyde, Oakland, Cal.

Water-Closet and Chamber-Pot Guard.—John F. Larrabee, S. F., Cal.

Ore Concentrator.—James M. Thompson, S. F., Cal.

Reissue.

Process of Manufacturing Artificial Stone. Ernest L. Ransome, S. F., Cal.

Design.

Handles for Spoons and Forks.—Wm. K. Vanderslice and Lucius Thompson, S. F., Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

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S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Oct. 7th, 1874.

The receipts of Domestic Produce for the past week have all been large, though those of Wheat and Barley from Bay sources have been smaller than for the previons week. Those of Flour and Oats have been notably larger than for the preceding week. The receipts of Wheat and Flonr as averaged hy the last two or three weeks, wonld if continued he equivalent to 15,600,000 centals, tor the whole of the harvest year of 1874-75. Taking from this the food requirements of those supplied from this city, there would he left 14,000,-000 for export.

Beeswax—The price is still 25@27½c.

Beans—Owing to large receipts prices are low.

Barley—Is better this week, Coast Feed being worth $1.05@$1.10. All the Old Brewing in the market is held hy one house at $1.65@$1.80. There is a vessel loading for Peru. We note sales of 7,800 sks of Coast Feed at $1.05@1,07½, 1,900 at $1.10, 1,300 New Brewing at $1.15, 800 do Choice at $1.20, and 7,000 do Chevalier, private. Receipts of Coast last week 16,013 sks, of Bay 12,472 ctls.

Broomcorn—We have again to report hut few sales. Prices remain at 5c@8c.

Buckwheat—A small lot arrived this week; but there are really no quotations.

Corn—We note sales at $1.35, and a rednction of 40c when compared with old.

Cornmeal—Table remains as last week, hut will be changed hefore our next report. Feed has declined to $32.

Cotton—The first new Cotton appeared in this market about two weeks since. The price is now 18c, at which rate 15,000 lbs has been sold last week. The crop is at present estimated at 600,000 lbs, of which 150 pressed hales, averaging 500 lbs each, have been received thus far. Most of the crop this year will he taken to the Woolen Mills, if any is left it will be exported to England.

Feed—Bran has declined to $16 and Middlings to $26. Oil Cake Meal remains unchanged.

Fresh Meat—Pork is cheaper than last week—on foot hy ½c, dressed hy ¼c. Beef and Mutton have sustained no change.

Fruit—California of all kinds is firm. Tropical Fruit is cheaper than last week.

Flour—Receipts this week have aggregated 46,752 qr-sks,and exports 16,057 hhls,including the cargo of the 'Cleta''—16,583 hf-sks—to Cape Town, South Africa. The price has receded to $5.12½ as the highest quotaion for Baker's Extra, and Superfine can be hought at the City Mills for as low as $4. We note sales of 1,000 hhls of Golden Age Extra for Central America, 2,000 of Baker Shipping, hy the same Mill for Batavia, hy the "Helena" and "Anna;" 1,100 hbls and 4,400 qr-sks of Extra, and 50 tons and 2,000 qr-sks Superfine, hy the National Mills. All for export.

Game—Hare is scarce and has advanced this week 50c a dozen. Small Ducks have also advanced slightly.

Hides—Are in good demand. We note sales of 2,000 at current rates.

Hay—The price has not changed during the week. We note sales of a cargo at $18, 30 tons of medium Wild Oat at $2.50, 25 do at $13.50, and 25 do Tame Oat at $12.50.

Honey—Receipts large, hut most of it is shipped East. Four car loads have been sent recently.

Hops—Are selling at 30@32½c wholesale, and 35@37½c jobbing. The shipments East still continue.

Nuts—Cocoanuts have heen receded again to $60 per thonsand. No change in other kinds, for which there is very little demand.

Onions—Yellow have still further receded to 70@75c.

Oats—Last week's receipts were large, 5,578 centals of Bay, and 20,174 sks of Coast. Prices of low grades have shaded off 5c; though Bay Choice has advanced 5c. A sale of 12,000 sks has been made for Melhourne, at $1.45. Other sales have been 2,000 sks Light, at $1.40; 400 do good Feed, at $1.50; 500 do, at $1.42½; 200 do, at $1.47½: 500 do good Choice, at $1,.52½@$1.57½; 100 do Choice, at $1.62½; 800 good do Super, at $1.65 Inferior, at $1.30.

Potatoes—Sweet Potatoes have declined 12½c, while other kinds have improved by 12½c. Receipts last week of Coast and Bay, 15,016 sks. Sales of 2,700 sks Pigeon Point, at $1.17½@$1.20; 200 do Cnffee Cove, at $1.15, 500 do Half Moon Bay, at $1.07½, and 100 do Sweet, at $1.75.

Poultry—Of all kinds is cheaper than last week.

Rye—Remains at $1.02½ Receipts of Coast 595 sks.

Seeds—Receipts of Flaxseed: Coast, 1,390 bags; Bay, 455 do. No chauge in prices.

Tallow—Still remains dull at 6½@7½c.

Vegetables—Are increasing in price as the supply lessens.

Wool—The prices quoted are merely nominal; they represent the views of buyers. There is little comparatively heing sold, the rates 2c@3o above the view of buyers, and nothing of coosequence will he done until the reduction is made. We note sales of 100,000 lbs of burry Fall, a ronnd lot at 12c@14½c; 175,000 do, at 14c@20c, and 50,000 do, at 17c@22c. Receipts in the city last week, 4,722½ hls.

Wheat—Quotations this week are a little firmer, and a sale has been made at 2½c ahove, our quoted rates which are $1.40@$1.45 for Shipping, and $1.45@$1.50 for Milling. The price in Liverpool has slightly declined—2c on the higher grade of Average California, hut the low grades remain the same. The following are the telegraphic quotations for October the 6th, for the past three years:

Year.	Price.
1874	$2 43@$2.49
1873	3.06@ 3.10
1872	3.16@ 3;20

This shows a falling off in the Liverpool market of 62c as compared with 1873, and of 72c as compared with 1872. We note sales this week of 12,400 sks Shipping, at $1.40; 7,300 do, at $1.42½; 15,800 do, at $1.47½; 2,300 do Choice Milling, at $1.50; 1,000 do, at $1.62½; 9,500 do Shipping, at $1.45, and 1,200 do Coast, at $1.37½. Receipts this week aggregated 215,399 centals oi Bay, and 10,776 sks Coast. Exports equalled 125,637 centals, as follows:

Ship.	Destination.	Cargo.	Value.
Mary Edey	Cork	11,915	$18,500
Madame Demorest	London	6,732	10,000
Talisman	Liverpool	30,235	48,456
Emille	Cork	24,959	37,000
Condor	Callao	13,698	23,229
British Sovereign	Liverpool	38,098	57,650
Total		125,637	$194,835

Of this the cargo of the "Mary Edey" was shipped on the 30th September, the halance in this month Shipments for the last three months, 1,800,100 ctls, worth $1,987,500. Exports of Flour for the past three months equaled 82,800 hhls, worth $410,200. The following is the latest English dispatch:

LONDON, October 6th.—The Mark Lane Express says: There was a considerable rain fall at the close of the week which has long heen wanted to mitigate the effects of a protracted drought. Wheat is still declining, though carefully prepared statements do not show the crop to he much ahove the average as to quantity or quality. Prices are declining over the entire continent. Arrivals from Odessa are light and unsatisfactory. It seems that no Egyptian Wheat is expected.

DOMESTIC PRODUCE.

WEDNESDAY M., Oct. 7, 1874.

BEANS.			
Beane, em'l wh. lb	3¼	@	—
do. bntter	4½	@	—
do, heyo	2¼	@	—
ao, pink	2	@	—
ao, pea	—	@	—
BROOM CORN.			
Per ton	$100	@	160
COTTON.			
Cal. 1874, ₱ lb	—	@	18
DAIRY PRODUCE			
Butter. Cal. choice			
lb	50	@	55
do, good	45	@	55
dc, inferior	32½	@	45
do, firkin	30	@	35
do, pickled	35	@	42
Cheeee, Cal. new	12½	@	17
do, Eastern	12	@	17
EGGS.			
Eggs, Cal. freeh	—	@	42½
do, Oregon	20	@	25
do, Eastern	15	@	25
do, DucLs'	40	@	42½
FEED.			
Bran, per ton	—	@16	00
Middlinge	—	@ 6	00
Hay	9	00@14	00
Straw, ₱ hale	—50	@—	55
Oil cake meal	—	@30	00
Corn Meal	—	@32	00
FLOUR.			
Extra	4 50	@5	12½
Superfine	3 90	@4	30
FRESH MEAT.			
Beef, fr quality..lb	8	@	8½
ao, eecond do..	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undreesed.	6½	@	6½
do, dreeeed	8½	@	9
GRAIN, ETC.			
Wheat, coast	1 30	@1	40
do shipping	1 40	@1	50
do milling	1 45½	@1	52½
Barley, coast	1	@1	10
do brewing	1 15	@1	25
Oate, chcice	1 55	@1	70
do oommon	1 35	@1	55
Corn, White	—	@1	35
do, Yellow	—	@1	35
Buckwheat	2 75	@3	00
Rye	—	@1	02½
HOPS.			
California, 1874	30	@	32½
East'rn, '73, ch'ice	—	@	—
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey in comb	20	@	25
do Strained	7½	@	10
Pulu	9	@	10½
Onions	60	@	90
NUTS—JOBBING.			
Cal. Walnuts	14½	@	12½
Peanute per lb	7	@	9
Chile Walnuts	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'de h'rd shell	10	@	12½
do, soft	20	@	25
Filberts	17	@	18
POTATOES.			
Sweet, per cwt	1 12½	@1	25
Cuffee Cove	—	@1	20
H. M. Bav	—	@1	20
Pigeon Pt	—	@1	20
Humboldt	—	@	—
Petaluma	—	@	—
Mission	80	@	90
Salinas	50	@	70
Bodega	—	@	—
St Barbara	—	@	—
Sec. River	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per lb	17	@	18
do gobhlere	17	@	18
Hens, per dz	5 00	@6	50
Roostere, young, large	5 00	@6	50
Broilers, emall	2 00	@3	00
do large	3 00	@4	00
Ducks, tame, doz	5 00	@6	00
Geese, per pair	2 00	@2	50
Hare, per doz	3 00	@3	50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@1	75
Mallard Duoke	3 00	@ 4	00
do small	—	@ 2	00
Wild Geese, gray	—	@	—
do white	—	@	—
Dovee, per dozen	50	@	75
Prairie Chickene	—	@	—
Grouee	—	@	—
Rabbite	1 25	@1	50
do tame	5 00	@6	00
Venison, per lb	7	@	9
PROVISIONS.			
Cal. Bacon, Light	—	@	16½
do Medinm	—	@	15½
do Heavy	—	@	13½
Eastern do	14	@	16
Hame, Cal	14	@	14½
do Whittakere	—	@	17
do Duffield, ch	—	@	15½
do Plankton & Armour	—	@	15
do Boyd's	15	@	16½
do Stewart'e	—	@	16½
Eastern Should's	9	@	9½
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	14½	@	17
SEEDS.			
Alfalfa, Chili	—	@	11
do California	—	@	14
Canary	4	@	4½
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mueterd, white	3	@	4
do. Brown	2	@	2½
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	11	@	11
Timothy	12	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Mesquit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Aleike	—	@	60
WOOL, ETC.			
FALL—			
Good to choice	19	@	22
Fair grade	16	@	18
Heavy free	14	@	16
Defective	12	@	15
Hidee, dry	19	@	20
do wet salted	8½	@	9
Tallow, Crude	5	@	6
do Refined	6½	@	7½

FRUITS AND VEGETABLES.

WEDNESDAY M., Oct. 7, 1874.

In Fruit there is little change to note from last week, where the price has raised any from last quotations it has been generally in an improved condition.

FRUIT MARKET.			
Tahati, Or. ₱ M	—	@35	00
Lorite, do	—	—@—	—
Cel. do	—	—@—	—
Limee, ₱ M	—	—@15	00
Cal. Lemons, ₱ M	—	—@—	—
Australian do	—	—@—	—
do per box	—	—@—	—
do Sicily ₱ h'x	—	—@—	—
Bananae, ₱ bnch	—	@4	—
Cocoanute, ₱ 100	—	@—	—
Pineapples, ₱ dz	6 00	@8	00
Apples, ₱ box	40	@1	25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberriee ₱ lb	15	@	20
Gooseberries	—	@	—
Raepberries	—	@	—
Currants	—	@	—
do blaok	—	@	—
Apricots	—	@	—
Plums	2½	@	7
Peaches, hskt.	1 00	@1	50
do, ₱ box	—	@	—
do ext Mountain. ₱ box	5	@	8
Pears, eating, hx	—	@1	50
do Cooking	40	@	50
Crab Apples	—	@	—
Neotarines	—	@	—
Wat'rmel'e ₱ 100	6 00	@10	00
Muskm'l'e ₱ 100	5 00	@10	00
Pomegran'e ₱ 100	6 00	@ 7	00
Figs	6	@	8
Grapee, Bl'k H'g	2	@	2½
do Muscat	4	@	6
do Malavo'e	3	@	4
do Sweetw'r	1½	@	2½
do Missiion	1	@	2
do Roee of Peru	2	@	2½
do Tokay	2	@	2½
do Morocoo	6	@	8
do St. Peter	—	@	—
DRIED FRUIT.			
Apples, ₱ lb	6	@	7½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	8	@	9
Apricots, ₱ lb	10	@	12½
Plums, ₱ lb	8	@	10
Pitted. do ₱ lb	14	@	16
do Extra, ₱ lh	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	8	@	10
White, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	30	@	35
Zante Currants.	8½	@	8½
Datee	12½	@	14
VEGETABLES,			
Aeparagus	—	@	—
Beets	—	@	1
Cahhage, ₱ 100 lbs	50	@	75
Carrots, ₱ 100 lbs	50	@	75
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	—	@	7
Green Peae	3	@	4
Green Corn ₱ doz	15	@	20
Sun'nSquash, lb	—	@	—
Marro'iat Sq'sh, tn 15	00	@20	—
Artichokee, ₱ doz	15	@	25
Strinz Beans, ₱ lb	3	@	3½
Lima Beane	4	@	5
Parsnips	12½	@	15
Shell Beans	3½	@	7
Peppere, green ₱ lb	2	@	3
Okra ₱ lb	10	@	—
Okra, Greeo	6	@	8
Cucumbors, hox	75	@1	00
Tomatoes, hox	37½	@	75
Egg Plant, box	2	00	@—
Rhuharh	—	@	—
Lettuce	10	@	—

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ₱ lb*	40		
do unpared, ₱ lb†	32		
Peaches, do, ₱ lb†	12½		
do pared, ₱ lb*	30		
do do ₱ lb†	30		
Bartlett Pears, pared, lb*	50		
Peare, pared (sliced) lb*	20		
do do (ring) ₱ lb†	18		
Pears, 10-lb hoxes, family use, extra	22½		
Seckel Pears, unpar'd, lb†	12½		
Currants, stemmed, lb*	40		
do unstemmed, ₱ lb†	32½		
Royal Ann Cherries, pitted, ₱ lb*	25		
Kentish Cherries, pitted, ₱ lb	55		
Apples, pared (ring) lb†	12½		
do do (whole,) ₱ lb†	12½		
Apples, 10-lb hoxes family use, extra	18		
Plume, pitted, ₱ lb†	25		
do do ₱ lb*	40		
Rhuharh, ₱ lb†	25		
Corn, ₱ lb†	30		
Beane, ₱ lb†	60		
Potatoes, ₱ lb†	14		
Sweet Potatoes, ₱ lb†	15		
Onions, ₱ lb†	40		
Beef, ₱ lb†	40		
Tomatoes, ₱ lb†	75		
Squash, ₱ lb†	20		

*In caddies. †In hulk.

RETAIL GROCERIES, ETC.

WEDNESDAY M., Oct. 7, 1874.

Flour, Sugar, Coffee, Candles and Keroeene are cheaper. Syrup has advanced.

Butter, Cal. ch'ice	55	@	70
do oommon	40	@	55
Cheeee, Cal. lb	12½	@	17½
Lard. Cal, ₱ lb	12½	@	15
Flour, ex. fam, hl	5 00	@5	50
Corn Meal, lb	2½	@	3½
Sugar, wn. crsh'd	—	@	12
do lt. brown, lb	7	@	9
Coffee, Sharhoro'e family gr'nd, lb	32½	@	—
Coffee, green, lb	24	@	32½
Tea, fine blk, 50, 65, 75		@1	00
Tea, finst Jap, 55, 75, 90		@1	00
Candles, Admant'e	17	@	25
Soap, Cal., lb	—	@	10
Can'd Oysters, dz	2 0	@2	50
Syrup, S F. Gol'n	35	@	40
Dried Apples	8	@	10
Dr'd Ger. Prunes	15	@	17
Dr'd Figs, Cal	9	@	10
Dr'd Peaches	10	@	?
Oile. Kerosene	30	@	35
Winee, Old Port 3	50	@5	00
do Fr. Claret	1 00	@1	25
do Cal., dz. bot. 3	00	@4	50
Whieky, O.B, gal. 3	50	@5	00
Fr. Brandy	4 00	@10	00
Rice, lb	10	@	12½
Yeaet Powders, dz. 1	50	@2	00

GENERAL MERCHANDISE.

WEDNESDAY M., Oct. 7, 1874.

We report Teas dull, with a reduction of 2c on wholesale rates. Syrups are largely in demand for Eastern account. Case goods with an advence of 25c ₱ dozen. Whale Oil advanced. Nails weaker. Coal firmer, despite large receipts. Coffee firmer. Tobacco with elight advance.

BAGS.			
Eng. Stand Wht	—12½	@13	
Detrick'e Machine			
Sewed, 22x36 E	—	—@13	
do 22x36, do E W	—	—@13¼	
do 20x40, do A	—	—@14½	
Flour Sacke ½e	9½	—@11½	
" ¼e	6	—@ 7	
Stand. Gunniee, double seam	15	@—	
eingle eeam	13¾	@14	
" Wool Sacks	65	@—	
Barley Bags 24x36	—	@14	
do 23x40	—	@14½	
do 24x40	—	@15	
do 28x36	—	@16	
Oat Bags, 24x40	16	@16½	
do 28x36	—	@17	
Hessien 40-in.gds	9½	@10	
do 45	10½	@11	
do 60	—	@15	
CANNED GOODS.			
Aset'd Pie Frnits in 2½ ₱ cans.	2 75	@—	—
do Table do	3 50	@ 4	00
Jame & Jellies	3 75	@ 4	00
Picklee ½ gl	—	@ 3	50
Sardines, qr box	1 85	@—	—
do hf hoxee	3 25	@—	—
COAL—Jobbing.			
Anetralian, ₱ ton	11 00	@11	50
Coos Bay	—	@10	00
Bellingham Bay	—	@ 8	50
Seattle	—	@11	—
Cumberl'd, cks	—	@23	00
do bulk	16 00	@17	00
Mt. Diablo	6 25	@8	50
Lehigh	—	@21	00
Liverpool	10	50	@11—
Weet Hartley	13	00@—	—
Scotch	9	50	@10 00
Scranton	—	@16	00
Vancouver'e Isl	11	00	@11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ hhl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Amerio'n	19	@	20
Costa Rica per lb	19	@	22½
Guatemala	19	@	20½
Java	—	@	27
Manilla	19	@	20
Ground in oe	—	@	27
Chicory	9	@	10
COFFEE.			
Pac. Dry Cod, new	5	@	—
oases	—	@	—
do honeless	11	@	12
Eastern Cod	—	@	—
Salmon in hhle	9 00	@9	25
do ½ hhle	4 50	@4	75
do 2½ lb cane	—	@3	00
do 2lb cans	2 65	@2	75
do 1lb cane	1 75	@	—
Do Col. R. ½ h	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ hhl	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ hls	8 00	@8	50
" Extra	—	@9	00
" in kite	2 00	@2	50
" Ex mese	3 00	@3	50
" Ex mess, ½ hs	—	@12	00
Sm'k Herr'g, hx	50	@	60
NAILS.			
Assorted size, lb	4 37½	@7	50
OILS.			
Pacific Glue Co. Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No. 1	—	@1	75
do do No. 2	—	@1	60
Cocoanut	60	@	65
Olive Plagnio	5 00	@	—
do Poseel	4 75	@	—
Palm lb	9	@	—
Lineeed, raw	—	@1	05
do hoiled	—	@1	10
China nut in cs	82½	@	88
Sperm, crude	—	@1	40
do hleached	—	@2	20
Coaet Whalee	60	@	—
Polar, refined	50	@	55
Lard	1 15	@1	30
Coal, refined Pet	37½	@	—
Oleophine	20	@	23
Devoe'e Bril't	25	@	28
Long Ieland	20	@	23
Eureka	—	@	—
Devoe'e Petro'm	20	@	23
Barrel kerosene	20	@	23
Olive	4 00	@9	50
Downer Keroee'e	—	@	37½
Gas Light Oil	—	@	26
PAINTS.			
Atlan. W. Lead.	6	@	10¾
Whiting	—	@	2
Putty	4	@	5
Chalk	—	@	2½
Parie White	2¾	@	—
Ochre	2	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@2	10
RICE.			
China No. 1, ₱ lb	6½	@	6⅞
do 2, do.	5½	@	5¾
Japan	—	@	6½
Siam Cleaned	5½	@	—
Patna	5½	@	5¾
Hawaiian	7¼	@	8
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@14	00
do Common	5 00	@ 7	00
Carmen Island	11 00	@13	00
Liverpool fine	—	—@22	00
do coarse	6 00	@—	—
SOAP.			
Caetile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Cloves	45	@	50
Caseia	26	@	27
Citron	—	@	30
Nutmeg	1 20	@1	25
Whole Pepper	20	@	22
Pimeoto	—	@	15½
Gr'nd Allsp'rdz	—	@1	12½
do Caseia do	—	@1	50
do Clovee do	—	@1	50
do Mnetard do	—	@1	20
do Ginger do	—	@1	00
do Pepper do	—	@1	00
do Mace do	—	@2	00
SUGAR, ETC.			
Cal. Cube per lb	11½	@—	—
Partz' Pro. Cuhe hhl or 100 lb hxe	—	@	11¾
do in 50 lb hxs	—	@	12
do in 25 lb hxe	—	@	12¾
Circle A crushed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	—
Golden C	—	@	10½
do Rey'g grade	—	@	6½
Cal. Syrup in ble	—	@	70
do in ½ hls	—	@	67½
do in kegs	—	@	75
Hawaiian Molasses	25	@	27½
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formoea	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@1	00
Gunpo'der, Cant.	30	@	42½
do Pingeuey	50	@	90
do Moyune	65	@1	25
Y'ng Hy., Canton	28	@	40
do Pingeuey	40	@	70
do Moyune	65	@	85
Japan, ½ cheste, hulk	30	@	75
Japan, lacquered hxs, 4½ and 5 lbe	45	@	67
Japan do, 3 lb hxe	45	@	90
do pl'n hx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navye	50	@	55
Dark do	50	@	55
Dwarf Twist	65	@	70
12 inch do	60	@	70
Light Preseed	65	@	75
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Ohio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine ot che'g, gr	8 50	@9	25
Fine out chewing, hue'ts	.75	@	90
Banner fine cut	9 00	@9	25
Enreka Cala	—	@9	00
TURPENTINE.			
Eastern	65	@	70

METALS.

WEDNESDAY M., Oct. 7, 1874.

American Pig Iren, ₱ ton	—	@	42 00
Scotch Pig Iron, ₱ ton	42 00	@	46 00
White Pig, ₱ ton	—	@	42 00
Oregon Pig, ₱ ton	—	@	46 00
Refined Bar, bad aseortment, ₱ lb	—	@	3½
Refined Bar, good aesortment, ₱ lb	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5¾
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	—	08 @	09
Horse Shoee, per keg	7	50 @	8 00
Nail Rod	—	9½ @	—
Norway Iron	—	8 @	—
Rolled Iron	—	6 @	—
Other Irone for Blackemlthe, Miners, etc.	—	— @	4¼
COPPER.			
Braziers'	—	31 @	— 32
Copper Tin'd	—	45 @	—
O. Nisle'e Pat	—	50 @	—
Sheathing, ₱ lb	—	— @	— 24
Sheathing, Yellow	—	— @	— 25
Sheathing, Old Yellow	—	— @	— 12½
Composition Nails	—	24 @	—
Compoeition Bolte	—	24 @	—
TIN PLATES.—			
Platee, Charcoal, IX ₱ hox	13	00	@ 14 50
Platee, 1 C Charcoal	12	75	@ 14 50
Roofing Plates	11	50	@ 14 00
Banca Tin, Slahe, ₱ lb	—	31	@ — 33
STEEL.—English Cast, ₱ lb	—	10	@ — 25
Andereon & Woods' American Cast	—	10	@ — 17
Drill	—	18	@ — 22
Flat Bar	—	18	@ — 22
Plough Points	—	16	@ — 17
ZINC.	—	—	@ — 11
Zino, Sheet	—	—	@ — 11½
NAILS—Assorted eizee	—	5¾	@ — 8
QUICKSILVER, per lb	—	—	@ 1 45

LUMBER.

WEDNESDAY M., Oct. 7, 1874.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00
Rough refuee, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Ruetio, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuee, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch eiding, ref. M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Plokete, rough, p'ntd	16 00
Piokets, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

PUGET SOUND PINE—Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal toot	1c
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾
REDWOOD—Retail.	
Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	25 00
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	24 50
Half-inch surfaced, M	40 00
Rustio, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

LEATHER.

WEDNESDAY M., Oct. 7, 1874.

Leather is now held quite firmly. The fall trade ie ful as fair as wee anticipated.

| | | | |

Stock Notices.



SULTAN SECOND.

See description in Pacific Rural Press January 4, 1873.

Address N. GILMORE,
eow El Dorado, El Dorado County, Cal.



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,
13v7-eow-tf Watsonville, Cal.



300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

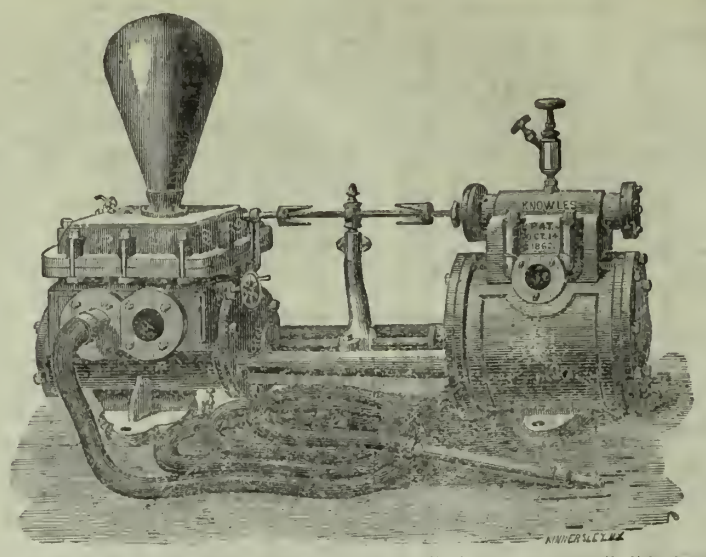
5v8-3m THOS. BUTTERFIELD & SONS.

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

KNOWLES' PATENT STEAM PUMP.



It has no Cranks or Fly-Wheel, and has no dead points where it will stop, consequently it is always ready to start without using a starting-bar, and does not require hand-work to get it past the center. Will always start when the steam cylinder is filled with cold water of condensation.

CENTRAL PACIFIC R. R., OFFICE OF THE GEN'L MASTER MECHANIC,
SACRAMENTO, Cal., January 14, 1873.

A. L. FISH, Esq., Agent of the Knowles Steam Pump—Dear Sir: In reply to your inquiry as to the merits of the Knowles Steam Pump, in use upon this road, I will say that it gives me great pleasure to report that they have performed their work well whenever called upon. In no instance have they failed. We have now over 30 of them in use on this road as fire engines, and pumping water for shop and station use. I consider the Knowles Steam Pump the best in use, and prefer it to any other. Yours, truly, A. J. STEVENS, General Master Mechanic.

A. L. FISH, Agent Knowles' Steam Pump—Dear Sir: In answer to your inquiries, we state that the highest award for Steam Pumps at the Eighth or last Mechanics' Fair in San Francisco, was a FIRST PREMIUM and Diploma, awarded to Knowles' Patent Steam Pump, as published in the Official List September 23d, 1871.

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W. H. WILLIAMS, Sec'y Board of Managers Eighth Industrial Exhibition, M. I.

WE BUILD AND HAVE CONSTANTLY ON HAND

The Largest Stock of Pumps in the World,

And for Every Conceivable Purpose.

SOLE AGENT ON THE PACIFIC COAST FOR THE

CLAPP & JONES SUPERIOR STEAM FIRE ENGINE,

Challenging the World!

THE CELEBRATED BOOMER PRESS,

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Nos. 9 and 11 First Street, San Francisco, Cal.

P. S.—All kinds of new and second-hand Machines on hand. 4v29-1am-bp-3m

Patent, First Premium Windmills & Horse Powers,

W. I. TUSTIN, Patentee.

Pioneer and Largest Manufacturer of Machinery (in this line) on the Pacific Coast.

FACTORY, Corner Market and Beale Streets,
SAN FRANCISCO.

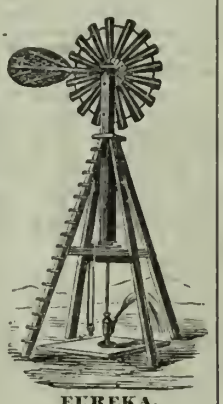
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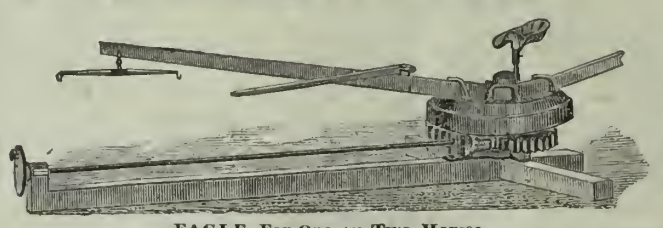
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ECONOMY—For One or Two Horses.



EUREKA.



EAGLE—For One or Two Horses.

We have made the manufacture of Pumping Machinery a specialty for the past twenty-four years in California. Received all the First Premiums awarded by the Mechanics' Institute for the past seven years, in our line.

Our Windmills are preferred by the great Railroad Companies of this coast, and are in general use along their line, giving perfect satisfaction, which can be proved by reference.

9v7-1am

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P. S.—*Special rates to members of the Grange.*

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H. K. CUMMINGS. 1858. H. H. BALSTON. 1873.

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Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have no interests that will conflict with those of the producer.

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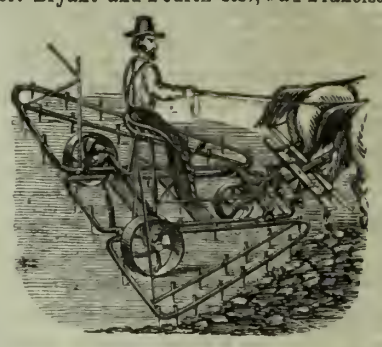
Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
v7-2m-3m Cor. J and 10th Sts., Sacramento.

THE CELEBRATED MITCHELL WAGON



[15v7-3m]

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

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CREGO & BOWLEY,

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CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
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MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

Took the Preminm over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the constrnction of Gang Plows. It is quickly adjnsted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
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—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.
Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

POISON! POISON!

WAKELEE'S PATENTED
Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

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Cor. Montgomery and Bush streets, S. F.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,
EGGS,
POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
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Smoked and Salt Fish,

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OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, ETC.

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(Successor to E. E. Moore).
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PETALUMA, CAL.

Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

Address, W. H. & G. B. PEPPER,
21v6-1y Petaluma, Sonoma Co., Cal.

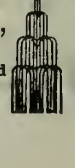
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JOHN DANIEL & CO.,
Manufacturers of and Dealers in

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21v2-1y



THE NEW WINCHESTER
REPEATING RIFLE,

(Model of 1873.)

San Francisco Agency.



The Winchester Repeating Arms Company, of New Haven, Conn., have recently made still further valuable improvements on the celebrated Henry Rifle, which now make it, beyond doubt, the most magnificent weapon in the world. They have just introduced this beautiful arm upon the market, and their San Francisco Agency is fully supplied with all the various styles, together with cartridges for the same.

In the manufacture of the new gun, iron mountings (blued or case-hardened) have been substituted for gun metal or brass, thus increasing the strength of the arm and decreasing its weight. It is also now so constructed as to carry a Central Fire Cartridge holding one-third more powder than used in the cartridge of the model of 1866, thereby greatly augmenting the power and accuracy of the weapon.

THE SPORTING RIFLE

Has a Set or Hair Trigger which can be used at will—set or not set, as preferred. All the arms have a sliding lid which covers the opening in which the Carrier Block moves up and down. This lid, by the action of the Carrier Lever, is always open when the gun is fired, and closed by hand when the firing ceases, thus protecting the lock and inner works of the gun from dust and rain.

Various other improvements, which it is not necessary to mention in detail, by which the strength of the several parts is increased and the general appearance of the gun improved, have also been made.

There is now a greater variety of the Sporting Rifle than heretofore. They can be had with a length of barrel (round or octagonal) ranging from 24 to 30 inches, fitted with Globe and Peep Sights, or any other kind in use.

The Carbine is now made with all the improvements above referred to, except the set trigger.

The Sporting Rifle and Carbine will also be made as Extra Arms, Gold, Silver or Nickel Plated, plain or beautifully engraved.

MILITARY ARMS.

Still further improvements have been accomplished which overcome all objections heretofore raised against the Repeating Rifle as an army gun. It is safe, certain and effective in fire, whether used with deliberation or during excitement in action, and no more motions are required than in operating the old model gun.

More extended and minute particulars concerning the new gun can be had by writing or applying to the San Francisco Agency for circular.

CARTRIDGES.

The trade is notified that the Shells of the Central Fire Cartridge for the new gun can be reloaded, and that the Winchester Repeating Arms Company are manufacturers of every description of Cartridge used for Carbine, Rifle and Pistol of any make, and that the Company have a full stock constantly on hand at their San Francisco Agency

JOHN SKINKER,
Sole Agent for Pacific Coast,
NO. 108 BATTERY STREET, SAN FRANCISCO.

NOTE.—Also Agent for the Dupont Powder Company and Eagle Safety Fuse Manufacturing Company.
eow-bp

THE ALDEN
Fruit Preserving Company
OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R.R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rate. Storage taken at lowest current rates. 4v8-tf

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SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.
Works, King street, bet. Second and Third. fe15-eow



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 45 Cal. Market, S.F

PEACHES. An enormous stock of trees, exceedingly cheap, embracing the BLOOD-LEAVED RIVERS', and other new varieties. Our assortment of FRUIT and ORNAMENTAL TREES is unusually complete. New Trade List sent free.

HOOPES, BRO. & THOMAS,
Cherry Hill Nurseries,
10v8-6t Westchester, Pa.

Italian Bees,

For sale in Harbison Hives, in quantities to suit. Also young tested Queens, bred from imported mothers. Safe arrival and satisfaction guaranteed. Terms low. Address,

A. LOVETT,
sep12-tf Sacramento, Cal.

PURCHASERS please say advertised in Rural Press.

Shipping---Vessels Up.

FARMERS' LINE.

THE SPLENDID IRON SHIP,

CITY OF YORK,

1255 Tons. A 1.



AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co.

RODGERS, MEYER & CO.,
aug15-tf 212 Battery street.

IMPORTANT TO FARMERS!

X Line to Liverpool.

DIRECT.

The New A 1 Clipper Ship

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Is intended to sail with dispatch.

Freight taken in lots to suit shippers.

Apply to E. E. MORGAN'S SONS,

320 California Street,
San Francisco.

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FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

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ap25-tf N. E. Cor. Montgomery.

EUREKA WAREHOUSE,

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY, 1874.

First m'th 50 cts ₱ ton } If delivered on Eureka wharf.
Afterwards, 30 cts ₱ ton }

Season Rates, fixed at time of storing, $1.50 per ton.

If hauled with teams, first month 25 cts per ton.

Afterwards, 30 cts per ton. Second Weighing, 10 cts.

Grain received on Dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to E. E. Morgan's Sons, S. F.

sep19 A. J. GOVE, Manager.

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER,
22v6-1y President Board of Directors.

ANNUAL MEETING.

The annual meeting of the stockholders of the Grangers' Bank of California, for the election of Directors, will be held at the office of the Bank on Tuesday, the 13th day of October next, at 1 o'clock P. M.

C. J. CRESSEY, Vice-President.
415 California street
San Francisco, Sept. 8th, 1874. sep12-4t

Davis & Sutton, Commission Merchants,

For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.
3v8-1y

A. W. THOMPSON,

Attorney at Law,

No. 6 Leidesdorff street, - - San Francisco
sep12-tf

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St.,
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Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The RURAL PRESS—established Jan., 1870, has been thoroughly a farmer's paper—" first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfluities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast; that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation, might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the RURAL has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than have been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the RURAL PRESS.

The S. F. Market Reports

Will receive greater attention in the department of DOMESTIC PRODUCE than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the PACIFIC RURAL PRESS. We commence the new year with a regular circulation of

Over 5,000 Copies,

A far greater issue than that of any weekly on this Coast, independent of a daily publication. If our friends will continue to " help us help ourselves," we hope to reach a circulation of 8,000 this year, and do a correspondingly greater service of good. While we have the greatest advantages and can make by far the best weekly for

Agriculturists on This Side of the Continent,

We cannot expect one-half so large a circulation as journals in older and more populous districts. Consequently readers cannot rightly expect such a paper here at Eastern rates.

No Premiums But a Good Paper

Do we offer. A flashy chromo (or cheap map), with an ill suited paper, will hardly satisfy the farmers of this Coast, whose time is too precious for trifling. To many of you the benefit of a reliable and valuable paper should reach a hundred fold its cost, while to all a poor journal would be dear at any price.

Sample Copies Furnished Free

On receipt of stamp for postage.

Agents are Wanted

Who will do more or less active canvassing. To such we will furnish free samples and pay liberally for their services.

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Six months 2.25
To Granges and Farmers' Clubs, furnishing club lists, $3 per annum.

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This Office.

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Machine for Engraving

A portion of the work, which can be finished thereby more perfectly than by the eye and hand alone. Our patrons can depend upon first-class work always, and at reasonable prices. Samples can be seen at our office.

DEWEY & CO.

Hints to be Remembered.

A note dated on Sunday is void.
A note obtained by fraud, or even from one intoxicated, can not be collected.
If a note be stolen it does not release the maker—he must pay it.
An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.
A note by a minor is void.
Notes bear interest only when so stated.
Principals are responsible for their agents.
Each individual in partnership is responsible for the whole amount of the debts of the firm.
Ignorance of the law excuses no one.
It is a fraud to conceal a fraud.
The law compels no one to do impossibilities.
An agreement without consideration is void.
Signatures in lead pencil are good in law.
A receipt for money is not legally conclusive.
The acts of one partner bind all the others.
Contracts made on Sunday can not be enforced.
A contract made with a minor is void

CALIFORNIA is admirably supplied with periodical agricultural literature. The RURAL PRESS, with which we are most familiar, gives a weekly compendium of information, theoretical and practical, relating to husbandry, which we sincerely hope is appreciated to the extent of an ample support of that paper. If there are others equally meritorious we hope they are also well sustained.—*Benicia Tribune.*

RICH FARMING AND DAIRY LANDS

In Alameda County for sale at a bargain.

The undersigned offers for sale 800 acres of farming and grazing lands in Alameda County, lying between the Bay of San Francisco and the Central Pacific R. R., and equi-distant from Niles, Warm Springs, Decoto and Washington stations. The land is rich alluvial loam, and is the best locality in the State for vegetable gardening and dairying, as rapid and frequent communication with the city is afforded by the railroad and steamers, touching at a wharf near the property. Apply to B. B. MINOR,
Room No. 4, No. 411½ California street, S. F., Cal.

MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to
B. F. CLAYTON, San Jose.
Or O. J. CLAYTON,
10v7-6m Clayton, Contra Costa Co., Cal.

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator-429 Montgomery street, San Francisco. 2v7-6m

GEO. F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

And Tree Seeds,

GARDEN TOOLS, TREES, PLANTS, Etc.

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Between Battery and Front.

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—CELEBRATED—

Worcestershire Sauce.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

To be obtained of **Messrs. CROSS & CO.,**
San Francisco.

M. EYRE, Napa, Cal.



Bronze Turkeys, Emden Geese,
Brahmas, Houdans,
LEGHORNS, and GAMES.

Black Cayuga and Aylesbury Ducks,

Bantams, etc.

Eggs, fresh, pure, true to name; well-packed so as to hatch after arrival.

ILLUSTRATED CIRCULAR AND PRICE-LIST FREE.

14v9-16p-tf.

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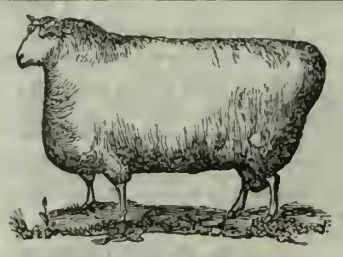
IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.

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A fine assortment of imported Rouen and Aylesbury Ducks just received; price, $8 per pair. Warranted of the best strains in the country. Send stamp for circular to

GEO. B. BAYLEY,
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Cotswold Rams,

Half, three-quarter and seven-eighths (⅞) from imported sires. Lambs—yearlings and upwards—for sale by **LEWIS & McCRACKEN,**
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FINE FARM FOR SALE.

160 acres good farming land adjoining the town of Petaluma, well watered, fenced and improved, with a comfortable house, barn and outbuildings, orchard, vineyard and garden. Title U. S. patent. Price $8,000. Apply to

BERRY & CAPP, 418 Montgomey St.,
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If there is a rancher of means who would desire a good tenant and the privileges of a home with a small family, he can secure such by addressing W.,
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Everything furnished by owner first year. References exchanged.

FARMERS write for your paper.

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

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W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

WM. QUINN, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

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J. R. JEWELL, Petalnma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, OCTOBER 17, 1874. [Number 16.

Call From a Hop Grower.

Mr. J. A. Knox, of Sanel, Mendocino county, called at our office this week and gave us some interesting information on the subject of his favorite crop—hops. We learn that the hop crop of Mendocino county is harvested and baled, and a large portion of it is coming into market. The crop has been rather uniform as to quality, but quite variable in regard to the yield; varying from 2,200 pounds, to 800 pounds per acre. The picking has been almost exclusively done by Indians, they receiving from 50 to 75 cents per day for their services. There are but few dry-houses in this hop district. The growers can have their hops dried and baled for two and a half cents a pound, and they prefer doing so to assuming the labor and expense attending this process. They have thus far used the hand press, but propose to substitute the horse-power press, by means of which the hops may be pressed without tramping, thus avoiding the crushing of the blossom. This is a consideration of no little importance, as the hops by being broken to pieces in the tramping process, are less marketable in appearance, and are liable to lose a portion of their strength and flavor.

The hop growers in this district use willow mostly for poles. They find that the loss by the breaking of poles at the butt, caused by being inserted in the ground, is considerable, and are seeking to avoid this by using some wood preservative in which the end of the pole may be immersed before inserting it in the ground. This object, it would seem, should not be attended with much difficulty. A coating of tar simply would impart a preserving quality to it.

Mr. Knox and his neighbors practice clean cultivation in their hop yards, and hill them moderately. They have not, thus far, seen any indications whatever of hop lice or honey dew, though they have discovered decaying roots in some cases. This is probably caused by the ravages of the hop grub. In exterminating this pest, they will find the skunk a most efficient ally. In the hop districts of New York this animal is considered a privileged character.

From what we can learn of the history of hops in the Russian river country, we are confident that there is quite an extent of country there particularly favorable to the production of this crop. The soil is favorable, poles can be procured at a moderate cost, pickers are abundant, and the distance from market is no greater than that of the most favored hop districts of New York, and is not more than half the distance that the hop growers of Wisconsin are compelled to haul their crops. We are assured that, even under the present system of expenses, our Mendocino friends can produce a ton of hops at as low rates as they can be grown in any of the Atlantic states. It is evident that some of the incidental expenses—picking for instance—may be reduced; and we shall thus be able to produce, within a very few seasons, cheaper, as well as better hops, than our Eastern competitors.

It may very naturally be expected that the present encouraging out-look for California hop growing will induce an increase of production which will result in depreciation of prices, to an extent that will render the crop unremunerative; but such a depression will soon produce a corrective reaction. Our pioneer hop growers with whom we have conversed, are prepared for such changes, and are possessed of too much pluck and good sense to plow up their yards in disgust during a period of over production.

An Interesting Discussion.—The readers of the Press this week will find among other interesting matters, the report of a very interesting discussion of the fruit question, by a convention of fruit-growers at Stockton, on Sept. 9th. We scarcely know of an occasion where the current issues in the fruit question were so thoroughly and so ably discussed. It may be read with much profit.

"Crawford's Late" Peach.

We give an illustration this week of "Crawford's Late" peach, which has no rival as a yellow-fleshed variety. Its large size, beautiful appearance and fine flavor make it a desirable favorite among growers. The fruit is large and roundish with a yellow suture. The skin is yellow with a dark red cheek, and the flesh is a deep yellow with reddish tinge at the stone. This peach ripens from the middle to the last of September. Peaches justly claim a large share of attention, not only by those benefited by its cultivation, but by those who have only a small plot of ground devoted to fruit. The ease with which they are raised, their generous return for the slight attention, and their unequaled flavor render them one of the most desirable fruits for the orchard or garden.



"CRAWFORD'S LATE" PEACH.

Additions to our list of good late peaches are particularly desirable at present, and this promises to be really an acquisition.

A New Regent of the University.—Wm. Meek, of Eden, Alameda county, has been appointed Regent of the University by the Governor in place of John W. Dwinelle resigned, whose term of office would have expired in March, 1876. Mr. Meek is one of the oldest and most successful agriculturists on the Pacific coast. He emigrated to Oregon as early as 1845, we believe, and after a successful prosecution of agricultural occupations there for three years, came to California in 1848. His large farm in Alameda county has always been devoted to diversified and liberal culture.

Grape Syrup.—Boiled cider for apple sauce is well known and appreciated by all our New England readers, but perhaps all are not so well informed of the fact that grape juice boiled down to a proper consistency, forms a more delicious syrup. Will some of our lady correspondents tell the Rural readers of their experience in making it?

Hogs at the Fair.

In the reports of the numerous agricultural fairs in this as well as in the Eastern States and in the Territories, it is noticeable that among the various departments of farm-stock that of hogs has been recognized as exhibiting decided improvement. In no department was improvement more needed; and in none will the results be so immediately available. The country at large will soon realize the benefits from producing cheaper and better pork. As an instance of the improvement of which we speak, we would mention the exhibit of hogs at the Washington County, Oregon, fair, where, among other fine hogs, a litter of fine thoroughbred Berkshires was exhibited by J. P. Whiting, of Portland. For a pair of these pigs, only three months old, $40 was offered—pretty good evidence of the appreciation of the right kind of stock.

Crowded Again.—Our readers will again observe—and will undoubtedly again excuse the circumstance—that "outside pressure" forces us to break in on our usual weekly routine, and curtail our regular departments. The space that has of late been granted to reports of fairs and other important current topics, has not been given grudgingly; our only regret being that we cannot, in addition to these, set before our readers their usual feast. We will take this opportunity to inform the friends of the Rural Press that we now possess the means for making the Press the coming winter more readable than ever. It has undoubtedly been observed that we are steadily securing desirable contributors to the various departments of our paper; and we feel safe in assuring our readers that the Rural Press shall not be surpassed by any publication to which our friends may turn during the rainy days and long evenings of winter, in useful and entertaining reading.

The present is a good time to subscribe for the Rural Press.

San Jose Stock Sale.

In regard to the sale of blooded stock which was announced to take place at San Jose during fair week, the *Mercury* of Oct. 8th, reports as follows:

"Pursuant to announcement in the *Mercury*, a large crowd of people assembled at the Stock Grounds yesterday morning to witness the first grand sale of thoroughbred stock, under the auspices of the State Thoroughbred Cattle Breeders' Association. Some were attracted to the Grounds out of curiosity to see the stock, and others with a view to making purchases. The different animals offered for sale were from the best thoroughbred herds of the coast, some of which were bred by the best breeders in America. Several head of the cattle were recently imported from the celebrated thoroughbred herds of Paris, Kentucky. Previous to the sale addresses were made by Mr. Curtis, Secretary of the Association, Col. Younger and Mr. Bland, showing the importance of the sale, and urging upon all, especially breeders, the value of securing a superior class of animals for the improvement of their herds. The speakers characterized the event as the opening of an important era in the stock business of the State. The sale was conducted by J. C. Bland, auctioneer, of the firm of Bland & Hughes, and will be resumed by him again to-day, when it is expected that still heavier sales will be made. The stock offered yesterday was disposed of at from 33½ to 50 per cent. of what the owners would have asked at private sale. They make these sacrifices in order to encourage the enterprise which they think is destined to become of great value to the people of the State.

The first animal offered was Frank, a white bull, owned by Jesse D. Carr of Monterey county. He was calved May 23d, 1673, and was got by Romeo. A. A. Weatberal of Monterey was the purchaser; price, $450.

Col. Younger's red roan bull, Oxford Lad, was next sold. He was calved Oct. 4th, 1873, and was got by Thorndale. He was purchased by Mr. Curtis for $120.

First Chance, a red and white bull, the property of Cyrus Jones & Co., of San José, was purchased by Mr. Blake for $170.

Pat. Reardon's red and white bull, Tom Moore, was sold on a reserved bid for $300. He was calved May 20th, 1872; got by Tyrone, and weighs 1,960 pounds.

Wm. Quinn's roan heifer, Jenny Linn, was sold to Jesse D. Carr for $50. She is of graded stock, and is 15-16 Durham. Quinn's roan cow, Frederica, three years old, was also purchased by Mr. Carr; price, $130.

At the sale to-day, between 10 and 11 A.M., several spans of fine carriage horses will be sold. The hours between 10 A.M. and 2 P.M. will be devoted to the sale of thoroughbred cattle. Following is a partial list of the cattle to be offered: By Jones & Co—Mazurka Star, Lucy Ann 10th, Lorena 3d, Cherry 6th, Luda 5th, and Fairy Queen; by Col. Younger—Red Rose of Woodlawn, Rose of Sharon, Gem, and Fairy Queen. Numerous other thoroughbreds will also be sold by Messrs. Carr and Quinn.

After this sale there will be offered at auction one thoroughbred Hambletonian horse which has trotted in 2:40; also one thoroughbred Patchen, a four-year-old, which has trotted in 3:09. In addition to these, a number of fine sheep, goats and hogs will be offered for sale."

More About That Cotton Sample.—We published last week a notice of cotton grown on the Friedlander & Chapman place, Borden Station, Fresno county, omitting intentionally to state the reported yield per acre, as we suspected some inaccuracy about it. We have since interviewed one of the proprietors of the ranch on the subject, who authorizes us to state that the yield was at the rate of 600 lbs. per half acre. He states that on his visit to the ranch last week he saw the cotton still growing vigorously, and bolling out.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Do Bees Eat Grapes?

EDITORS PRESS:—That close observer of nature, Aristotle, some two thousand years since, remarked "that bees hurt no kinds of fruit, but wasps and hornets are very destrective to them." This has been the experience of fruit-growers in all countries, indeed it is impossible for a bee to puncture the skin of even the most delicate grape, its jaws which are *flat* and shaped something like the two jaws of a vise, are specially adapted for the manipulation of wax, whereas wasps and hornets which secrete no wax, have strong *saw*-like jaws, for cutting the woody fibre with which they build their combs and can easily penetrate the skin of the toughest fruits.

Dodant, the French apiarist, states that bees are unable to cut the skin of any kind of fruit. He has placed the most juicy grapes, pears, cherries, plums, etc., inside the hives, but they were never attacked by the bees, if they were not previously scratched. The experiment was frequently made and always with the same result—it was found invariably that the *first* cutting was made by wasps, hornets or birds, or caused by the rain falling when the fruit was ripe.

If the movements of bees are closely watched they will undoubtedly be found in fruit, but they are only on those that other insects or birds have already punctured, or where there is a crack or a spot of decay, and the observer will perceive that when a bee settles on sound fruit that after a careful examination they leave with evident disappointment. Instead of being injurious to the orchardist the bees are a positive good, they gather up the fragments, as it were, of fruit already tapped, that nothing be lost; they are also exceedingly useful in carrying pollen from one tree to another and thus insure a more perfect fertilization of the fruit, indeed there are some plants to which bees are absolutely necessary for fertilization.

Wasps and hornets are the great pests of fruit-growers, and as only the mother wasp or hornet lays over through the winter, she should be closely watched and destroyed in the early spring. Indeed, so alive to this fact are European orchardists that they offer a small premium for all the wasps and hornets destroyed in their vicinity.

Local Items.

For the first time this season we had a touch of the "desert wind" yesterday. It dried up things considerably—105 deg. in the shade for several hours—but about 5 o'clock P. M. a glorious sea breeze reached us here, and the desert wind was a thing of the past. Our Sweetwater valley is highly favored in many respects, well watered and near enough to the sea to have the advantage of a modified sea breeze, and we can grow every thing, even "buckthorn." I have some tea plants doing well and am gathering the second crop of figs (white Smyrnas) from trees that were only cuttings last year. How is that for "Buena San Diego."

J. C. MOORE.

Riverdale, Sweetwater Valley, Sep. 29, 1874.

The World Our Fruit Market.

EDITORS PRESS:—The excellent article of "A. W." in the RURAL PRESS of Oct. 3d, suggests further discussion of some of the points so ably treated there.

The Condition and Prospects of Our Fruit Market Are not difficult to understand when we consider that we have a consuming population of less than one million and a producing capacity sufficient to feed many millions. Even this limited market we must share with the Sandwich Islands and the Mexican coast. We used to wonder why fruit should be allowed to waste in Brooklyn or just across the river from Sacramento and that so small a part even of the fruit easiest of access, should ever find its way to market. We used to be 400 miles from market, but allowed no fruit to waste because we sent it to a city whose market had a thousand outlets, and they could scatter a surplus from the West Indies to Nova Scotia. But the case is changed when the fruit must be used in one city or thrown in the bay. So we may safely rest in the belief that our market for fresh fruit is always in danger of a glut, and only the owner of some choice locality or rare fruit, can depend upon fair prices either now or in the future.

What are the chances for increasing the market? Place your fruit in such a condition that you have the world for a market, and your own time to take your price. The canning business does this but here in the country it takes fourteen cents for a can to hold the peaches that we can buy for three. Then there is always ten per cent. of loss from cans bursting, and these items with freight, and the many profits before canned goods reach the consumer, make them fancy groceries for which the demand must be limited to the wants of the wealthy.

Let us turn to dried fruit. We have the best climate in the world for drying fruit out of doors; but while it is drying insects deposit their eggs and do their best to make the article as perishable as fresh fruit. Then the price of sun-dried fruit is so low that many take no pains to produce a good article and we have sweet and sour, green and ripe, bruised and sound, filthy and clean, all in one motley heap. When a butter dealer runs his tryer through a firkin of butter the poorest layer in that firkin establishes the price of the whole. So it has been with dried fruit until the very name of dried fruit is repugnant to a large class of consumers. Those who dry fruit in the sun must count the labor nothing and the fruit nothing. Then they will make a profit.

So the price keeps the canned goods from furnishing the world market, and the insects and poor quality of product limit the outlet for sun-dried fruit. Now gentlemen, come forward to offer us processes which give us the flavor and keeping qualities of canned fruit, the ease of transportation with a near approach to the cost of sun-dried goods. But these same processes are in use in all parts of the country and the natural course of business will be to supply the demand so that these shall be no better than average investments. We mean to say that on the articles of apples, peaches, tomatoes, etc., we can expect no large profits because all parts of the United States can produce them, and so many factories are starting. But we have peculiar advantages in our climate and freedom from insects for the production of such evaporated fruits as are affected by the blight or the insects at the East. On the articles of apricots, plums, prunes, figs and raisins we have the market to ourselves. These are fruits that follow each other in such a way as to keep a set of machinery busy from June till November, and whoever has a location adapted to produce these and facilities for manufacturing them has a fortune. Bartlett pears are a luxury that a few of the wealthy enjoy for a few days in the year. Let us produce them for the world all the year around. Immunity from blight is a better protective tariff than ever Kelly engineered for the iron mongers of Pennsylvania. If we descend from our vantage ground and enter the list in competition with the world we must expect our profits to rate low.

FRANK S. CHAPIN.

Cotton in Fresno.

EDITORS PRESS:—In 1873 about 600 acres of cotton were grown in this county. Most of the growers were inexperienced. The season was unfavorable, there being no late spring rains. Seed was planted in dry earth in expectation of rains in April and May. These expectations failing irrigation was resorted to in order to start the seed. Under these circumstances but a light crop was obtained. The average yield was not above 175 pounds per acre. The picking cost, of course, more per pound than it would have cost had the crop been better. The crop in the aggregate did not pay expenses. The outlook for the business was not encouraging. Col. Strong on Mariposa creek had planted on bottom land that needed no irrigation. He had reported a success yet it had never been to him sufficiently remunerative to induce his neighbors to engage in the business. Few of them believe that his crops in the aggregate have paid the expenses of growing them.

Most of the Fresno growers after the experience of 1873—their second year of failure—were discouraged. A few, however, resolved on another trial; others joined them, and the cotton fields on upper King's river aggregate about 1,000. Picking has commenced and the growers are jubilant. If there are no early frosts they expect 450 pounds per acre. Some think that in another year they can improve in the time and manner of irrigation, and all are expecting to plant more largely next year. Notwithstanding the favorable reports that have gone forth this is the first success that has been attained in cotton growing in this vicinity. The growers having learned how, now think they can make the egg stand on end every time. Of this more anon.

T.

Fresno, October 4th, 1874.

THE pork packers at their convention at Louisville, adopted the report of the business committee, changing the standard weight of a barrel of pork to 190 pounds instead of 196, as heretofore, and making the maximum of shoulder pieces 85 pounds instead of 90.

THE total receipts of the San Joaquin Valley Agricultural Fair, taken in at the Pavilion and the Park, were $6,345 90, being an excess over last year of $1,564 15.

THE total receipts of the State Fair for admission tickets was $23,168 35, against $21,221 55 last year.

IT is said that the Louisiana sugar crop will be splendid, probably 50,000 hogsheads above an average.

A BUSHEL of wheat weighing sixty pounds contains 550,000 kernels

California in the Pliocene Epoch.

At the meeting of the California Academy of Sciences on last week, Dr. J. G. Cooper, ormerly of the State Geological Survey made some remarks on California in the Pliocene Epoch, of which the following is an abstract:

The map here exhibited is that of California and Nevada, published by the Geological Survey, and of which this new edition is issued, by authority of the University of California, and presented to the Academy by the chief topographer, Mr. C. F. Hoffmann. On this there are pinned pieces of orange colored paper, (chosen from its contrast with the blue and brown tints of the map) to represent the portions now land, but covered by salt or brakish water during the epoch just preceding the age of man. A considerable part of these along the edge of the Coast, is, however omitted, being to nar row to show on this small scale at a distance. Probably much of the Coast Range was also under water, of which no evidence from fossil remains is now left, the strata, if any were deposited, having been washed away.

Numerous small fresh water lakes also existed, which have left deposits, especially on the slope of the Sierra Nevada, but not yet surveyed enough to define their limits. The Sierra must then have been much lower to allow these lakes to stand where they would now drain out completely. Most of the states of Nevada and Utah were also covered by large fresh water lakes, filling what is now called the "Great Basin," and which have since evaporated so as to form the salt lakes now existing, by condensation of the salts always contained in lakes and rivers. This is shown by the deposits of fresh water shells at high levels above the present salt lakes, and the absence of salt water fossils later than the cretaceous in the Great Basin.

In California, the whole great interior basin of the Sacramento and San Joaquin valleys was occupied by brackish water, as proved by the remains of sharks and porpoises found by Professor Blake and others near Kern river. All the principal level valleys now forming our best agricultural lands were also occupied by arms of this inland sea or of the ocean. The gulf of California extended over the desert a hundred miles or more north of its present limits.

The Sacramento basin had other outlets besides the Golden Gate, (if that existed at all) through an inlet opening at Russian river, and another through Santa Clara valley into Monterey bay. Thus many islands probably existed, which are now joined to the main land, among them the peninsula of San Francisco. Some of the inlets near the coast were occupied by marshes through which the animals of that period reached the nearest islands, as shown by the remains of the fossil elephant found near this city. Similar remains found by Blunt and Harford, of the Coast Survey, on Santa Rosa island, show that it was then either joined to the main land by dry ground or marshes, as were probably the whole inner row of islands now forming the south shore of the Santa Barbara channel.

The evidence of all these changes is in the remains of marine, land, and fresh water animals now found in the valleys mentioned, which have become more or less filled up by deposits from the adjoining hills.

The following are the most striking forms, described by Prof. Leidy in the "Report of the U. S. Geological Survey of the Territories," issued last year.

A tiger (*Felis Imperialis*) as large as the Bengal tiger, found in or near Livermore valley, by Dr. L. G. Yates.

Wolf (*Canis Indianensis*) larger than the existing kinds, from same deposit; also found in the tertiary of Indiana, etc.

Llama (*Palauchenia Californica*) from the foothills of Merced county, found by C. D. Voy, larger than the existing camel; also remains of perhaps another species from Alameda county by Dr. Yates.

Buffalo (*Bison latifrons*) found in several parts of this State and the Eastern States; larger and differing from the living form. A very perfect skull was found by Mr. C. Brown, engineer of the Pilarcitos valley aqueduct, in excavating for that work.

Horse (*Equus occidentalis*) of which remains are common in most of the States, though no horses existed on this continent when it was discovered by Europeans.

Rhinoceros (*R. Hesperius*), of which teeth were obtained by Prof. Whitney in Sierra Nevada.

Elephant (*E. Americanus*), one of the commonest of the great fossil animals throughout the United States.

Mastodon *M.* (*Americanus*), more rare, but also found in many localities.

Another species (*M. obscurus*) first found in the Gulf States, and since by Dr. Yates in the foothills of the Sierra, Alameda county, etc.

A great tortoise, equal to the Galapagos species in size, but probably of fresh water, from a lake deposit of Nevada county. This is still undescribed, being one of the fossils obtained by the University from the Geological Survey.

Remains of palms and other tropical trees, chiefly from the lake basins of the Sierra, were sent by Prof. Whitney to the eminent Prof. Lesquereux, to be described in one of the Geological Reports, that *ought to be* published by the State of California.

From these evidences we perceive that the climate of that day was tropical. The country consisted of peninsulas and islands like those of the present East Indies, resembling them also in climate and productions. From the extent of water surrounding them, there was abundant rainfall and luxuriant vegetation, suitable for the animals mentioned.

It is not unlikely that some of these animals may have existed before the pliocene epoch as well as in it, but the explorations are still insufficient to decide this.

Volcanic Age.

The termination of this tropical epoch in California, was marked (as described first by Prof. Whitney), by enormous volcanic outbursts, which poured out great streams of lava on the slope of the Sierra Nevada covering entirely large tracts toward the north. At the same time the whole country was apparently raised by the elevation of new mountain ranges, and increase of old ones, causing the lakes to be drained, and their beds filled by washings from the hills, mixed with volcanic materials. This great convulsion no doubt exterminated most of the tropical flora and fauna of California, although some of its representatives might have existed later in neighboring regions, and their descendants may still be found in tropical America. That all are not extinct, is probable from the analogy of tertiary species elsewhere, and from the fact that most of the marine and fresh water shells of the strata deposited at that time are still living, some however, only south of California.

Many extinct land animals have been found to have lived in Europe since the appearance of man on the earth, and there is strong evidence in the "Calaveras skull" and others, that the same fact is true of California.

It does not, however, necessarily prove that man existed in the Pliocene epoch, as his remains may have been buried under volcanic outflows of later date together with Postpliocene animals, or even bones of Pliocene species mixed with them by aid of volcanic convulsions.

Postpliocene Epoch.

The immense period of time that has elapsed since the Pliocene epoch is shown by the vast accumulations of volcanic materials poured out by Mt. Vesuvius on top of marine strata of shells, every one of the species still living in the Mediterranean, and therefore of late Postpliocene date. Yet history, and the evidence of human remains go back through only a thin portion of these volcanic strata! California before the end of the Pliocene, was certainly badly suited for the existence of man. The deposits formed during the convulsive age, to the thickness of hundreds of feet, are themselves almost destitute of all fossils, although burying such a rich collection.

While this was going on in California, there was probably a great geological change taking place in other parts of the world, followed by the Glacial Age. In this, the northern hemisphere down to about lat. 38° was mostly covered by ice, and the great deposit called the "Drift" found in Europe and the Eastern States.

The Geological Survey proved conclusively that this deposit of erratic boulders did not reach over California, and it is doubtful if even as far south as Vancouver's Island. Still the influence of the frozen period was no doubt exerted here in the form of extensive glaciers covering the Sierra, at least half way down their western slope, and probably the highest parts of the Coast Range. *Now* we have in summer a mere remnant of that great ice field, which no doubt did a great part in the excavation of the tremendous cañons now cut deep below the previous volcanic deposits of the Sierra. The thawing of such an ice field must have acted much more rapidly in this erosion, than the comparatively slight water courses of the present time. There is evidence also, in the present existence of far northern land-shells along the whole length of our Sierra Nevada, that the glacial period progressed slowly, allowing them to spread southward before its advance, without being exterminated. In Europe it has been found that man existed both before and after this period, living like the present Esquimaux on the edge of the perpetual snow, and advancing north again as it receded.

Present Epoch.

The end of the reign of ice brings us to the present epoch, in which there has been very little change in the outlines of the land in California, although some changes in the fauna and flora, as well as climate, which are yet undetermined. The volcanic disturbances have continued with decreasing intensity since the advent of man in the post pliocene epoch, and may have elevated considerable portions of land, especially southward, followed by increase of dryness and probably greater extremes of temperature. A rising of land near the Arctic sea would further decrease the temperature. Judging from the continual discoveries still being made in the study of these latest formations of the earth's surface in Europe and the Eastern States, we may safely say that a vast field still remains open for the investigations of science in California.

ORNAMENTING WOOD.—Wood can be ornamented by punching down carefully in patterns, planing off a little, and then wetting; the parts punched down show in relief above the planed surface and make quite a puzzle.

THIS year's wheat crop in New Mexico was threshed in the old Egyptian style—with goats, sheep and horses.

Good Health.

Indian Meal as a Vehicle for Heat.

The application of heat to the body as a remedy is very common. Wringing out cloths in hot water, infusions of hops or other plants, and placing them upon the part affected is probably the plan most frequently pursued. This practice is objectionable, because it needs close care to prevent wetting and chilliug when cool, and also to be so frequently renewed and re-applied to keep up the due amount of heat. If jugs or bottles of water are employed they are liable to become broken or uncorked, or to leak and deluge the bed. Besides, when water is used as a vehicle for heat it causes moisture, which is undesirable, particularly as it is a good conductor of heat. If sand or sugar is employed the weight is objectionable. In looking about the resources of an ordinary household for a substitute I was led to select Indian meal, as it is generally on hand in the larder; it is of light weight, not unpleasant in odor, and particularly because it holds heat for a long time. This latter fact I noticed when a mere boy, finding that corn meal would, after grinding, bear several miles' transportation, and after delivery and deposition in the bins of the granary would for hours still be warm from the friction of grinding.

When, therefore, it is desired to apply dry heat to any person it is only required to place a quantity of the Indian meal in a baking-pan on a heated stove, and stir constantly till thoroughly warmed. It should not be burnt. It can now be put into woolen sacks and tied up and applied as a hot bottle usually is; or into large flannel bags if for the abdomen. In a case of successful resuscitation of a new-born child, the heated meal was poured into an oblong chopping-tray and a flannel cloth laid over it and the infant in it. The cloth yielded, and the child was partly buried in the warm meal. It is found that the meal retains its heat long, and when it cools it does not chill, which is a very important consideration. Two sets of bags or wrappers may be provided, so that while one is being applied the other may be heated. The meal is not weighty. The aroma of it when heated is rather agreeable than otherwise. It is now my favorite vehicle for applying heat.—*Cor. Herald of Health.*

Artificial Feeding of Children.—Nursing by the mother is the only natural feeding, and it cannot be substituted by any other with safety to the health of either the mother or the child. Wet nursing is only to be resorted to when the mother's milk is not suitable, and a proper wet nurse can be obtained. The so-called "prepared foods" with their flaming advertisements and testimonials, oftentimes spurious, and accompanied as in one instance, by the picture of a wonderful baby "brought up on this and no other food"—all of these originate in a desire to meet the wants of children deprived of mother's milk, and often stand in the way of a mother's duty of nursing. The country is flooded with them. Some are harmless, many dangerous and a few useful. The thoughtless endorsement of physicians is sadly deplored. A perfect substitute for mother's milk has not yet been made, and it is doubtful whether it will ever be. An exact analogy in solid and fluid coustituents cannot take the place of human milk, with its inherent, unexplainable, life-giving principle.—*Sanitarian.*

Hay Fever.—From the best statistics that can at present be collected, there appear to be over fifty thousand persons in the United States who are annually subjected to this distressing complaint. In the opinion of the most intelligent physicians, it is to be classed among the nervous diseases, such as neuralgia, rheumatism, etc. An effort is being made in medical circles to obtain particulars from sufferers, and thus promote the study of proper remedies. For this purpose, Dr. George M. Beard, of New York city, has prepared a printed series of questions for answers by patients, the results of which are expected to be of value. All who are troubled with hay fever, and all who are personally familiar with the disease should send for this series and supply such informa as they can.

Sleep in the Olden Time.—There are yet to be met with, in some old castles, monstrous old fashioned bedsteads, in which formerly whole families used to sleep together. This custom dates itself to the times of chivalry. These valiant souls who were accustomed in the field to share the same tent, bed and table, were also admitted to share winter quarters in each other's castles with the same cordiality. And then there might be seen, sleeping in one and the same bed, the master of the castle, his spouse and children, the knights his guests, and along with the rest sometimes the favorite dog. Admiral Bonnivet used to sleep with Francis I., who called him his knight companion.

Transfusion of Lamb's Blood.—Interesting experiments have recently been made at Cincinnati in the transfusion of lamb's blood into human blood, particularly in cases of chronic enæmia. Dr. Settle, under the direction of Dr. Dawson, has made several trials at the Good Samaritan hospital. In one instance he transferred eight ounces of blood from the neck of a living lamb to the veins of a man's arm, the connection being made by means of a silver tube in the man's arm, glass in the lamb, with a rubber tube between.

What is Hydrophobia?

Dr. Hammond, an eminent surgeon, has made a discovery touching hydrophobia of great interest. A number of extraordinary cases have occurred recently in New York. A man was bitten by a dog which appeared to be in good health—showing no symptoms of the rabies. But the man died, having all the symptoms of hydrophobia. This is by no means an isolated case. Dr. Hammond reaches the conclusion that the bite of a dog may be fatal while the dog has no discernible symptoms of hydrophobia. The dog may live, while the man may die. If this is a correct conclusion, then the bite of a dog under any circumstances, is very dangerous. For, however healthy the dog, it cannot be known that hydrophobia will not follow. People who have a horror of the bite of even the smallest dog, though it be a household pet, have certainly good ground for this dread.

It has also been found that hydrophobia is a disease of the nerves and brain rather than a disease of the blood. This theory being true, many of the remedies heretofore applied are worse than useless. The nerve centers are first affected, then the brain. There is some ground for believing that persons are sometimes victims of hydrophobia who have never been bitten by any dog or by any other animal. There are cases on record which support this view. When some of these cases have resulted in madness it has been referred to an old bite occurring 20 years before. It would seem possible that a madness at least analogous to hydrophobia might result from the imagination, the same symptoms being manifest and the same results following.

The statistics of death from hydrophobia show that 63 deaths occurred in the United States during the last ten years. Of these cases nine occurred in New York, nine in Pennsylvania, and 22 in Louisiana, while no well-authenticated case is recorded in California, although there have been reports from time to time of the destruction of rabid dogs. The theory that this terrible disease prevails to a greater extent in hot weather is partially borne out by the facts. Louisiana has a very hot climate, and a large number of rabid dogs. But it is equally hot in Texas, where only two cases of the rabies were recorded in ten years.

Useful Information.

Restoration of Oil-Paintings.

Oil-paintings are made, we know, with siccative linseed-oil colors, and when dry covered with a thin resinous varnish. Aside from the incurable darkening by age, they are subject in the course of time to two diseases conditioned by the oil employed, and which are capable of improvement. By too hard drying the paint contracts, and covers the picture with numerous cracks, which can be rendered invisible by tediously filling them up with fresh paint. Besides this, it also happens that the film of varnish, which was originally strong and transparent, is transversed by innumerable fine cracks, which render the picture indistinct. Prof. Pettenkofer, of Munich, was the first to devise a simple method to render the varnish transparent again. He placed the picture, painted side down, on a vessel containing absolute alcohol. The ascending vapors condensed on the surface of the picture, and rendered the varnish to a slight degree soluble, so that the parts flowed together and the flaws disappeared. The operation was somewhat inconvenient, since it was impossible to watch the operation directly, and the picture had to be frequently turned over to ascertain the point at which the restoration seems complete.

Eimerling, of Augsburg, conducted warm alcoholic vapors directly upon the picture; this action is frequently too strong, and may injure the paint.

The writer has devised a third method, which does not act so violently as the above, yet, like that, permits its direct observation, and can be conducted just as far as desired.

A vessel filled with alcohol is gently warmed, and air is blown through it with a bellows or other contrivance. The air is impregnated with alcoholic vapor, and is conducted through a tube directly upon the picture. In this way much less alcohol is brought upon the picture than in the preceding method, and the results are excellent.—*Dr. Weigelt.*

Preserving Specimen Insects.—M. Anzoux states, for the benefit of those who are engaged in collecting insects, that he has discovered a new method of rapidly killing and preserving for a considerable period without harm specimens collected in expeditions. He recommended a few drops of essence of bitter almonds to be placed in some sawdust, which should itself be enclosed in a flask hermetically sealed. M. Anzoux has received from the Isle of Ceylon flasks thus prepared containing insects still so flexible as to permit of their being prepared and mounted, though they had been collected at Point-de-Galle some months previously.

To Make Waterproof Paper.—A nice waterproof paper, transparent and impervious to grease, is obtained by soaking good paper in an aqueous solution of shellac in borax. It resembles parchment paper in some respects. If the aqueous solution is colored with aniline colors, very handsome paper for artificial flowers is procured.

Punching Holes in Straps.

The punching of holes through the various straps of harness, for buckle-tongues, and for attaching the buckles, is a matter of considerable importance, and does not, as a rule, receive the attention that it should. The old method, of punching them from the upper or grain side of the leather, has been generally abandoned by the manufacturers of fine work, it being deemed injurious to the wear of the leather. The principal objection arises from the liability of the grain of the latter to crack from the strain of the buckle-tongue, and to be the cause, eventually, of the leather tearing, as it causes such a crease where the tongue catches, that it injures the texture of the leather, and makes it tear the hole more or less. In addition to this, if the leather is very strong, the tongue of the buckle is sure to bend out of shape. All these objections can be obviated by punching from the under or flesh side of the strap, and by using a punch, the long sides being parallel with the length of the strap; the punch should be set at an angle of about 20 degrees, cutting the hole at such an angle that the buckle-tongue will rest in it without throwing any strain on the inside of the leather.

Some object to punching the hole from the under side on account of its forcing the grain out, and thus disfiguring the outside edges of the hole. This can be corrected however by driving the punch through the hole from the outside, which will cut away the slightly turned edge of the grain, and set it down smooth and clean. It is not necessary, however, to repunch any holes except those that will be exposed when the harness is complete. Punches should be as thin as possible, as the extra thickness of the metal strains the leather.—*Harness Journal.*

Improvement in Tanning.

M. B. Picard reports a new system of tanning skins which is carried through without acid and in a much shorter time than is required by the ordinary processes. He first boils the tan down in water, making a complete extract, and then frees the decoction by decantation from all residues and foreign substances. The strength of the essence thus obtained is regulated according to the quality, thickness, etc., of the hides to be treated, weakening it when necessary with pure water. It is placed in the pits in a cold state, and the skin is immediately thrown in. The latter are lifted and their positions changed three times during both the first and second days, twice during the third, and once a day afterwards. Ordinarily eight days suffices to complete the operation, and the inventor states that the proportion of about 77 pounds of extract to 220 pounds of skins gives excellent results.

The following method is recommended for private use in skin tanning: take equal parts salt, alum, and Glauber's salt, and half a part saltpetre; pulverize and mix. Handle the skins and rub the mixture in well three or four times a day, the oftener the better. If there is not sufficient moisture in the skin to dissolve the salts, put a little water into the latter. We are assured that no moth will attack furs the pelts of which have been thus prepared.

Useful Rules.

To find the circumference of a circle or of a pulley—Multiply the diameter by 3.1416, or as 7 is to 22, so is the diameter to the circumference.

To compute the area of a circle—Multiply the circumference by one-quarter of the diameter; or multiply the square of the diameter by .7854; or multiply the square of the circumference by .07958; or multiply half the circumference by half the diameter; or multiply the square of half the diameter by 3.1416.

To compute the diameter of a toothed wheel—Multiply the number of teeth by the true pitch, and the product by .3184. These results give only the diameter between the pitch line on one side and the same line on the other side, and not the entire diameter from point to point of teeth on opposite sides.

Egyptian Blue.—A remarkable and very beautiful shade of blue is noticeable upon many of the ancient ornaments found in the tombs of Egypt. Analysis some time since proved the color to be formed by a combination of soda, sand and lime, with certain proportions of copper, from which substances the Egyptians managed to produce three different products—first, a peculiar kind of red, green and blue glass; second, a brilliant enamel; and lastly, the color to which reference is made above, and which was used for painting. By synthetical experiments M. Peligot has succeeded in reproducing this peculiar shade of blue, by heating together 73 parts of silica with 16 of oxide of copper, 8 of lime, and 3 of soda. The temperature should not exceed 800 deg. Fahr., as, in such case, a valueless black product is the result.

Sensitive Silk.—Silk thoroughly impregnated with the bichromate of potash presents a very sensitive photographic surface. Thus prepared, any shapes cut out of tin and laid upon it may be beautifully imprinted thereon by the sun, and in tints according to the color of the silk itself. A white or very light silk shows a delicate pale red impression; a red-tint takes a still deeper shade of red in the pattern, etc. Fern leaves arranged to suit the taste and kept flat by a piece of sheet glass, can be imprinted in the same way.

Domestic Economy.

Household Exercise.

The *American Agriculturist* says dishwashing is good for dyspeptics. It is light exercise of the arms and chest soon after meals and it may be done sitting as well as standing. A high office stool is very useful in the kitchen. Feeble women, who do their "own work," often stand upon their feet more than necessary. You can sit down down to dress vegetables, to wash and wipe dishes, to knead bread, to iron, and to do many other things. You may be a little more slow about the work, but you will get through it in better condition. Housekeepers would often like to take an out-door walk, only their "feet are so tired."

Dish-washing would not be half so disagreeable as it often is, if the dishes were lightly scraped free from crumbs, and neatly piled up for washing. There should be a large dish-pan and plenty of hot water, with which to fill up the pan gradually as its contents cool. I seldom use soap for washing dishes, but to the unskilled, or to those who use much butter and fat in their cooking, it seems a necessity.

Sweeping is good exercise if the floors and carpets are not dusty. Ah! that "if!" Bed-making will serve as gymnastics, if the beds are kept clean and well aired.

And what of washing? I do not think highly of the old-fashioned wash board exercise. It is hard for both lungs and back. With good washers and wringers, and strong arms for lifting, it may be made passable as exercise, and it is always a pleasure to see soiled things clean once more.

A moderate amount of ironing is good for women in health, in cool weather. On hot days endeavor to do it in a cool room or on a shady porch.

Cooking is perhaps the most important part of housework, and its exercise is not heavy in quality, though to some it may be burdensome in quantity. It seems to me more like a high art, or dignified occupation, worthy to be called a profession—far more honorable than—the legal profession, for instance. I should not wonder if really good and scientific cooks could do more to preserve and to restore health than the doctors of medicine can. As with ironing the hardest kind of cookery is the least necessary—the ornamental part. We should study to make our cooking work as little heating as possible. For instance, bread may be baked in the oven instead of cooking it upon the griddle in the form of "pancakes," and in hot weather we can avoid those forms of food that require constant stirring while cooking.

There is a great deal of necessary work to be done in the world in order that we may all be comfortably fed, clothed and lodged. I should like to see what would be the result if the labor and strength spent upon unnecessary work, usually considered ornamental, should be given cheerfully to doing the necessary work of the world, as a preparation for the advent of real beauty or genuine adornment in all departments of our daily life.

Eggs as Food.

Would it not be wise to substitute more eggs for meat in our daily diet? About one-third the weight of an egg is solid nutriment. This is more than can be said of meat. There are no bones and tough pieces that have to be laid aside. A good egg is made of 10 parts shell, 60 parts white, and 30 parts yolk. The white of an egg contains eighty-six per cent, water; the yolk fifty-two per cent. The average weight of an egg is about two ounces. Practically, an egg is animal food, and yet there is none of the disagreeable work of the butcher necessary to obtain it. The vegetarians of England use eggs freely, and many of these men are eighty and ninety years old, and have been remarkably free from illness. A good egg is alive; the shell is porous, and the oxygen of the air goes through the shell and keeps up a kind of respiration. An egg soon becomes stale in bad air, or in dry air charged with carbonic acid. Eggs may be dried and made to retain their goodness for a long time; or the shell may be varnished, thus excluding the air, when, if kept in a moderate temperature, they may be kept good for years.

The French people produce more eggs than any other, and ship millions to England annually. Fresh eggs are more transparent at the centre, old ones on the top. Very old ones are not transparent in either place. In water in which one-tenth of salt has been dissolved, good eggs sink and indifferent ones swim. Bad eggs float in pure water. The best eggs are laid by young, healthy hens. If they are properly fed the eggs are better than if they are allowed to eat all sorts of food. Eggs are best when cooked four minutes. This takes away the animal taste that is offensive to some, but does not so harden the yolk or white as to make them hard to digest. An egg if cooked very hard, is difficult of digestion, except by those with stout stomachs; such eggs should be eaten with bread and mastieated very finely. An excellent sandwich can be made with eggs and brown bread. An egg spread on toast is food fit for a king, if kings deserve any better food than any body else, which is doubtful. Fried eggs are less wholesome than boiled ones. An egg dropped in hot water is not only a clean and handsome but a delicious morsel. Most people spoil the taste of their eggs by adding pepper and salt. A little sweet butter is the best dressing. Eggs contain much phosphorus, which is supposed to be useful to those who use their brain much.—*Poultry Review.*

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms: Fruit Growers' Aesociations, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, and Farmers' Mutual Life Insurance Company, 415 California street, S. F.

OFFICIAL NOTICE.

The quarterly due of six cents for each member, alluded to in Article 8, Section 3, of the Constitution of the California State Grange, means six cents for each member, whose name appeare on the roll book, at the end of the quarter, without any reference to the time when the name was enrolled there.

The reports of Suhordinate Grangee required hy Article 2, Section 1, By-Lawe of Netional Grange, to be made on the first day of January, first day of April, first day of July and first day of October, includes Secretary's as well ae Treasurer's reports.

J. M. Hamilton.

Patrons who are subscribers to the Rural Press ehould pay their subscriptione promptly in order to secure club ratee.

Grangers' Bank and State Agency.

The regnlar annnal meeting for the election of directors of the Granger's bank of California was held at the rooms of the bank, 415 California street, on Tuesday, October 13th. Called to order at one o'clock P. M., President A. F. Walcott in the chair. After the reading of the report of the directors for the past year they were re-elected by a unanimous vote as directors for the ensning year. A complimentary vote was passed endorsing and approving their action in the management of the bank.

This was followed by a resolution on the part of the directors, expressive of gratitude for the confidence reposed in them and of a desire to merit the continnance of snch confidence. After a short address by Messrs. Cressey and Walcott, there appearing no fnrther bnsiness, on motion of J. H. Earl, adjourned to meet at the rooms of the secretary of the State Grange immediately.

The meeting was called to order by J. H. Earl, W. A. Sandus was elected chairman and A. W. Thompson secretary. Speeches were made by Messrs. Earl, Thompson and others, showing the necessity for an agency fnnd, and a more perfect organization for the sale of farm products and the purchase of tools, etc., required by farmers. Messrs. Earl, Thompson and Vanderbilt were appointed to draft a plan of organization to be approved by Executive State committee. After which a subscription of about $7,000, with ten per cent. advance payment was secured to start a more perfectly organized Grange agency. On motion adjourned.

In Memoriam.

It becomes our painful duty to record the untimely death of Christopher G. McCormick, who was a member of West Grafton Grange, No. 89, P. of H. Brother McCormick was kicked by a vicious horse, on Angust 4th, and died Augnst 12th. His remains were interred by the West Grafton Grange according the ritual of the Order. He leaves a wife and nine children to mourn his loss.

Brother McCormick was an exemplary christian, beloved and respected by all who knew him, a member of the Methodist Episcopal Church South, and at the time of his death, Superintendent of a Sabbath School. He was born in Washington county, Missouri, June 16th, 1830. Aged 44 years, 1 month, 26 days at the time of his death. The Committee offer the following resolutions:

Whereas, In the dispensation of Providence, we are called to lament the untimely death of hrother McCormick, who had heen in our community for yeere, and had linked our hearts in close sympathy with his own, Therefore,

Resolved, That we unite in that tribute of respect and affection to which his chrisiian deportment ie justly entitled.

Resolved, That we sympathize deeply with the afflicted wife and children in their sad bereavement, and mingle our tears with theirs in sorrow, trusting they may find consolation in the assurance of a re-union in heaven.

Resolved, That a copy hereof be placed upon the minutee of the Grange,and a copy he sent to the Rural Prees, and the number of the Rural Prees containing the above, with the kindest regarde of the Grange he tendered to the bereaved family of our deceased hrother. Geo. W. Park, Sec'y,

Cacheville, Septemher 10th, 1874.

Grange Elections.

Alliance Grauge has elected the following officers for the ensuing year; reported by J. W. Marshall, Sec'y; M., James D. Durfee, Los Angeles: George Mark, O.; S. S. Reeves, L.; W. H. House, S.; W. H. Gwinn, A. S., Mrs. M. A. Marshall, C.; Mrs. D. B. Duifee, T.; J. W. Marshall, Seo'y, El Monte; W. P. Cooper, G.K.; Fannia Mark, C.; Ella V. Reeves, P.; Jennie Mark, F.; Mary J. Reeves, L. A. S.

Stanislans Grange has elected the following officers, reported by V. E. Bangs, Sec'y: Vital E. Bangs, M.; John V. Davis, O.; Jas. E. Laughlin, L.; J. D. Harp, S.; S. Garlinghouse, A.S.; A. J. Hart, C; W. B. Wood, T.; Mrs. Elizabeth J. Turner. Sec'y; R. B. Robinson, G.K.; Mrs. V. E. Bangs, C.; Mrs. E. T. Robinson, P.; Miss Annie Fraser, F.; Mrs. R. C. L. Buckner, L.A.S.

Alameda County Picnic.

The Germans say of us: "The Americans do not know how to keep a holiday. They work for the sake of working and make hard work of resting."

This is, nnfortnnately, too near the truth. Moderation in work is a lesson we have yet to learn. Every energy is strained for the first twenty years of active life to get a start in the world, and the impetns having been given there is no stopping until the health gives way, and and only the wreck of a life remains. Much good has already been accomplished by the Granges in making one day in fonrteen a kind of holiday. The frequent exchanges of social courtesy between neighboring Granges has a good effect in widening the circle of sympathy and good will.

On the 17th inst. the Grangers of Alameda county will gather for a social reunion and basket feast in the grove at San Lorenzo. They have invited the rest of the farmers to join them. It will be a farmer's gala day, as well as a Granger's. Good music is promised, with toasts and speeches. Professor Carr will give an address. Bro. Wright is also expected to speak.

Let there be a general turnout, and let us celebrate the close of a plentcous harvest season, the ingathering of our corn and wine with gladness and thanksgiving. Where the voice of prayer has so lately ascended, the voice of grateful praise shall rise for the promise of the good time which no longer scems afar off—the period of universal plenty and peace. Let the young people and the little ones brighten the grove with their happy faces and help to make the autnmn festival the best of the year. The place selected for the gathering is one of the most desirable in the county, and within a few steps of the railroad station. The morning trains from Stockton and San Jose will suit the convenience of those coming from those directions, and the 7 o'clock train from San Francisco those going from the west. Officers of the State Grange are expected to be present. The farmers of Alameda county in general are invited. All Patrons and their invited friends will be welcome. The San Lorenzo C. P. R. R. station is within a few rods of the grove. There are return trains to San Francisco about 11 A. M. and 7 P. M.

In Memoriam.

We regret to learn that Bro. E. S. Carr, W. M. of Temescal Grange, Bro. Nelson Carr, W. P. M. of Bennett Valley Grange, and Bro. E. M. Carr, W. M. of Sunal Grange, have received intelligence of the death of their mother, Mrs. Deborah Goodrich Carr, of Milton, Wisconsin.

This venerable matron with her hnsband and familiy, and her brother, Hon. Joaeph Goodrich, was one of the early settlers of Rock county. She belonged to a family of pioneers, her ancestors, the Goodriches, having been the first emigrants to Pittsfield, Mass. Their numerous descendents are well known in the annals of old Berkshire. Mrs. Carr out-lived her husband more than twenty-five years, and died at the ripe sge of eighty. She was the mother of ten children, nine of whom survive her. Of these, five sons and two daughters are Patrons. Though a life singularly rich in goodness haa been taken from the earth—as a shock of corn fully ripe, her children rise up to call her memory blessed, and her name will loug be cherished in the chnrch to which she was devoted, snd in the community where she was honored and beloved. Communicated.

[Many are the friends on this Coast who will join in personal sympathy for this noble family, thrice stricken with inexpressible loss during the paat twelve months. First the elder son; then tho mother's father; and now the father's mother. Truly they have much to bear with paticnce, under the wisdom of the Great Father.—Eds. Press.]

A Good Arrangement.—We learn from the *Sentinel* that there will be no agricultural fair in Santa Cruz this season, the society having failed to receive from the legislature an appropriation. It is understood, however, the Grangers of that county intend to make arrangements for the annual exhibitions, the first of which will be given next season. We shall then expect to see a fair which will have for its object the development of the agricultural and mechanical industry of the country, and not conducted for the maintenance of a jockey club.

There is a remarkable discrepancy between the statements of the Grangers to their brethren of the North and the reports of the subordinatea of Mr. Attorney General Williams as to the condition of Alabama. The explanation is undoubtedly that tho subordinates of the Attorney General have a large pecuniary interest in lying.—*Post.*

The Council committee of the Solano Grangers have been investigating the financial affairs of the county. In their report they advise the different Grangea to employ an attorney to see that the Board of Supervisors, at their meetings, allow no bills but such as are in accordance with law.

Patrons in Council.

The State Grange of the Patrons of Husbandry have had a grand and satisfactory session. Following we give several able reports. Further articles will appear hereafter.

CALIFORNIA.

Changed by J. W. A. W. to suit the Golden State, from versee hy Miss Julia S. Tutwiler, entitled Alabama. Dedicated to the California State Grange, and read before that hody Oct. 7th, 1874.

California! California!
We will aye be true to thee!
From the Southern shore where groweth
By the sea thine orange tree,
To thy Northern vales where floweth
Deep and swift the Trinity,
California! California!
We will aye be true to thee!

Broad the s reams thy mountains nourish;
Grand thy Joaquin rolls along;
Fair thy Merced, Sacramento;
Bold thy Klamath, swift and strong;
Blessed like the land that Moses
Climbed up Horeh's hight to see;
California! California!
We will aye be true to thee!

From thy prairies, wild and sunny,
Where the farmers' "white wheat" shines,
To thy hills where gold and silver
Hide in thy exhauetless mines—
Strong-armed workmen, husy merchants,
Farmers, or what e'er we he;
California! California!
We will aye be true to thee!

From thy quarries where the marble
White as that of Paros gleame,
Waiting for the sculptor's chisel,
Wakes to life thy poet's dreams;
For not only wealth of nature—
Wealth of mind thou hast tn fee;
California! California!
We will aye be true to thee!

Brave he thy men; thy women, true;
Better this, than "corn and wine;"
Keep us worthy—God in Heaven—
Of this goodly land of thine!
Open doors to all the needy,
Free of heart, in spirit free,
California! California!
We will aye be true to thee!

Annual Address before the State Grange.

BY WORTHY MASTER HAMILTON.

During the first day of the session Worthy Master J. M. Hamilton, delivered an address from which we are allowed to take the following extracts. The portions omitted were not intended for public eye:

Patrons all hail! Another year has come and gone. Another year with its hopes snd fears, its joys and sorrows, its toils and pleasnres, is past and gone. We miss some familiar faces from our circle; Time's untiring pen has written change npon others, yet many of us who assembled at San Jose one year sgo are still spared. The kind greeting has again welcomed us, the Patron's grip has again been exchanged, well-remembered tones of those linked to us by fraternal ties again sound in our ears, and with our Order all is well.

Growth of the Order.

At our last meeting we numbered in our State 104 Granges, with a membership of 3,168. Today we have to report 231 Granges, with a membership of 18,500. Our sister State of Nevada has not made much progress as yet in developing the interests of our Order. Last June I organized four Granges within her border, with 104 members; since then three new Granges have been formed, and the membership has increased to over 200. We hope, however, a good time is coming for them, when the knowledge taught by the educational features of our Order will change the sage-brush plains from their desert-like appearance, and cause them to bloom and bear fruits and flowers; when the home of the antelope and the coyote and sagehen shall be transformed, and the now dreary waste shall be covered with fertile fields, when comfortable homes of happy Patrons shall beautify and adorn the landscape, when school houses and churches shall spring up, and all give evidence of prosperity and happiness.

The National Grange.

Last February I appeared at St. Louis as your representative in the National Grange. From the published reports you have been made familiar with the proceedings, and I need not detail them here, but will only say I found that our favored State was a marvel to many Patrons there. Our soil and our climate, our fruits and our flowers, mountains and valleys, with all their wealth of metals, wool, wine and grains, were sources of wonder to them, and many an earnest wish was expressed in my hearing that the time might come when they could witness for themselves the wonders of which they could form but faint ideas.

If suitable arrangements were made, I have no donbt the next session bnt one of the National Grange would be held in California, and here, under our own sunny skies, surrounded with the treasures of Pomona, Flora and Ceres, we might have the pleasure of meeting representatives from every section of our Union, and hold friendly converae with those bonnd to us by the mystic tie of brotherhood.

Individual Preferences must be Laid Aside;

The wisdom and experience of all should be the joint fnnd from which to draw our supplies, to help us forward in our work. In the language of the National Grange, "Until perfect harmony is secured, not only so far as regards the formality of our Ritnal, bnt what is of even more importance in the thorongh and complete knowledge and recognition of our principles of action, success in any undertaking as a united Order can only be partial, not complete." No Patron should set up a standard of his own to which conformity is reqnired, snd take for granted his wisdom, his experience, his practice are the only right ones. The general objects we have in view are so plain we need nor err therein, but, hand in hand and shoulder to shoulder, we shonld keep step in our onward march, and be trne to onrselves and to each other. In order to accomplish this it is absolutely necessary that we mnst not only be united in our efforts, but we must adhere to plans formed by those we have placed in position for that purpose. If there are any who canuot do so, they are out of place. They may be with ns, but they are not of us; their presence, their voices, their acts, sre elements of weakness instead of strength, and we should avail ourselves of the ample means which have been provided by our laws to remove such from among us.

The Grangers' Bank

Is an institution growing out of our necessities. Without it, we are destitute of an important anxiliary to carry out the plans and purposes we have in contemplation in regard to storing, shipping and selling grain in the home and foreign markets, in the arrangements contemplated for the futnre, for procuring direct from manufactnrers on the most favorable terms, such articles as were needed by Patrons. With it we have financial facilitities afforded by which we can be assisted in the operation of onr agencies, be aided in carrying our crops and obtaining such money accommodations as from time to time are almost indispensable, without having to pay exorbitant rates of interest. Although a difference of opinion did exist among patrons at the inception of the enterprise, as to the expediency of attempting to carry it through at the time, and the prospect of its final success, the bank is now an established fact. It has been in operation nearly three months, and the amonnt of bnsiness done through it, and the snperior facilities it affords for the transaction of our bnsiness, are so apparent that these differences have become almost entirely removed.

No Embarrassments Apprehended.

From the opportunity afforded me for observation I am able to say that all the bnsiness transactions and all the financial arrangements are carried on in such a safe and conservative manner that, as long as the present policy is pursued, I cannot see how any disaster can overtake it, or any injnry arise from it. The interests of the stockholders are so well guarded, and their control and management of it is so directly in their own hands, that nothing but gross neglect on the part of the friends of the bank will ever allow any advantage to be taken of it, or a loss be snstained by those investing money in it. Over 1,300 Patrons are now stockholders in the bank, having 10,802 shares. This, I believe, is more than double the number of stockholders in any other bank in California, and they are from every part of the State. Thus the impossibility of its improper management.

The Grangers' Insurance Company

Just meets a great want among the agriculturists of this State; and Patrons, instead of having to depend upon others to assist them in repairing losses, which from time to time are snstained from fire, have a friend of their own, bred and born in the Order, managed and controlled by themselves, of but a short existence, still fast assnming grand proportion; and from the rapidity with which Patrons are availing themselves of the security it affords them against losses, its popularity is becoming more and more manifest, and confidence in it is becoming stronger every day. Its policies embrace all the most improved features adopted by other fire associations; the care exercised in taking only what are termed by all underwriters first-class risks; the low rates of preminm required—all recommend it strongly to the patronage of our Order, and all should unite in availing themselves of the benefits to be derived.

Exertion Needed for the Future.

And now, Patrons, let me again remind you we have our task before us, and all our ability will be taxed to devise plans to accomplish it; all our energies will be reqnired to carry it into effect. Let each brother and sister do all that is in his or her power to promote harmony and if we all cannot reach the point at which we aim by one road, let no one falter or grow weary in well-doing, but let our course be upward and onward; let charity and fraternity be our motto. With these for our watchwords, and with reform for our object and aim, we cannot fail. If we are bnt true to ourselves and the cause we have espoused, by the light of the new era which has dawned, we will secure better and brighter days for the tillers of the soil than they have ever enjoyed. We will establish a test of trne manhood, and make honor, honesty and capacity the crucible in which to try men's fitness for place and power. When this is done we will realize the benefits we have sought for, and then, but not until then, can we sit under our own vines and fig trees without molestation and enjoy the fruits of our labors.

California State Grange—Second Annual Session.

BY THE WORTHY LECTURER.

EDITORS PRESS:—The second annual session of the State Grange of California, which convened in Stockton, October 6th, closed its session a few minutes before midnight, Saturday the 10th. It was an eventful meeting and there is no exaggeration in saying it is the most important, as well as the largest gathering of our State Grange since its organization, and, indeed, the most important meeting of our farmers that California has ever witnessed within her borders. As Worthy Master Hamilton mentioned in his admirable address, we have 231 subordinate Granges in California, with a membership of 18,500, besides seven active Granges in Nevada, which is now united in one jurisdiction with us.

About 200 members of the State Grange were present at this meeting, and as fourth degree members in good standing were admitted at all times, except part of one day's session, the attendance of visiting members was very large. That

Harmony Prevailed

In the highest degree, which is taught by the pure precepts of our Order, and the results of the session are entirely satisfactory. Those of our members who were so fortunate as to attend this memorable meeting, go home with fuller and clearer views of the objects, extent and importance of our work; their wills and hands are strengthened for our future efforts, and they have a firmer confidence in the final success of our cause. A very large amount of business was transacted. By devoting our mornings to committee work, ample time was allowed to mature measures, and several Grange associations, working under the supervision of the State Grange, accomplished much for their special interests.

The numerous reports of officers, agents, and committees were entirely satisfactory, and were indorsed with hearty good will by our large membership. Nothing caused more surprise and approbation than the

Very Small Expense

With which the varied wants and enterprises of the State Grange have been attended. There is really something wonderful in the economy secured. It proves to our members most emphatically on how solid a basis our principles and their workings are founded.

The business of the session, was so conducted, that every subordinate Grange and every member had an opportunity to be heard, and to urge such measures as each deemed best for the good of the Order.

Among the many

Notable Events

Of the session, were as follows:

1. As hearty an endorsement of the shipping agents of the Grangers of California and Oregon, E. E. Morgan's Sons, as it is possible for a large assembly of representatives to give. The rules were suspended, and there was not a dissenting vote.

2. An emphatic adoption of a resolution to the effect that conference and conciliation with all transportation companies for just and desirable reduction of freights and fares is preferable to legislation, when they can accomplish the same ends, and hence recommending conference for such purpose between our Executive Committee and all transportation companies in whose charges the people of California are especially interested. We hope much good will come of this. If it does not, the industrial classes of California know what their remedy is.

3. The earnest endorsement and confirmation of our varied enterprises, such as the Grangers' Bank of California, the Farmers' Fire Insurance Co., the Purchasing Agency, the Fruit Growers' Association, the Dairy Produce Agency, the sustaining of the agricultural and mechanical features of our noble State University, the full endorsement of the Declaration of Purposes of the National Grange, and other enterprises which the future will develop.

4. Such co-operation for the general good with the mechanics of our State as the principles of the Grange will permit.

5. The ratification of all the amendments to the Constitution of the National Grange, except the one making life members of seven of its founders.

6. A cordial invitation to the National Grange to hold its ninth annual session in San Francisco.

7. A dispatch of greeting from the Grand Lodge of Good Templars then in session at Vallejo, as has been mentioned by the city press, and a respectful vote of the State Grange that the Worthy Master be authorized to reply.

8. Thursday night, 146 new members were initiated in the 5th degree, perhaps the largest class we shall ever have.

9. An arrangement was made by which cotton can be shipped from San Francisco as cheaply as from New Orleans.

10. A valuable report on education and labor, from a new committee on those subjects appointed, was read by Sister Carr.

An amusing incident occurred during the session resulting perhaps from faulty arrangements on the outside for the press of the State to receive such daily reports of our proceedings as are allowed by the principles of the Order to be published. It was the publication of an important assertion by the Stockton *Independent*, which has been very generally copied by other papers, but was immediately corrected by the *Independent* when it was informed of the grave error committed. There is probably no mode of explaining this matter more just to all parties concerned than the following extract in the *Independent* of Monday the 12th inst.

Explanatory.

"In the proceedings of the State Grange of Friday last, as published in the *Independent* Saturday morning, occurs the following: "One of the gravest matters with which the Grange has to contend is the supplying of the deficiency due vessels chartered and freighted early in the season, before the decline in wheat. It has been proposed to make up the deficiency by assessments equitably apportioned among the subordinate Granges. This does not meet with unanimous approval, and the solution of the question is altogether problematical." The information upon which the above statement was made was furnished us by a well known and respected citizen of Stockton, a gentleman of veracity, who informed us that he received it from a Granger. It was published in good faith as an item of news, the legitimate property of a daily newspaper. It appears to have created some commotion, and on Saturday afternoon we were waited upon by a committee of Gangers, consisting of Messrs. Wolf, Cressey and Overhiser, who assured us that the report was incorrect, and that the matter above alluded to had never been brought before the State Grange during the session of that body. They are gentlemen whose words are entitled to credence. There has evidently been a mistake made somewhere—though not on our part—and the Patrons of Husbandry are entitled to and are cheerfully accorded the benefit of this explanation, which has been given to their committee in person, together with the name of our informant."

Thus it will be seen that what was intended by some traitorous hand as a death-blow to the direct shipping interests of the farmers of this coast, fell powerless by its timely detection and denial.

What a lesson of watchfulness and fidelity does this incident teach to

Every True Patron.

The amusing part of it is that no such question came up for consideration at all, nor was there any occasion for it. Never has our great enterprise of direct shipments been going on more prosperously than at present, as is attested by the loading of some 17 ships already, while five or six more are taking in cargoes of wheat, and our members are steadily becoming more favorable to direct shipments on their own account.

Accept this brief outline of the session just ended. Each subordiuate Grange will, of course, soon have a full report of the proceedings. We must admit that a vast amount of work was accomplished, both in reports of the past and in the mapping out of the future, when we remember that the meeting continued only five days.

[The funeral event of Sister Melissa Stephens, being mentioned in another report, is omitted by us here.—EDS.]

Our work for the past year is done, the preparation for our future work in California has been propitiously begun. May the measure of success in the past attend our efforts in the future. Bright and happy will be most of the memories connected with this notable session of our State Grange. Those who attended will carry them to their graves. May our future years be brighter and more profitable for having been there.

We cannot take leave of this subject without allusion to the tasteful, cheering and inspiring decorations of the large and beautiful room. Mozart Hall, which our fellow Patrons of Stockton Grange had prepared for our meetings. The domains of

Ceres, Pomona and Flora

Were taxed to furnish suitable decorations. Upon the walls, the platform, and the pendant gas pipes, these varied displays were made with exquisite taste.

Forest trees had furnished the evergreen cypress, and the graceful eucalyptus adorned the entrance and portions of the hall. Stalks of green corn in the ear, with columns and masses of ripened wheat, straw and heads, were distributed along the walls. Festoons of evergreens with pendant ears of corn and pomegranates occupied the intervals. Everywhere flowers in columns, bouquets, and hanging baskets, added to the beauty of the scene.

At the proper time, there was a fine display of the fruits so bountifully lavished on our State by our patroness Pomona.

On the walls above the Overseer's position were placed in letters of evergreens the names of the virtues,

Faith, Hope, Charity and Fidelity,

And elsewhere the very suitable motto,

In Our Union is Our Strength.

In short, the spacious and handsome hall was not unlike a fairy scene representing a symbolic farm.

In its symbolism, the attractive scene thus presented seemed to point us to those Elysian Fields where the disembodied spirit may wander happy in the future, although sky and sunlight were shut out there by the circumscribing walls of brick and mortar—just as the walls of mother earth must yet entomb these bodies, while our spirits shall soar to the realms of the great Master above.

Such was the scene; such some of the reflections and acts of this ever memorable meeting.

Beyond question, our members left it with new strength and hope to work together for our noble Order. Should any harsh words, or any unkind acts have appeared to any to find place there, let them be buried by the forgiving principles of fraternity.

May reflection correct our errors; may experience and perseverance remedy our faults, and, above all things, may charity ever veil them.

Let renewed pledges guard our fidelity as Patrons, and by our united efforts, even a greater success will crown the future of our great and good cause. Yours fraternally,

J. W. A. WRIGHT.

Stockton, Oct. 12th, 1874.

[The above, furnished by the Worthy Lecturer, came to us after the preparations of other reports, yet we deem it of such interest as to demand its insertion.—EDS.]

A Social View of Our State Grange Session.

BY SISTER C. A. C.—FOR THE RURAL PRESS.

I wonder if all the brothers and sisters who were unable to attend the late session of the State Grange, at Stockton, would like to know how we, who had that privilege, enjoyed ourselves.

Taking an affirmative answer for granted, I hereby make my salutation to the fraternity, and especially to the members of Nord Grange, whom I hope soon to meet. We are fresh from the

Oregon State Grange,

and brought the greeting of Worthy Master Daniel Clark, who will be remembered by all who attended our session at San Jose last year. Unfortunately we only reached Salem on the last day but in time to hear them endorse the house of E. E. Morgan's Sons, of San Francisco, as their agents in shipping wheat, and also to assist in conferring the fifth degree.

We met an enthusiastic welcome from the patrons, and their warm hearted, frank cordiality are among the pleasantest memories of a three-weeks' tour in Oregon.

Arriving in San Francisco on Monday morning, we took the Stockton boat the same day, reaching here in ample time Tuesday for breakfast. In addition to the happiness of being again on California soil (and soil of any kind for that matter, after a three day's siege of seasickness) we were treated to

A Series of Delightful Surprises,

Meeting first on the wharf our affable neighbor Master of Chico Grange, and at the hotel entrance the noble faces of our Worthy Master, Overseer and Lecturer, Secretary, Agent, Editorial brother from Modesto; and again the thrill of pleasure at such cordial greetings, quickened our pulse and made us doubly thankful that we are Californians and Patrons. Surely this was coming home, and the family was gathering again after a year of separation. In the halls and parlors appeared familiar faces, every one of which appeared beautiful to me, all settling down for

A Week of Pleasurable Work.

At an early hour we went to the hall where our morning session was held, which, by the way, is in the hotel building, owned partly by the Stockton Grange and one of the finest in the State used for a similar purpose.

The Grange was opened, minutes read and approved, committee appointed upon order of business, credeutials received from Masters of Granges on roll call, when we adjourned for lunch.

At 2 o'clock, P. M., we met in Mozart Hall on the opposite corner of the street, where we found ample accommodations for all—Masters and Matrons and fourth degree members in good and regular standing. We found the

Choir of the Stockton Grange

Ready to lead the singing, with the aid of our organ, at which the Secretary's daughter presided. Grange opened in due form when committee on order of business reported. It was found that so much work had been planned for the brothers that it would be needful for the sisters to lend a helping hand, which delicate compliment was duly appreciated.

Beautiful Decorations.

So many adjectives have been employed to express our admiration of the manner in which the hall was decorated that I have no hope of being original upon this subject. But you may imagine hanging baskets filled with vines and flowers, sheaves of wheat and corn, pampas grass, bouquets and pyramids of flowers, fig branches, wreathes and festoons of evergreens, pomegranates, coruucopias and pictures, and one panel on the wall dedicated to "Mother," "Home," and "Love," with a white dove suspended in front near the ceiling, a motto in blue letters extending down the full length of the pannel "In Union is our Strength," a truth, that God forbid, we should ever forget.

It is not to be supposed that there were no differences of opinion among this body of

Independent Thinking Farmers,

But the general spirit of harmony that prevailed, was remarked upon with satisfaction.

We were constantly reminded that

"The Grange is a School,"

And the lessons of forbearance, patience and perseverance here learned, may enable us to conquer in many a battle of life.

New pleasures were constantly in store, in the matter of

Meeting Friends.

In the dining room we were accidentally seated opposite the representative of the RURAL PRESS—the pet and pride of the Grange—whose face was familiar, but not associated as it henceforth will be with our enjoyment of that periodical.

Our worthy Patroness, Ceres, had also been pointed out and her charming womanliness noted. A former pupil, with her father, present for the first time at our home gathering, added a zest to our happiness, by their own appreciative enjoyment. People long acquainted through mutual friends or interest, here met for the first time, and found themselves henceforth richer by this addition to their circle of kindred spirits. And last, but by no means least, our queenly Lady Assistant Steward, chaste Pomona, and sister B., all overflowing with love for the Order, and cheering all by their very presence.

Since I have mentioned the dining room, I am reminded to say that I heard outsiders inquiring for "Grange soup," as if they hoped with that beverage to drink in the inspiration that shone in our

Happy Faces.

Apropos of this, it is due to say that in May we had the pleasure of stopping at the Yosemite House, when the gentlemanly proprietor, James Cole, was receiving warm praise from the traveling public, for the excellent appointments of his table; and the demoralizing effect of an overcrowded house on the present occasion was our common misfortune.

Plain Talkers.

Wednesday evening Bro. Walcott paid us a visit, and by his modest candor and honesty of speech, inspired that confidence and esteem which his efforts in our behalf so richly deserve. Bro. Cressey answered a summons from the State Grange to come up and tell us something about our bank. If you don't know Bro. Cressey, it is'nt worth while to try to tell you anything about him. But he has made this cause a part of himself, by the generous, self-sacrificing heartiness with which he has thrown his powerful energies into it, and it is a success.

It was remarked that after each of these men was fairly launched upon his subject, there was no need of the Master's gavel to preserve order, each being distinctly heard within a reasonable distance from the platform, though using only an ordinary conversational tone of voice, carrying conviction by the simple truthfulness of their manner.

On Tuesday morning, by request of Bro. Overhiser, we, as a State Grange, attended the

Funeral of Sister Stephens,

A member of Stockton Grange, our worthy Master and Chaplain assisting at the obsequies, and brothers and sisters aiding the choir. The occasion was a sad one; but it is pleasant to know that a Patron is loved and honored, even in death.

I do not propose to tell you all that was done at our sessions, for somebody else will do that; but I hope you will gain such an impression from my account, that you will all want to

Attend in Person Next Year.

If it seems ever so improbable that you will be able to do so, let me say all my plans during the past year have been made to this end, and I believe you will be fully repaid for any effort you may make for this purpose, even to so desperate a measure as to "farm out" the children among the neighbors, and leave the rest to a Chinaman.

We believe that the sisters, especially, need

The Benefits that must follow,

In many ways. The arguments in favor of your having a change from household cares must be even more apparent to yourselves than to us; so, instead of repeating them, we will say, you are sure to gain refreshment of soul, if not of the body, from the very atmosphere of the place. This probably sounds like enthusiasm; but I repeat, it is *irresistible!*

There was no organized efforts this year to attack the subjects of dress reform and co-operative housekeeping; but we were content to discuss them by the light of each other's experience in little primary meetings, held in the halls, parlors, and at the stairway, while waiting for our delinquent husbands.

Next year, however, it is proposed to hold a women's convention in one of the outer-rooms, where we can discuss all the matters pertaining to our social and domestic life, and perhaps have an opportunity to exhibit our proficiency in parliamentary tactics, which we are fast

Learning of our Brothers.

So, come prepared to consider the questions of brown-bread and gems, raising chickens, chil-

[Continued on Page 249.]



Live and Hope.

[Written for the PRESS by J. SUMNER COLEMAN.]

To Mre. A. E. G., on the death of a beloved daughter.

Oh think of me now I am gone
To realme of bliss where angels dwell,
Where Jesus in his arms has borne
Me home to reet, and all is well.
Then when the evening shades appesr
And etare shine in the darkened sky,
My spirit msy sometimee be near,
Though undiecerned by mortal eye.

When gentle breezee from the sky
And grateful fragrance fille the air,
When Luns's light ie eeen on high
And shines so bright and pure and fair,
Then may you know that I am nigh
And ready to impsrt a kise,
To bring you joy for every sigh
And fill your soul with hesvenly bliss.

When in the house of God you kneel
And join to praise the Savior'e nsme,
My holy love you then shsll feel
And Chriet will grant you still the esme.
Where'er you fix your ardent gaze
On stormy sky or mountsin slope
To me your thought you'll sometimes raise
And hesr me whisper Live and Hope.

San Francisco, Sept. 21st, 1874.

Sarah Ammon's Elopement.

[Written for the RUBAL PRESE by EVE MORE.]

Mr. Ammon was a pioneer farmer of Michigan. He was formerly a resident of the State of New York, but the tide of emigration carried him, with many others, towards the west, where many broad acres of land could be purchased for a small amount of meney. He remained in Michigan one year; dnring which time he prepared a rude, though comfortable home for his wife and child. He then returned to the East, bade a final adieu to his many friends, and with his little family, once more turned his face toward the setting sun. Many years of hard work were before our emigrants, but they did not shriuk from the task. Industry, perseveraace and goed management, will accomplish wonders. These qualities, our friends possessed in an eminent degree. Therefore it is not strange that, as the years passed away, they had the satisfaction of seeing their farm become more and mere attractive and valuable. Improvements were continually beiug made; a large house was built; out-houses erected; their stock increased, and the fruit of the orchard yearly become more abundant.

In short, when Sarah, their daughter, was eighteen years old, Mr. Ammon was a wealthy farmer. Sarah possessed a pretty face and pleasiug manners; and her mother desired that when she left the paternal reof as a wife, she would be conducted to a home as goed, or better than the one that she left. But ah! the child will not always accept the pareuts' choice of a mate. Had Sarah, the gessips said, been pleased to give herself to Mr. Tristle, the rich young merchant of Hastings, who was very much smitten with the charms of our country girl, her way to the marriage altar would have been without an obstacle; but with youthful waywardness, she would not heed her mother's advice to encourage the young man. And when she became acquainted with Charley Sprague, the gay, handsome, though penniless farmer, she had the "obstinacy," as her mother called it, to fall in love with him. The young couple were not long in learning that their affections were mutual; but their joy in each other was clouded by an uncertain future. They pledged themselves to each other, with youthful ardor; and they suffered themselves to build many a noble castle in the air. Mrs. Ammon's keen eyes were not slow to discover that her daughter found much pleasure in the society of Charley Sprague; so when a favorable opportunity presented itself, she addressed her daughter thus: "Sarah, I have been watching you for some time, and I fear that you find more than ordinary happiuess in the society of Charley Sprague. Am I mistaken, or not?" The crimson blood rushed to the yonng girl's face at these words. She hesitated for a moment, then decided that it were best to be frank; so she replied in a tremulous voice: "Yes, mother, you are right." Again she hesitated, but soon summoned courage to continue in a low voice and with downcast eyes: "Yes, Charley and I *do* love each other very much; he has asked me to be his wife; and—I have cousented." Mrs. Ammon turned livid with rage; and without considering what she did or said, raised her hand and struck her daughter in the face; while she fairly hissed the words: "Take *that* for your impudence." In a moment she repeuted; but it was too late. That blow from the mother's hand, developed the dormant willfulness in the daughter, that she inherited from her mother. The insult to her pure affections, stung her to the quick. No longer did the little room contain a drooping, blushing maiden, but in her place, a woman, pale, erect and proud. "Mother," she said, "you forget that I am no longer a child," then turned and left the room. "Fool that I am," her mother muttered, "but to have the aspiratiens of years, quenched by this penniless youngster. This feolishuess must not last. My daughter shall yet be Mrs. Tristle, the *merchant's lady*."

After Sarah left her mother, she sought and found her father, to whom she confided the story of her love, and of the treatment she had just received from her mether. "Father," she said, after she had told him all, "have I your consent to msrry Chas. Sprague?" He replied, "Sarah, you are of age, I like the frank, open manners of yonr lover; *I* can have no objections to your marrying him; but I fear that it will be long ere your mother will give her consent. She is not one to easily abandon a favorite project." "Mether never will give her consent to this union," said Sarah confidently. "I have always respected my parents wishes, but in a matter of this kind, I feel that I must act for myself. Adieu, dear father." That night our lovers had an interview, and plans for the future were formed, that would have filled Mrs. Ammon with dismay, had she known of them.

Nothing occurred for some time to excite the mother's suspicions, and she began to hope that no harm had ensued from that unlucky morning's talk. Six months passed away with its labers and cares, before any nete-worthy event transpired in Farmer Ammon's family; but at the expiration of that time, on the morning of the 26th of Sept., Sarah Ammon was missing. Mrs. Ammon having called her daughter several times without receiving an answer, went to her room to waken her. Judge of her censternation, when she found that Sarah was not there! She took up a note that was lying on the table, and read as follows:

"DEAR MOTHER:—Thinking that it would be impossible to ever attain your consent to my marriage with Charley Sprague, and feeling that we were intended by Providence for each other, a private marriage was determined upon. We will be married to-night at ten o'clock, by the Rev. Mr. Shaw.

As this is my first act of disobedience, I hepe that yon will forgive me.

Your affectionate daughter,
Sept. 26th, 1851. SARAH AMMON."

The grief of Mrs. Ammon, after reading the note was dreadful to witness. It was long ere she could control her sorrow; but gradually her stern, stubborn will conquered every other emotion. Her husband was away from home at this time. When he returned, Mrs. Ammon related to him in a tranquil manner the news of their daughter's elopement. "Margaret," said Mr. Ammon, "we must invite them home. What is done cannot be undone." "Invite them home!" was the answer, "*never by me.*" In vaiu did Mr. Ammon reasen with his wife, and eutreat her to reconcile herself to the inevitable. Mrs. Ammon was incorrigible. Mr. Ammon went to bid his danghter and son-in-law good-bye, ere they departed for their new home in Ohio. "Sarah," said the old man, "I alone have come to bid yon farowell." His voice faltered, bnt in a moment he continued: "May Ged bless you both; and let us not forget to pray our Father in Heaven to incline the heart of the mother to her child." After a few more words of tenderness, they parted.

Three years passed away, and the mother and daughter had not met. The mother was too proud to send for her child, but her heart yearned for her. Slewly bnt snrely love was gaiuing the ascendency over anger.

* * * * *

It was night, and good Farmer Ammon read from the Holy Book. He knelt in prayer with his wife. He prayed for their daughter. "Oh God, our Father," he said, "watch over and protect our child; she is our only child. Oh! Thou dost know the parents' heart. Thou dost know the love that *we* bear for the dear one Thou didst give us in our yonth." (A sob escaped from the corner where Mrs. Ammon was kneeling.) "Dear Father, it is long since we have sceu her. Oh, grant that ere we close our eyes in death, our loved one may return to the home of her yonth!" Another sob was heard from the outside. The sound reached the ears of the worshipers. The prayer was soon finished; and Mr. Ammon opened the door, and lo! there stood his daughter and her husband holding a child.

"Sarah," said the father, trembliug with joy, "my prayer is answered. Welcome home, and you too, Charley, but what have you here? Can this be your child?" "Yes, this is our little Maggie, father," said Charley; for Sarah was clasped in her mother's arms, and both were luxnriating in tears; happy tears, accompanied with smiles and brokeu seutences, such as, "dear mother," "Sarah, can this be? God be praised," etc.

They were all too happy to think of their old trouble. After the first joy was over, Mrs. Ammon and Sarah both began to talk of forgiveness; but they would not heed each other's self reproaches. They both claimed to be the most to blame. The reconciliation was complete, and years of happiness followed. Our story is told.

THE wild bird that flies so lone and far has somewhere its nest and brood. A little fluttering heart of love impels its wings and points its course. There is nothing so solitary as a solitary man.

THERE have been many definitions of a gentleman, but the prettiest and most pathetic is that given by a young lady: "A gentleman," says she, "is a human being combining a woman's tenderness with a man's courage."

A Hen-pecked Husband's Soliloquy.

[Written for the PRESS by Mre. ELISA E. ANTHONY.]

Hurrah! My wife has gone to visit her mother, and will be away one week; and I am so happy—ahem! I should say sorry—that I hardly knew what to do first, although I have met with some trouble since she left. She started two days ago, and as there are seven days in a week, there will be only five more days of freedom; then adien to comfort—I mean loneliness.

I do not mean to insinuate anything against my wife, but decidedly speaking, I cannot feel lonely when she is at home. She does not like to have me ont of her sight. If I go into the sitting-room, tip my chair back, put my feet on the mantle-piece, so I can contemplate them at my leisure, and commence smoking, in two secouds the door will be thrown open, and my beloved partner will walk in, and tell me to stop smoking, and sit like a civilized being, and not fill the room with smoke. Out of deference to her opinion, I meekly leave her—my—our room, and stalk up and down the hall, enjoying my cigar, when she appears again, and coughs and speaks so feelingly of the injnry done to her health by my smoking, that I am conquered, and like a dutiful husband, throw my cigar away. It cost me twenty-five cents.

After supper if I endeavor to slip away without her knowledge, she is so careful of me, that she follows me from one room to another, until it is too late to go out. And I ask yon, how could I act cross and savage, to a wife who is so solicitous lest I should breathe the night air, and be ill? But I meekly suggest that there is such a thing as being entirely *too* solicitous. She alse institutes a search of my peckets every night, when she thinks I am asleep. But I am wise enough not to keep any mementoes there; for all wives will periedically turn their husband's peckets inside out in search of love-letters, pictures and other triffles; so I don't complsin of my beloved; it only shows her interest in my behalf.

But she is away; and I can smoke in the parlor, leave my boots on the piano, my box of cigars on the bed and need not hang up my clothes, as she will always insist on my doing; but can throw them down any place, without expeoting a lecture. She told me to feed the cat three times a day; but to save that tronble I gave a boy ten cents to carry him off; so when my wife returns, I will tell her poer Tom is lost. I know she won't believe a word I say, bnt that is not my fault. She cautioned me to be careful and not spend much money; so I have been very economical. For two days I have cooked my own meals; but as I have not washed a dish since she left, and brokeu three cups and her best glass pitcher, there are no more elean dishes; so I will board at a hotel the remainder of the week; and if that is net economical. I would like to knew what is. When my wife is at home, if I am not pnnctual at my meals, I have to eat cold lunch, or go without. My wife is an excellent manager.

Last evening, half a dozen of my friends came in, and we had a jelly good time; but this morning, when I awoke and found myself lying on the piano, and saw the curtains were torn from top to bottom, wine stains and broken glass all ever the carpet, the ouuary bird dead in the cage, the full length mirror in fragments, I had a dim recollection that there had been some kind of a row; and shuddered to think of the still worse row there would be, when my wife retnrned. Not that I am afraid of her. Oh, no! but she has such a determined manner, and snch a flow of language, that I do not like the idea of confronting her. She knows that I am master in my own house, and far from being timid, but—but—but I believe I will go away on business for about two weeks; and the storm will have blown over when I return I am no coward, bnt—you understand.

San José, Sept. 28th, 1874.

Are We Living Too Fast?

We are living too fast to-day. We think, as a people, to much of money and to little of the cultivation and development of a higher life—a life which shall give impetus to the noblest impnlse of the soul, which shall give us a more truly Christain home life, which shall give us a better basis to society, which shall fiud time for resting from the ceaseless whirl and restlessness of business. As a rule, the wealthy business man of to-day does not enjoy life. He carries business with him everywhere. He takes it home; he sleeps with it; he thiuks of it as he rides out; and when Sunday comes, he takes it with him to church and dreams of it in his nod during the sermon. We must have a change from all this. There are other panics yet to follow if we do not coase this crazy pursuit of money. We are glad to know thst there is a healthy reaction from the wild and foolish and wicked manner in which so much of the business of the country has been conducted, and we trust it will continue. Better that business should droop a little; better that steamers and ships should rest a little at the wharves, that we may scrape the barnacles off; better that man should have an opportunity for knowing his neighbor; better that he should know more and think more upon the country to which he is going. We have brought nothing with us into this world, and it is certain we can take nothing out. Let us think of this a little more; let us estimate it at its true worth, and act and live accordingly.—*Christian at Work.*

THE strokes of the pen need deliberation as much as those of the sword nced swiftness. —*Julia Ward Howe.*

A Farmer's Beautiful Wife.

Matilda Fletcher thus describes a farmer's wife who is not only beautiful and wise, but possesses several cardinal virtues in addition:

The most beautifnl woman I ever have known was a farmer's wife, who attended to the household duties for a family of four, and also assisted in gardening, and the light farm work; and yet I never saw her hands rough and red, and never even saw a freckle on her nose. Impossible! you say, how did she manage? I never asked her, but she had some envions neighbors, who went slouching around with red, scaly hands, sunburnt faces, and hair matted with dnst and oil, who let me into the dreadful secret. They informed me with many an omineus shake of the head, that she was just the proudest minx that ever lived; that she actually wore India rubber gloves when she used the broom and scrubbing brnsh, and always when she werked out-doors; that she also had a bonnet made of oil-silk, completely covering the head, face and neck, leaving only apertures for seeing and breathing, thns securing perfect freedem from sun, wind and dust. Did you ever hear of such depravity? She also fastened her dishcloth to a stick, so that she need not put her hands in hot water. For the same reason, she accomplished her laundry work with a machine and wringer. And then to see her in the afternoon tricked ont in a fashionable white dress, with a bright colored ribbon at her throat, and a rose in her hair entertaining in the parlor, as thongh she was the greatest lady in the land, was more their patience conld endure. And how they did pity her poer children because "she wonld not let them eat pastry nor greasy food, for fear it might spoil their complexion."

The truth was her plump little darlings always looked like fresh rose bnds, and she met them coming home from school with so much love and beauty and grace, that I don't see how she could be inproved one atom by becoming a veritable angel. And her hnsband! He had such a satisfied expression, that it was a perfect aggravation te ordinary people to look at him. He deserved to be happy, because he enconraged and helped her to cnltivate beauty and goodness both in herself, her family and her home; and I don't know but her success principally belonged to him, becanse he bonght all the new inventions that conld lighten her labor, and all the delicate and pretty things she needed to adorn her home, and when she was sick he wonldn't let her do mnch work nntil she was well and strong. Strange as it may seem, at snch times he nsually devoted himself to her with as much care and tenderness as he wonld if she had been the most valnable horse on the farm. Wise little woman; she knew how to improve her health and comeliness, and of course she was not ashamed to do it when she had enconragement and approval. If, instead of her genial, noble-hearted husband she had married a niggardly Gradgrind, she would probably have lost her health, her beanty, her sweet disposition, her whole interest in life, and become an unlovely, broken-spirited woman.—*Moore's Rural.*

EXCITEMENT AND SHORT LIFE.—The deadliest foe to man's longevity is an unnatural and unreasonable excitement. Every man is born with a certain stock of vitality, which cannot be increased, but which may be husbanded or expended rapidly, as he deems best. Within certain limits he has his choice, to move fast or slow, to live abstemiously or intensely, to draw his little amonnt of life over a large space or condense it into a narrow one; bnt when his stock is exhausted he has no more. He who lives abstemiously who avoids all stimulants, takes light exercise, never over tasks himself, indulges no exhausting passions, feeds his mind and heart on no exciting material, has no debilitating pleasure, lets nothing ruffle his temper, keeps his, "account with God and man dnly squared-up," is sure, barring accidents, to spin out his life to the longest limits which it is possible to attain; while he who feeds on high-seasoned food, whether material or mental, fatigues his body or brain by hard labor, exposes himself to imflammatory disease, seeks continual excitement, gives loose rein to his passions, frets at every trouble and enjoys little repose, is burning the candle at both ends, and is sure to shorten his days.

FAILURE IN LEARNING MUSIC.—*Whitney's Journal of Music*, an excellent monthly pnblished at Manchester, N. H., states three reasons why American children often fail to excel in music *First because they commence the study of the pianoforte too late in life.* The proper age with most children is between six and seven years; then the mind craves not yet for so much variety as at a later period, and the fingers are supple enough to admit of easy and perfect adaptation to the mechanism of the instrnments. *Secondly, because the discipline at home is too lax*, and admits, in many cases, of too precocious development, which is the untimely end of all continued, well-directed effort; and snch effort is indispensably necessary, even with the most gifted of children. in the pursuit of musical studies. *Thirdly, the want of musical animation at home.* The unfortunate fact that men are not æsthetically educated in this country, and have neither taste for nor any knowledge of music, causes the mother to neglect her piano very soon after marriage; and the children, not hearing any music at home, lose the opportunity of training the ear at a time when than organ is most susceptible of cnltnre.

FAME is a vapor; popularity an accident; riches take wings; the only certainty is oblivion.—*Horace Greeley.*

A Smuggler's Narrative.

"We shall be, my dear madam," said I to a fellow-passenger in the Dieppe boat, taking out my watch, but keeping my eyes steadily upon her, "we shall be in less than ten minutes at the cusom house." A spasm—a flicker from the guilt within—glanced from her countenance.

"You look very good-natured sir," stammered she.

I bowed, and looked considerably more so to invite her confidence.

"If I were to tell you a secret, which is too much for me to keep myself, oh! would you keep it inviolable?"

"I know it, my dear madam—I know it already, said I, smiling, "it is lace, is it not?"

She uttered a little shriek—and—yes, she had got it there among the crinoline. She thought it had been sticking out, you see, unknown to her.

"Ob, sir," cried she, "it is only ten pounds worth; please to forgive me, and I'll never do it again. As it is, I think I shall expire."

"My dear madam," replied I, sternly, but kindly, "here is the pier, and the officer has fixed his eye upon us. I must do my duty."

I rushed up the ladder like a lamp-lighter; I pointed out the woman to a legitimate authority, I accompanied her upon her way, in custody, to the searching-house. I did not see her searched, but I saw what was found upon her, and I saw her fined and dismissed with ignominy. Then, having generously given up my emoluments as informer to the subordinate officials, I hurried off in search of the betrayed woman to her hotel. I gave her lace twice the value of that she lost, paid her fine and explained:

"Yon, madam, had ten pounds worth of smuggled goods about your person; I had nearly fifty times that amount. I turned informer, madam, let me convince you, for the sake of both of us. You have too expressive a countenance, believe me, and the officer would have found you out in any event, even as I did myself. Are you satisfied, my dear madam? If you still feel aggrieved by me in any way, pray take more lace; here is lots of it."

When I finished my explanation the lady seemed perfectly satisfied with my little stroke of diplomacy, though she would have doubtless preferred a little less prominent part in it. —*Exchange.*

Tell Your Wife.

If your are in any trouble or quandary, tell your wife—that is if you have one—all about it at once. Ten to one her invention will solve your difficulty sooner than all your logic. The wit of woman has been praised, but her instinct are quicker and keener than her reason. Counwith your wife, or your mother, or your sister, and be assured light will flash upon your darkness. Women are too commonly adjudged as verdant in all but purely womanish affairs. No philosophical students of the sex thus judge them. Their intuitions, or insights, are the most subtle, and if they cannot see a cat in the meal, there is no cat there. In counselling a man to tell his wife, we would go farther, and advise him to keep none of his affairs a secret from her. Many a home has been happily saved, and many a fortune retrieved, by a man's full confidence in his "better half." Woman is far more a seer and a prophet than man, if she be given a fair chance. As a general rule, wives confide the minutes of their plans and thoughts to their husbands, having no involvements to screen from them. Why not reciprocate, if but for the pleasure of meeting confidence with confidence? We are certain that no man succeeds so well in the world as he who, taking a partner for life, makes her the partner of his purpose and hopes. What is wrong of his impulse or judgment she will check and set right with her almost universally right instincts. "Help meet" was no insignificant title as applied to man's companion She is a helpmeet to him in every darkness, difficulty and sorrow of life. And what she most craves and most deserves is confidence—without which, love is never free from a shadow.

JEREMY TAYLOR ON MARRIAGE.—The following extract from that sound old divine, Jeremy Taylor, is always read with interest, because of its simple truthfulness: Marriage has in it less of beauty, but more of safety than the single life; it hath no more ease, but less danger; it is more merry and more sad; it is fuller of sorrows and fuller of joys; it lies under more burdens, but it is supported by all the strengths of love and charity, and those burdens are delightful. Marriage is the mother of the world, and preserves kingdoms, and fills cities and churches, and heaven itself. Celibacy, like the fly in the heart of an apple, dwells in perpetual sweetness, but sits alone, and is confined and dies in singularity; but marriage, like the useful bee, builds a house, and gathers honey from every flower, and labors and unites into societies and republics, and sends out colonies, and feeds the world with delicacies, and obeys their king, and keeps order, and exercises many virtues, and promotes the interests of mankind, and is that state of good to which God hath designed the present constitution of the world.

MAN is the merriest species of creation; all above or below him are serious.—*Addison.*

WE pardon as long as we love.—*Rouchefoucald.*

Young Folks' Column.

Playing Meeting.

'Twas a rainy morning. My children four,
Ernest and Bell, Louise and May,
And the two little Dixons over the way,
Had been noisy in play an hour or more,
When all at once such a quiet lay
On the room, that I guessed it was "Meeting Day."

So I noiselessly drew to the door ajar,
And sat and listened; they could not see
My form, but the group was plain to me;
Ernest, with face drawn gravely down,
His little head lost in his father's crown,
Had the highest seat in the gallery.

And Alice Dixon whose placid face
In its sober moods was pictured rest,
With a 'kerchief folded on her breast
Sat next to him, in the preacher's place,
And the young ones on stools below,
Louise and Bell, and May and Joe.

A solemn silence filled the room!
I knew not then, and I know not now,
If it could be so, but it seemed somehow
That the Spirit of Goodness did descend
The same that we feel in its holy sway
In the grown-up meetings not formed for play.

Then Alice, the preacher, rose to speak—
Bell giggled a little, but all the rest
Sat perfectly quiet, as if possessed—
And she said in a voice that was clear and sweet,
"Dear friends, I know that we are young and small,
But I think the good Lord loves us all."

And then she went further on to show,
How, when they got cross at their work or play,
Or were naughty, He turned His face away;
And she prayed "to be *good*," and her prayer I know
Was very simple in thought and word,
But a sweeter one I have seldom heard.

Then the hands were shook, and the meeting broke,
And the children laughed to be free again;
But I thought perhaps not all *in vain*
Was that *meeting* held or that *sermon* spoke,
For *playing good* may induce the state,
And the *simple* things confound the *great*.
—*Children's Friend.*

Stick to Your Bush.

A rich man, in answer to the question how he became so very successful, recited the following story:

"I will tell you how it was. One day when I was a lad, a party of boys and girls were going to pick blackberries. I wanted to go with them, but was afraid my father would not let me. When I told him what was going on, and he at once gave me permission to go with them, I could hardly contain myself. I rushed into the kitchen, got a big basket, and asked mother for a luncheon. I had the basket on my arm, and was just going out at the gate, when my father called me back. He took my hand and said in a very gentle voice: 'Joseph, what are you going to do?' 'To pick berries,' I replied. 'Then, Joseph, I want to tell you one thing. It is this: When you find a pretty good bush, do not leave it to seek a better one. The other boys and girls will run about, picking a little here and a little there, wasting a great deal of time, and getting few berries. If you want berries, stick to your bush.'

"I went, and we had a capital time. But it was just as my father said. No sooner had one found a good bush than he called all the rest, and they left their several places and ran off to the newly-found treasure. Not content more than a minute or two in one place, they rambled over the whole pasture, got very tired, and at night had very few berries. My father's words kept running in my ears, and I 'stuck to my bush.' When I had done with one I found another, and finished that; then I took another. When night came I had a large basketful of berries, more than all the others put together, and was not half so tired as they were. I went home happy. But when I entered I found my father had been taken ill. He looked at my basketful of ripe blackberries, and said, 'Well done, Joseph. Was I not right when I told you? Always stick to your bush.'

"He died a few days after, and I had to make my way in the world as best I could. But my father's words sank deep into my mind and I never forgot the experience of the blackberry party; I 'stuck to my bush.' When I had a fair place, and was doing tolerably well, I did not leave it and spend weeks and months in seeking one a little better. When other young men said: Come with us, and we will make a fortune in a few weeks,' I shook my head, and 'stuck to my bush.' Presently my employers offered to take me into business with them. I stayed with the old house until the principals died, and then I had everything I wanted. The habit of sticking to my business led people to trust me, and gave me a character. I owed all I have and am to this motto: 'Stick to your bush.'"

KEEP IT FROM THEM.—Don't give liquor to children. Possibly you can do it with safety, but the chances are agains it. One of the first literary men in the United States said to a writer: "There is one thing which, as you visit different places, I wish you to do everywhere: that is, entreat every mother never to give a drop of strong drink to a child. I have had to fight, as for my life, all my days to keep from dying a drunkard, because I was feed with spirits when a child, and acquired a taste for it. My brother, poor fellow, died a drunkard. I would not have a child of mine take a drop of liquor for anything. Warn every mother, wherever you go, never to give a drop to a child, as she values its future happiness."

Progress in Astronomical Discovery—The Lights in the Heavens.

We clip the following from the published proceedings of the French Association of Science: The spectroscope has explored the far-off space of heaven. The light of hundreds of of stars has been analyzed, and nebulæ, scarcely visible, have had the quality of their radiations revealed by its aid. The light, in some cases very feeble, with which a number of stars shine, gives a spectrum with dark lines like the solar spectrum, and this fact proves to us that the constitution of these stars is like that of our sun. Aldebaran sends us records of hydrogen, magnesium, and calcium, which abound in solar light, but also those of metals which are rare or absent, as tellurium, antimony, and mercury.

Nebulæ, twenty thousand times less brilliant than a candle at a distance of 13,000 feet, have still given a spectrum; for their light, although feeble, is very simple in its constitution, and the spectrum which it gives consists only of two or three bright bands, one of hydrogen, the other of nitrogen. These nebulæ, which give a spectrum of bright lines, are those which the most powerful telescopes cannot resolve; there is an "abyss" between them and resolvable nebulæ, which like ordinary stars, give a spectrum with dark lines.

What an effort of the human mind! To discover the constitution of stars of which the distances are unknown, of nebulæ which are not yet worlds; to establish a classification of all the stars, and still more to guess their ages—ah, tell me, is not this a triumph for Science? Yes, we have classed them according to their ages. Stars colored, stars yellow, stars white; the white are the hottest and the youngest; their spectrum is composed of a few lines only, and these lines are dark. Hydrogen predominates. Traces of magnesium are also met with, of iron, and perhaps of lodium; and if it is true that Sirius was a red star in the time of the ancients, it owed perhaps its tint to the greater abundance of hydrogen at that epoch. Our sun, Aldebaran Arcturus, are among the yellow stars. In their spectra the hydrogen lines are less developed, but the metallic liues are fine and numerous. The colored stars are not so hot and are older. In consequence of their age, they emit less vivid light. In them there is little or no hydrogen. Metallic lines abound, but one also finds channelled spaces like the lines of compounds. The temperature being lower, these latter can exist whether they consist of atoms joined to others of the same kind, or whether they contain groups of heterogeneous atoms.

As to matter, it is everywhere the same, and the hydrogen of water we meet with in our sun, in Sirius, and in the nebulæ, everywhere it moves, everywhere it vibrates; and these movements which appear to us inseparable from atoms are also the origin of all physical and chemical force.

INFLUENCE OF CARBONIC ACID ON THE GROWTH AND COLOR OF PLANTS.—Starting with the supposition that at a former period of the earth's history vegetation was incomparably more luxuriant than at present, and that this was largely due to the much greater quantity of carbonic acid in the atmosphere, Jos. Bœhm instituted some experiments on the green color of plants and the germination of seed in atmospheres containing definite quantities of carbonic acid. The results obtained showed that in air containing only 2 per cent. of that gas the formation of chlorophyl was much slower, while in an atmosphere containing 20 per cent. it ceased entirely, or nearly so, according to the kind of plant experimented upon. In like manner a larger or smaller quantity of carbonic acid retarded more or less the germination of seed Some moistened beans were kept for eight days in equal parts of air and carbonic acid, and at the end of this time did not show the slightest indication of sprouting, and grew as usual when left in the open air. Bœhm deduces this alternative conclusion from his experiments: Either the hypothesis that the atmosphere was richer in carbonic acid than now is false, or else that the plants of a former time must have been less sensitive to carbonic acid than their successors of to-day. The former hypothesis agrees with the view that the atmosphere is unlimited, and relieves us from any anxiety as to the unchangeableness in the future of the principal food of plants.

THE TRAINING SHIP OBTAINED.—Commander Glass writes from Washington to Colonel Zabriskie as follows: "I am at last able to write you that I have succeeded fully in my mission to Washington, and congratulate you and our other friends that the "Jamestown" is to be fitted at once for a school ship for San Francisco. I will be in San Francisco about the 20th or 25th of October, as I am under orders to superintend fitting the "Jamestown" for service. In the meantime I will go to New York and Boston and find what is being done in those cities that may have any bearing on our school. I have all the papers that could be found in the Navy Department on the subject of training or apprenticeships, and will be prepared to go to work at once on my return to San Francisco."

LAND is rapidly increasing in value in Santa Barbara county. A few days ago Spencer L. Skeels sold twenty-one acres lying in Montecito, for $100 an acre. This land could have been purchased from Col. Dismore one year ago for $35 an acre,

Why Iron Castings are Accurate Copies of the Mould.

Robert Mallet furnishes the *Engineer* with a lengthy but interesting paper upon this subject, from which we condense as follows: The fact that iron does take, very accurately, the form of the mould in which it is cast, has long been attributed to the supposed fact that this metal expands in volume when cooling—a supposition which has passed current for a century, but without sufficient proof to establish it as a fact. Recent experiments, however, have proven that iron does not expand in cooling.

But even if iron *did* so expand, the casting could not be an exact copy of the mould, from the fact that the expansion would distort the mould wherever the walls were least resistant. For example a flat plate, moulded from a pattern of equal thickness throughout, would have one or both of its surfaces forced outwards so as to make the plate thickest toward the central parts, while the edges or coruers would remain nearly unaltered.

Cast iron does, however, as is well known, take the form of the mould, as formed of sand or loam by the usual methods of the founders, with great fidelity, except in case of chills or moulds of cast iron, the liquid metal cast into which is so instantly chilled by contact as not to form a very accurate transcript of the mould. It does not do so, however, to a quarter the extent that do several metals to which the property of expanding in consolidation has never been attributed, as zinc and lead. Gold, silver, copper, and most of their alloys afford less perfect castings.

The circumstances upon which these results arise undoubtedly involve conditions mechanical, chemical and molecular. Density is considered one of the most important, and is the mechanical force by which it is compelled to fill the sinuosities of a mould. Gold in this respect should form the most perfect casting; but, in fact, it is very inferior to iron.

The specific capillarity of a metal when in fusion, and its viscosity while cooling is considered by Mr. Mallet as having a very important influence in producing a perfect casting. Different metals are liquid in very different degrees while in perfect fusion, and therefore require very different degrees of pressure to force them into angular cavities. Upon this point physicists have as yet given us but little exact information. The greatest diameter of spherical drops capable of being assumed by any metal when taken in connection with its density is, however, a rough measure of the resistance which each presents to being forced into angular cavities of a mould of such material that it is not wetted by the liquid metal. Drops of mercury cohere at larger diameters than those of liquid lead. So also different metals differ in the range of viscosity through which they pass between their state of most perfect liquidity and that of solidity. Lead and some of its alloys, such as plumber's solder, pass through a very long range of viscosity; brass and copper do so likewise, though in less degree; cast iron, and in general all the metals that crystallize most readily and best, pass through a very brief stage of viscosity. Where the melting point of the metal is a low one, one of the effects of this prolonged viscous stage, during which the metal contracts by loss of heat, is that its withdrawal from the sides of the mould is not compensated by a sufficient continuance of hydrostatic pressure, owing to imperfect liquidity. Cast iron is remarkably free from this objection; its melting point being very high, and its range of viscosity small and confined to a small range of temperature, the metal is maintained, though constantly contracting by loss of temperature, in close contact with the mould by hydrostatic pressure up to within a brief period of its setting.

The third hindrance to perfect casting is the tendency of the metal to oxidize. Melted zinc oxidizes but very slowly up to a temperature somewhat above its melting point, but rapidly at and above a bright red heat; hence zinc gives perfect castings; but when it is alloyed with copper the melting point of the brass is raised to such a point that the zinc oxidizes very rapidly, and produces that "tai ing" and general scurfiness of surface which is the plague of the brass founder, and the oxide of zinc is not reducible back to metal at the temperature at which brass is cast by any chemical agent capable of being introduced into the substance of the mould.

In cast iron, on the other hand, its tendency to oxidize by contact with the atmosphere when in fusion is opposed by the presence of silicon and carbon in the metal itself, and any oxide superficially formed is reduced back to metal with great facility by the hydrogen and carbonic oxide evolved from the moisture and charcoal, or coaldust, or other carbonaceous matter entering into the constituents of the mould. Gold is inoxidisable, but possesses a vigorous affinity for sulphur, and it is probable that the film which may be observed upon the surface of molten gold in casting, and which produces "tailiness" in the ingot or bar, consists of some sulphur compound taken up from the gases from the fuel employed for fusing it. Copper also casts badly, as when in fusion it is constantly either taking up carbon or oxygen as the heat of the furnace is either a reducing or an oxidating one, and the great cleanness of castings produced from phosphorised copper arises from the presence of the small amount of that element precluding it from taking up carbon, on the one hand, and shielding it from oxidation on the other.

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SAN FRANCISCO:

Saturday, October 17, 1874.

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WHEAT VS. BEANS.—We notice in the Assessor's statistical returns for Yavapai county, Arizona, some figures which show that farmers can make a little out of other crops than wheat. In that county last year there were only 91 acres of wheat which yielded 1,274⅔ pounds per acre, or 11,600 pounds in all. The average price was 5 cents per pound. There were in the same county, 214 acres of beans planted, which yielded 1,369 pounds per acre, or 293,100 pounds in all, and the average price they brought was 7 cents per pound. The beans beat the wheat that time. The barley in the same county produced 1,094⅓ pounds per acre, and brought on the average 3¼ cents per pound. Corn yielded 1,540⅓ pounds per acre, and paid 3 1-6 cents per pound. Potato yielded 2,201⅓ pounds per acre, and brought 3⅜ cents per pound. Onions yielded 2,064¾ pounds per acre and brought 4⅓ cents per pound. The average expense of cultivating the wheat and barley per acre was $10; corn, $11, potatoes, $12. Why cannot some of our large farmers try some comparative experiment and give us the results in detail of cost and per cent. of different crops.

SISKIYOU COUNTY FAIR.—The ninth annual fair of the Siskiyou County Agricultural Society was held at Yreka last week. The exhibit is declared to have been superior to that on any former occasion, especially in fruits in different conditions, and in vegetables. The domestic departments are also highly spoken of as displaying the handiness of the wives and maidens of Siskiyou county in matters of taste and usefulness. We shall endeavor to give the awards of premiums in our next.

ON FILE.—"A Visit to San Francisco," Miss M. I. H.; "Listen, Girls;" "The School Ma'am Abroad," and "Where There's a Will There's a Way," Mrs. C. I. H. N; "Items from Santa Ana," J. R.; "Letter from a 'Fruit Drier' Pat entee," W. P. S.

THE hay crop in Lake valley, at the head of Lake Tahoo, is larger this year than ever before; but the vegetables have been seriously injured by the frost. Potatoes, which usually do well in that locality, will not yield one-fourth the average crop.

PUYALLUP VALLEY, W. T., with the acreage in new fields, will next year yield 250,000 pounds of hops.

Fruit Growers in Convention.

[Reported for RURAL PRESS.]

A convention of those interested in fruit growing met in the hall opposite the Yosemite House in Stockton, on Friday October 9th. McPherson Hill in the chair. Committee on order of business reported topics for discussion as follows: First, methods of drying; Second, shipment and sale of fruit; Third varieties of fruit to raise.

P. Sanders being called, he responded by a detailed account of the method of raising and drying practiced in the vicinity of Malaga, Spain, where the great bulk of the raisins of commerce are manufactured. By request he continued with a detailed account of the method of culture, pruning, etc. On the subject of varieties, he said that he had not a single vine to sell, but that he had seen in Malaga a variety of grape which made the very finest raisins; was of the largest size, and a prolific bearer under favorable circumstances of soil and culture, and that they lost but 50 per cent of weight in the process of drying.

He had some of these vines growing, and will have some for sale when they shall be in such bearing perfection that he would be enabled to put in the hands of every agent offering them for sale, specimens of the grapes, and of the raisins made from them, but under no circumstances would he sell even a single cutting until that time.

On being asked his opinion relative to different driers, he said that he would not give ten cents for the best of them for raisin making—that the only drier he wanted was a level, smooth, clean black surface, on which the grapes should be spread from eight to twelve days, when they would be ready to gather up—perfectly cured raisins.

In this he was followed by Dr. Stenzell, who explained the chemical changes that take place in the process of curing, demonstrating the

Necessity of Sufficient Time

Being allowed for these changes, which would most perfectly correspond with the average time required for sun drying. He further showed that these changes were impossible in the rapid work of our fruit driers—and that therefore those machines could never turn out the perfect raisins to which the taste has been cultivated by using the sun dried raisins of Spain.

Llewelling, of St. Helena, Napa county, then explained his method of making raisins, and illustrated it by an exhibition of some very fine specimens, lacking only the glucose granules, and something of the flavor of Malaga raisins. He said that he dried them by exposure to the sun from four to six days, and then finished the work by about 36 hours of drying in the drier—though this work of the drier was not essential for the perfection of drying, but for destroying insects and larva that would attach to the grapes while undergoing the process of sun drying.

J. C. Holman, of Lockeford, then explained the method of

Fig Culture and Curing,

As practiced in Italy. There are hundreds of different varieties grown there. Those that make the greatest proportion of the dried figs of commerce are gathered at maturity, and dipped in a weak lye made of wood ashes, and are then dried on a black surface in the sun.

This was followed by a statement of dealings with different commission houses in San Francisco and elsewhere, and a general discussion on the subject of marketing fruits.

Hicks, of Sebastopol, spoke at length describing a drier which he had invented and called the "Grangers' Drier." He said he had not yet obtained a patent on it. The construction he exemplified as very simple—cost, about $100; consumption of fuel, one cord of wood for ten days' work, and with a capacity nearly equal to the high-priced driers. He showed some dried apples of the Rambo variety, of snowy whiteness, the work of his drier.

Llewelling also explained a drier which he had invented and for which he had applied for a patent. He spoke with great assurance on some points of superiority over any drier yet brought into use. He also showed some very perfect specimens of its work.

Holman spoke of the necessity of

Producing the Best of Everything.

That 'tis but little more labor to produce a given quantity of the best of plums, apples, pears, grapes, or other fruits, and that the cost of marketing would be no more now than for a like quantity of an ordinary or inferior quality. He spoke in terms of severest censure of the practice of some producers who put up their fruit in such a way as to show to the purchasers from an outside inspection only the best in the packages or boxes, and by this means they sell good and bad all together. He then mentioned a number of men engaged in fruit growing, the appearance of whose names on a box is

A Guaranty

That the quality will be uniform throughout, and of the fruit being properly prepared and packed for market; and added that these men always find a market for their fruit, even when that from unknown producers would never be looked at.

Hill, of Sonoma, one of the parties enumerated whose fruit always showed uniform quality, responded by saying: Whatever of popularity I enjoy in the fruit market of San Francisco is directly attributable to my methods of packing my fruit for market. I am particularly careful that each box shall be so packed as to carry safely, and so that it shall show honestly to the most casual observer the exact quality of the lot sent. After speaking in terms of censure of the dishonest practices of fruit-growers in packing fruit for market, he said, pertaining to middlemen: "There are some who, on receiving a consignment of fruit, will sell out in small lots all that is best, or in greatest demand at that particular time, and then the balance is sold at wholesale, and the lot is accounted for, at only the price obtained for the balance at wholesale." He enumerated some other evils resulting from our present system of trade, one of which is

Present Methods of Charging Drayage.

A dozen lots of fruit are sent from a dozen different fruit-growers, all of which would make but a single load for one of the large truck-wagons used in conveying freight from the wharves; yet when the bills are made out each one of these dozen men is charged for drayage the full price for hauling an entire load from the wharf to the commission house. He spoke of the desirableness of a more general shipment of fruit to our Eastern markets.

Hicks asked: "What variety of plum is best for drying? Where can the trees be obtained and their price? This question was answered at length by Llewelling, that the *Petite d'Agen* prune far surpasses all other varieties. He enumerated the points of excellence of a first-class drying prune, in all of which this is unexceptionable. Among other recommendations, he said: "These can be left under the tree just where they fall, till they are perfectly dried and ready for boxing." He also described the German prunes, but said that without irrigation the trees were liable to drop their fruit. Of Coe's Golden Drop he spoke favorably as a good bearer, large fruit and a thrifty growth of trees, but the slight adhesion to the stone makes it objectionable as a first-class drying plum.

West, of Stockton, read a table showing the per centage of dried plums, that different varieties would produce: "*Petite d'Agen* prune 24 per cent.; Fallenburg, 22 per cent.; Columbia, and most other varieties 20 per cent.

Thompson, of Suscol, spoke of Duane's purple as a freestone of fair size and a prolific bearer. He deemed it a most desirable variety. He also spoke of the Green Gage as the standard of excellence in flavor in New York and other Eastern markets, but that in California it had not this high reputation, on account of there being so many spurious varieties; but that where the true Gage is grown that it posseses all the excellence that has given it its high reputation at the East.

Shinn, of Santa Clara spoke of the different roots used for propagation of the plum. He preferred the apricot in most cases as the stock on which to graft, but said it would not do on cold, wet land. Coe's Golden Drop was mentioned as growing well on almost any stock. Cut down any old peach tree and graft in a cion of this variety and you will be surprised to see how soon a thrifty valuable tree will be produced.

Holeman described a plum growing in his orchard and asked for a name. Shinn said it was the Jefferson; that there are many varieties of plum here called Jefferson, which bear but a slight resemblance to the large, beautiful and excellent true Jefferson plum.

Several topics were deferred till the next meeting of the Fruit Grower's association, to be held in San Francisco on November 11th.

The limit of time having expired, the meeting adjourned.

WHEN Fresno county was created out of a portion of Mariposa county, in 1856, the total estimated value of the property was $431,628. Not an acre of land was assessed at that time, and the white population was less than 500. Now, the assessable property is $7,514,627; the number of acres is $1,502,837, and the population fully 8,000.

LARGE quantities of alfalfa are raised on the Truckee, and one of the newspapers in Reno seriously declares that the town does not depend for its prosperity on the railroad to Virginia or the mines, but on alfalfa.

"DOMESTIC ECONOMY."—This department of our paper, unintentionally omitted for some time past, will be resumed. Our lady readers may expect more new and useful receipts.

THE San Bernardino *Argus* says that more land will be ploughed in that valley the coming season for grain than ever before.

A COMPANY of Minnesota farmers have made engagements to immigrate to the foothills in Amador county.

HARRISON & WAGNER, of Stockton, will ship two and a half tons of leather to Japan by the next steamer.

THE Los Angeles distillery is crushing 70 tons of grapes daily.

THERE is talk of establishing a beet-sugarie at Marysville.

The State Grange and Cal. P. R. R.

By a resolution adopted by the State Grange, the Executive Committee were empowered to confer with the officers of the Cal. P. R. R. in regard to a reduction of freights and fares. The result of the first conference we are enabled to report by authority as follows:

On Tuesday, in this city, the Worthy Master of the State Grange, in company with a special committee appointed by State Grange to confer with the officers of the California Pacific railroad in regard to local freights on grain, had an interview with Governor Stanford.

After hearing a statement of the objects and purposes of the Patrons of Husbandry, the Governor expressed himself decidedly in sympathy with them, and stated that instead of having any intention, or even inclination, to pursue an unjust or oppressive policy towards them, he was satisfied that the interests of the railroad would be advanced by co-operating with them.

The Governor farther stated, he was well satisfied that any policy which had a tendency to check the development of the resources of the country, or retard the settlement of it by immigrants, was injurious to the best interests of the road. And while it was impossible to establish a strictly uniform tariff of fares and freights—owing to the fact that the actual cost of running the road was so much greater over some parts of it than others—still they would endeavor to establish a tariff of internal transportation of bulky freight at as low rates as they could possibly afford, a due regard being had to the interests of the stockholders of the road. And while he claimed the exclusive right of the managers of the road to conduct their business affairs in the manner which they believe to be most conducive to their interest. They disclaimed all intention to impose an expensive tariff of fares and freights, and declared most emphatically that no unjust or unfair discrimination should be made against persons or places.

PROPOSAL TO BUILD A PAVILION.—A prominent business man of this city, who is largely identified with the interests of both city and county, suggests what seems to be a reasonable plan for building a Pavilion for the use of the San Joaquin Valley Agricultural Society, and for other purposes. He proposes to be one of 20, or a less number of men, to erect a substantial brick edifice 100x200 feet on Washington square, providing the city will give them a lease of the ground for a period of not less than 20 years. That the building shall be used by the Agricultural Society for holding fairs therein for a nominal rent, and that the Society shall have the privilege of purchasing the building upon easy terms and reasonable interest. It is further suggested, in case the proposition should be accepted by the City Council, to bring the square up to the grade, fence and ornament it with shade trees. A hall of the kind is needed here for other than fair purposes. It would be convenient for holding political and large social gatherings in, and it strikes us that the investment would be a good one. So far as the city is concerned, the square could not be put to any other use as valuable as this. It would enhance the value of property in that vicinity, and give the at present useless plat an appearance of respectability. The plan is feasible, and worthy of serious consideration.—*Stockton Ind., Oct. 12th.*

CHEAP HORSES.—They had a horse auction the other day in Santa Barbara, of the horses in the city pound. There were 12 animals sold, and the prices ranged all the way from 10 cents to $14. It seems hardly credible that a live horse in any condition could be sold for 10 cents, and yet the Santa Barbara *Press* says that the small boy who had invested his bit, and led off his mustang with a rope around its neck, looked as if the triumph of possession was slightly marred by a doubt concerning the wisdom of his investment.

TOBACCO.—The Gilroy Advocate in speaking of the success of tobacco growing in this county, says that the firm of Geo. T. Headen & Co. have this year grown and successfully cured eighty acres of Havana tobacco, and their product is being hauled into town at the rate of a ton a day. At the present time they have stored about 50,000 pounds, and have but barely commenced to move their crop. The quality of their tobacco has been pronounced by experts to be of a very fine grade, and if put up in the style that Havana tobacco comes to us, it could not be detected from the genuine, and would readily pass as such in the market.

AN Indiana editor mildly remarks: "If you can't bring us wood, remember us in your prayers. It is something to know, as we sit and shiver, that we are not forgotten if the stove is cold."

AN editor once wrote: We have received a basket of strawberries from Mr. Smith, for which he will receive our compliments, some of which are four inches in circumference.

THEY took a mud-turtle weighing 23 pounds out of a Rhode Island pond the other day, and ever since that the State has been troubled with symptoms of earthquake.

[Patrons in Council.—Continued from Page 245.]

dren and flowers, dress-making, house-cleaning millinery, *et cetera ad infinitum*, and meanwhile the columns of the PRESS are open, you know, to all who desire to be getting ready for this proposed convention.

It is late, and I am so sleepy that I had nearly forgotten to tell you that we had

A Matrimonial Committee

Appointed for the benefit of our worthy gate-keeper and the bachelor brother who cooks his own gems away down in the King's river county. Oh! do yon know, I have jnst made a brilliant discovery, I verily believe; I am almost certain I saw that same bachelor whom we pitied and treated so badly last winter, flirting slyly with one of our pretty, nnmarried *matrons (?)*. Who knows what may come of it before another year rolls round? Let us hope the trials of our single, much abused brothers are nearly at an end.

Good night. May the white wings of peace, love and prosperity brood over you all

"'Till we meet again."

Daily Newspaper Reports of the State Grange Meeting.

We gave the main proceedings of the first day of the session at Stockton October 6th, in our last issue. That our readers may know what has been reported by the daily press we give the following from the Stockton *Independent*, in addition to other reports made in to-day's issue:

Second Day.

The Grange convened at 1 P. M., October 7th, and opened in due form. Minutes of yesterday's proceedings read and approved.

The Worthy Secretary read his report, which was received and referred to the appropriate committe.

J. H. Hegler, Manager of Dairy Produce Department, presented a full report which was referred to the appropriate committee.

A. W. Thompson, Secretary of Grange Fruit Association, presented a report which was referred to the appropriate committee.

A meeting of fruit growers was appointed for 9 o'clock to-morrow.

I. G. Gardner, State Grange Agent, presented his report which was referred.

Worthy Lecturer, J. W. A. Wright, presented his report which was referred. He also read a poem dedicated to the Patrons of California.

The Master of Stockton Grange announced that Sister Stephens, of his Grange, died to-day, and that the funeral would take place to-morrow at 11 o'clock. The officers of the State Grange were invited to take charge of the exercises, and the Grange in a body, was iuvited to attend.

Roll was called by counties for presentiug business. Various resolutions, memorials, etc., were introduced and referred to appropriate committees.

The worthy Master appointed the following committees.

On Commercial Relations—Shinn, Dean and Leonard.

On Co-operation and Transportation—Bockius Eckson and Cutler.

On Education and Labor—Matrons Carr and Dean and Mr. Meyer.

On State University—Wright, Abbott and Baxter.

On motion, Earl was added to tho Committee on Immigration.

I. G. Gardner, Chaplain of the State Grange tendered his resignation, which was accepted.

Evening Session.

Grange convened promptly, and opened in due form.

Secretary Baxter concluded his report by reading the names of persons who had been expelled from Sub-Granges during the year. Total, 11.

Worthy Master ruled, in answer to a question, that a member of the Order holding a withdrawal card is amenable to the Grange within whose jurisdiction he may be.

Report of Committees called for. None.

Roll of counties oalled for presentation of business.

Hallet, of Butte, offered a resolution looking to the importation of domestic help. Referred.

Committee on Immigration was announced as follows: Abbott, Earl, Spencer, Carrington and Dean.

On Legislation—Fowler, Estill and Crane.

Judiciary—Spencer, Case, Merry, Inman and Haile.

Vanderbilt moved that two be added to the Committee on Co-operation and Transportation. Carried.

Wolf and Inman were appoiuted.

Wright moved that a Committee be appointed on National Finance. Carried.

Colby, Fraternal Delegate to the Oregon State Grange, presented a very flattering report.

Walcott having arrived, was invited to address the Grange, which he did at considerable length.

On motion of Colby, the following resolution was passed unanimously, under suspension of the rules:

Resolved, That we most heartily endorse the house of E. E. Morgan's Sons for their valuable services in the past, in behalf of the Patrons of Husbandry in this State and Oregon, and that we most earnestly recommend them as entitled to our fullest confidence and patronage in the future.

Third Day.

Tho Grange convened at one o'clock P. M., October 8th, after attending the funeral of Mrs. Melissa C. Stephens, a member of Stockton Grange. The session was opened in due form, and considerable business transacted, but it was of such a nature that its publication is not desired until the Executive Committee revises it.

An adjournment was made until 7 o'clock, P. M.

Evening Session.

This was an interesting session, and was devoted to conferring the fifth degree. The fifth degree is at present conferred only on Masters, Past Master and their wives who are Matrons.

Fourth Day.

The Grange convened at the usual hour on Friday, and opened in due form. The greater part of the session was consumed in discussing various mooted questions looking to the welfare of the members of the Order and the producing classes generally. The reforms proposed to be inaugurated and the manner in which they are proposed to be brought about were ably discussed by members from different parts of the State, the remarks of some of the speakers eliciting hearty applause.

Fifth Day.

In addition to the daily reports, we would add that the fifth day, Saturday, was the most important of all. Some members left on Friday, but the main body held fast to the work. J. A. Hutton, of Yolo, was elected and installed as Worthy Chaplain. Sister G. W. Davis, of Santa Rosa, (absent at the last sessiou) was installed as Worthy Ceres.

J. C. Merryfield, A. B. Nally, W. A. Colby, A. D. Logan, J. M. Thompson and H. M. Leonard were elected Executive Committee. The first three were re-elocted for one year; the others are new members elocted for two years.

Changes were adopted in the State Grange by-laws. Amendments were recommended in the Subordinate Grange constitution and by-laws, subject to review by the Executive Committee. We will fully state the changes next week. The Declaration of Purposes of the National Grange, published in last week's RURAL, were unanimously adopted.

A resolution recommending plainness and economy in dress on the part of sistors of the Order was offered by sister Clark, of Solano, and adopted with much merriment and enthusiasm.

An elegant address to the State Board of Education on the subject of new and appropriate school books for this State and our progressive age, was read by Mrs. J. C. Carr, of the Committee on Education, and enthusiastically adopted. Our readers may expect its publication next week.

The Saturday evening meeting was held in the Stockton Grange room, and was most impressive in its closing services.

State Executive Committee.

New Members.

At the meeting of the State Grange the following changes were made in the Executive Committee: Bros. J. M. Thompson, A. D. Logan and H. M. Leonard were elected to fill the places of Bros. Gardner, Jolley and Garey, whose terms had expired. In this connection we deem a short biographical sketch of the new members not inappropriate, as all true patrons must feel an interest in the past and present of those with whom they intrust the management and direction of the affairs of the Order.

Brother Thompson, is a son of the proprietor of the celebrated Suscol nursery, and was born in Bucks county, Pa., coming to this State in 1853, and is now about 36 yoars of age. For the past ten years he has had entiro charge of the uursery, and in that business is one of the foremost men in the State. He is a thorough business man, and has been very successful in all his euterprises. He is universally respected and highly ostoemed whorever knowu. In addition to his extonsive interests in Napa county he, in connoction with Messrs. Grigsby and Lynn, owns a large tract of land in Texas. He is also the owner of some of the finest blooded stock on this coast. His intercsts are entirely with the farmers. Entering with a warm heart into everything which was of interest to the farmer, his fine intuitions and solid judgment led him to take an activo part in the grange movement from its first iutroduotiou; hence he became one of the charter members of the Napa Grange, the first regularly organized Grange on the Pacific coast, and of which he is Master. Both he and his estimable lady have ever been earnest workers in the good cause since its first establishment in the State.

Brother Logan was born in Montgomery Co., Missouri, in 1824, and crossed the "plains" with an ox-team in '49, his train bringing with them two years' provisions. He located at Ophir (now Oroville), Butte Co., where he engaged in mining, freighting, and keeping a trading post. From there he went to Marysville and engaged in farming and the dairy business, until in 1856, when he discontinued his dairy and bought a large cattle ranch in Colusa county. In 1857 he sold his cattle and began the raising of sheep, which, combined with farming has been his occupation ever since. For the last five years his grain crop has averaged 20,000 bushels and the sales from his farm $25,000 per annum. At present he owns about 16,000 acres of land, one-fourth of which is tillable, producing 40 bushels of wheat to the acre, the other three-fourths being grazing land. Bro. Logan is one of the charter members and now Master of Princeton Grange. To illustrate his zeal and interest in the cause we may state that he has missed only four of the grange meetings since its organization more than a year ago, although the meetings occur semi-monthly and he resides twenty miles away. His excuses for this absence was attendance upon the State Grange and the hurry incident to harvesting a large crop. He married in Colusa in 1858, but has no children. Bro. Logan, Sister Blanchar of Napa, and Bro. Haile of Suisun, all arrived in California the same day, Oct. 7th, 1849.

Bro. Leonard was born in Hampshire county, Mass., in 1836, and arrived in this State in 1855. He took a two years' ramble through the northern portion of the State, and tried his "luck" as a miner on Humbug creek, near Yreka, but never "struck it rich." He left the mines on account of ill-health, and settled in Santa Clara valley in '57, since which time he has been engaged in farming. He owns 280 acres of valuable land. He married in '66, and has two children. He is a charter member and present Master of Santa Clara Grange, and also of the Santa Clara County Council.

Patrons may well congratulate themselves upon the addition of these three substantial, intelligent, energetic business men to their executive committee, upon whose efficiency and sound judgment the success of the Order in a great measure depends. The sincere thanks and lasting gratitude of every Patron is due to the whole committee, and especially to the retiring members, for their earnest, persevering, arduous labors in inaugurating and carrying forward the many worthy and important enterprises of which our Order can boast at present. No other State in the Union can furnish so proud a record of Grange work as can California to-day.



SHARP-SHINNED HAWK, *Accipiter fuscus*. Bonaparte.

Sharp-shinned Hawk.

The sharp-shinned hawk ranges far to the north and to the south, and is met with in every State and Territory, but is more abundant in the Middle and Southwestern States than in the Northern. Mr. Audubon pronounces it "the miniature of the goshawk." Not only is this likeness in its appearance, but in the irregular, swift, vigorous, varied, yet often undecided manner of flight, which is at times, however, greatly protracted. It moves by sudden dashes, pounces upon, or strikes such objects as best suits its appetite, but so very suddenly that it appears quite hopeless for any of them to try to escape. It is often seen to descend headlong into a clump of briers, regardless of all thorny obstacles, and to emerge from the other side clutching in its sharp claws a sparrow or a finch. At other times, two or three of them may be seen conjointly attacking a golden-winged wood-pecker, which had taken position against the bark of a tree in fancied security. While defending itself from the attack of one or two of these hawks, the woodpecker is usually vanquished by the efforts of another, which thrusts its legs forward with vivid quickness, protrudes its sharp talons and seizes the victim by the back, while it tears and lacerates. Thus wounded, it falls to the ground with its captor, where the struggle is continued; but a disengaged hawk now tears out its vitals with its claws, and the repast of the assailants commences. Young chickens are often seized by it, even in the presence of their keepers; and as many as 20 or 30 have been carried away by one hawk in as many consecutive days. Birds of various sizes, from the smallest warbler to the passenger pigeon, and small reptiles and insects, also, it is said, compriso its food.

The roosting places of these hawks, in ordinary seasons, are in the fissures of rocks, in tall trees in isolated situations, and in precipitous declivities overhanging turbulent streams; but it cautiously retires after daylight has departed, and leaves its resting-place before the light of morning. Its nest has not often been invaded by the curious investigator into its habits at the season of incubation.

THE Lewiston (Idaho) *Northerner* says: "The farmers in Northern Idaho, as far as we can learn, are nearly through with taking care of their grain. The crops generally are not as good as they were last year, although the yiold has been comparatively good, and more grain has been raised than will find a ready market."

Premiums at the San Joaquin Valley Fair.

An official list of awards made at the Fifteenth Annual Fair of the San Joaquin Valley Agricultural Society, held at Stockton, California, from September 29th to October 2nd, 1874, inclusive.

First Department.

CLASS I—HORSES—THOROUGHBREDS.

Best stallion, 3 yrs old and upward, to Isaac Lsswell, San Josquin county, for h. s. Hardwood, by Woodburn, 4 yrs old, $20.

Second best stallion, to Col. Csleb Dorsey, Stanislaus county, for c. s. s. Spectre, 5 yrs old, framed dip.

Best mare, 3 yrs old and upwsrds, to Barnes Potter, Stanislaus county, for b. m. Fsrmer's Msid, 5 yrs old, $15.

CLASS II—FAMILIES.

Best mare for all purposes, with fsmily of four or more colts, to H. Heuston, San Joaquin county, for ch. s. m. Chestnut Bird, 8 yrs old, with four colts, $10.

Best roadster msre, with family of four or more colts, to J. A. McCloud of Ssn Joaquin county, for b. m. Beauty, 20 yrs old, with 7 colts, $10.

Best mare for drsft or farm purposes, to W. R. Leadbetter, for b. m. Kitty Overhiser, and five colts, $10.

CLASS III—HORSES FOR ALL PURPOSES.

Best stallion, 3 yrs old and upwards, to L. U. Shippee, Stockton, for h. s. Bay Colt, by Dsvid Hill, 6 yrs old, $20.

Best stallion, 2 yrs old, to Joseph Heintze, Stockton, for s. c. Phil Sheridan, by Dsvid Hill, $10.

Best sucking colt, to C. M. Creaner, Stockton, $5.

Best msre, 3 yrs old snd upwards, to Besrdsley & Fee, Stockton, for s. m. Lady Lovell, by Messenger horse, 5 yrs old, $15.

Best mare, 2 yrs old, to L. U. Shippee, Stockton, for b. f. Kste M., $10.

CLASS IV—ROADSTERS.

Best stallion, 4 yrs old snd upwsrd, to W. D. Ashley, Stockton, for br. s. Bismark, by Dsvid Hill, 5 yrs old, $20.

Best stallion, 3 yrs old, to Chss. H. Sisson, Stockton, for s. c. Fox, by Blackhawk, $10.

Stallion, 2 yrs old, to Lewis Hewlett, for b. c. Dinks Holden, by Chieftsin, special premium dip.

Stallion, 1 yr old, to Uriah Martin, for b. c. Young America, by Chieftain, special premium, dip.

Best mare, 3 yrs old, to J. A. McClond, Stockton, for Berkshire Girl, $10.

CLASS V—CALIFORNIA DRAFT HORSES.

Bcst stallion, 3 yrs old and npwards, to Besrdsley & Fee, Stockton, for b. s. Ontario, by Chieftain, 6 yrs old, $20.

Second best stallion, to H. Heuston, San Joaquin county, for b. s. Monarch, by Prince Consort, 4 yrs old, frsmed dip.

Best 1 yr old, to same psrty, for horse colt Scotchman, by Mouarch, $10.

Best sucking colt, to same party, for Heavy Set, by Monarch, $5.

Best mare 4 yrs old and upward, to same party, for ch. m. Chestnut Bird, 8 yrs old, $10.

CLASS VI—CARRIAGE HORSES.

Best single buggy horse, to J. A. McCloud, for b. h Silver Thorn, by Chieftain, $5.

CLASS VII—GRADED HORSES.

Best stallion 3 yrs old snd upwsrds, to Wm. Johnson, Stanislaus county, for h. s. Sam Houston, by Solomon, 4 yrs old, $10.

Best stallion 2 yrs old, to L. U. Shippee, Stockton, for h. c. Major Kent, by Genersl McClellan, dsm Belmout, $5.

Best msre 4 yrs old and over, with colt, to C. M. Cresner, for s. m. Julia and colt, $10.

Best msre 2 yrs old, to J. A. McCloud, Stockton, for s. m. Pet.

SWEEPSTAKES.

Best stallion to L. U. Shippee, Stockton, for b. s. Bay Colt, 6 yrs old hy David Hill, $20.

Best msre to same party, for s. m. Flora, by David Hill, 3 yrs old, $10.

CLASS VIII—JACKS.

Best Jack, to Jeff Bridgeford, for Mameluke, 4 yrs old, $5.

CLASS IX—MULES.

Best psir of mules owned by one man, to L. U. Shippee, for a spsn of black mules, $10.

CLASS X—DURHAM CATTLE.

Best bull, 3 yrs old and upwsrds, to Jeff Bridgeford, for Gold Dust, $20.

Best bull 2 yrs old, to Col. C. Younger, Ssnta Clara county, for Moonlight, $10.

Best bull, 1 yr old, to Cyrus Jones & Co., San Jose, for Mason Duke, $5.

Best bull calf, to W. L. Overhiser, San Joaquin Co., for 22d Grand Turk of Oak Home, framed dip.

Best cow 3 yrs old snd upwsrds, to Cyrus Jones & Co., San Jose, for Geraldine, $15.

Best cow, 2 yrs old, to ssme parties, for Caroline, $10.

Best heifer, 1 yr old, to same parties, for Lady Hughes, $5.

Best heifer calf, Jeff Bridgeford, for Goodnew 2d, $5.

CLASS XII—JERSEY CATTLE.

Best cow, 3 yrs old and upwsrds, to L. J. Orcutt, for Blanche, $5.

CLASS XIII—HOLSTEIN CATTLE.

Best bull, 3 yrs old and upwards, to Chsrles Clark, San Jose, for Oppedose, $10.

CLASS XVI—GRADED CATTLE.

Best bull, 3 yrs old and upwards, to Ssmuel B. Kingsley for Herman, by Blanco, $10.

Best cow, 3 yrs old snd upwards, to Chsrles Clark, San Jose, for Molly, $10.

Best Heifer, 1 yr old, to same party for Molly 1st, $5.

CLASS. XVII—HERDS.

Best herd, to Cyrus Jones & Co., $20.

The committee most earnestly recommend a special premium to Colonel Younger of Ssnta Clara county, for the herd exhibited by him.

SWEEPSTAKES.

Best bull, to Cyrus Jones, for Mason Duke, 1 yr old, $20.

Best cow, to Colonel C. Younger for Sprightly, 6 yrs old, $10.

CLASS XVIII—GOATS.

Best thoroughbred buck, to M. Gilmore of El Dorado county for Hannibal, $5.

Best ewe to same party, $5.

Best herd of 10, to same psrty, $5.

CLASS XIX—SHEEP—SPANISH MERINO.

Best ram, two yrs old and upwards, to L. U. Shippee, Stockton, for ram Colonel Fremont, $10.

Second best, to same party for ram Colonel Moore, framed dip.

Best ram, one year old and under two, to ssme party for ram Pride of Vermont, $10.

Second best do., to same party for rsm Commodore, framed dip.

Best pen of ewes, two yrs old and upwards, to same party, $10.

Best do., one ycsr old and under two, to same party, $10.

Best pen of five ewe lambs to same party, $5.

Best rsm snd five of his lambs, to same party for ram Colonel Fremont, $15.

Special premiums recommended hy the committee to Thomas A. Wilson and W. D. Ashley for lambs exhibited by them.

FRENCH MERINO.

Best ram, two years old and upwards, to William Blacow, of Alameda county, for ram Gamester, $10.

Best pen of five ewes to same party, $5.

LEICESTERSHIRE.

Best ram, two years old and upwards, to Jesse D. Carr, Gabilsn, for ram Lord Leicestershire, $10.

SOUTHDOWNS.

Best ram, 2 yrs old and npwards, to J. D. Carr, $10.

Besl pen of 5 ewes, to same party, $5.

GRADES.

For best pen of 5 lambs to W. D. Ashley, San Joaquin county, $5.

SWEEPSTAKES.

Best ram, to L. U. Shippee, Stockton, for ram, Col. Ellsworth, $10.

Best ewe, to same party, for Nellie, $5.

NOTE.—The Board of Managers scknowledge their obligslions and tender their thanks to Jas. Sessions, Esq., of Oakland, for the exhibition of his celebrated trotting mare Oskland Mald, and his Hambletonian stallion Ulster Chief; also, to William Mathews, Esq., of San Jose, for exhibit of his fine trotting stallion. George M. Patchen, Jr., the performances of speed of which animals on the track was one of the most attractive and interesting features of the exhibition. A frsmed dip. is hereby awsrded to each of the above named gentlemen.

CLASS XXI—POULTRY.

Best Polands, to John E. Moore, Stockton, for coop of Golden Spangled, $3.

Best Dark Brshmas, to P. T. Brown, Stockton, $3.

Best Cochins, to ssme psrty, for coop of Psrtridge, $3.

Best Houdans, to same party, $3.

Best White Leghorns to H. Brock of Stockton, $3.

Best Silver Spangled Hamburgs, to P. T. Brown, $3.

Best exhibit of Bantams, to same party, $3.

Best exhibit, comprising the greatest number of ths different hreeds, to same party, $5.

Best lot of Turkeys, to Stewsrt & Derrick, for coop of the Bronze vsriety, $3.

Best exhibit of rabbits, to Walter F. Baggs, Stocklon, $2.

Second Department.

CLASS I—FARMS, ORCHARDS, VINEYARDS.

Best bsle of hops, to G. C. Holman, San Joaquin county, $5.

Special premium recommended to Joseph Putnam, San Joaquin county. Special mention of watermelons and squsshes exhibited hy the same person. Also, of 1 sack of Excelsior wheat and 1 sack of Early Rose potatoes exhibited by Dr. R. K. Reid; snd of samples of Early Rose potatoes, volunteer corn, heans, squsshes and pumpkins, exhibited hy Thomas Wslls, raised on their farms nesr Linden. Two mammoth watermelons, exhibited by Thomas Barnes, from his fruit store on Main street, deserve special notice.

Best 50 lbs. whest. to Mrs. Mary W. Rhodes for sack of White Chili, sample of 140 tons, $3,

CLASS II—VEGETABLES.

Best display of vegetables raised on one ranch, and exhibited hy the producer, to Thos. J. Murray, gsrdener st the Insane Asylum $5.

Brown & Co., merchants, on Levee street, exhibited a fine collection of vegetsbics, which deserve special attention.

BRANDY AND WINE.

Best White Wine, vintage of 1870, to C. Detten, Stockton, $5.

Best do., vintage of 1871, to same party, $5.

Best do., vintage of 1872, to same party, $5.

Best Red Wine, vintage of 1872, to George West, Stockton, $5.

Best Angelica, vintage of 1871, to Geo. West, $5.

Best do., vintage of 1872, to same party, $5.

Best Frontignac, vintage of 1872, to ssme psrty, $5.

Best Sherry, vintsge of 1867, io ssme party, $5.

Best Reisling, vintage of 1871, to ssme party, $5.

Best brandy, vintage of 1867, to same party for "El Pinal" brand, $5.

To Powers & Henderson, agents, Sscramento, for splendid collection of bitters and tonics, a dip. of the Society is recommended.

REMARKS OF COMMITTEE.

The msnufacture of wines is now one of the most important industries of the State. It has been demonstrated for yesrs thst our climate and soil are not excelled snywhere in the world for the growth of the best varieties of wine-prodncing grspes. It only requires capitsl, skill and expcrience to comnete with the great wine growers of Europe. The Sherry of Geo. West, etc., is not excelled by the famous Duff Gordon or any other brand. The dry White wines of Mr. Detten, and of Mr. West, slso, are more palatable, and possess a richer flavor than the same class of Rhine wines. The Madeira, Reisling, Frontignac snd Angelica, are all good of their class. According to the taste and judgment of your committee, the entire list of wines which we have examined are too sweet. They contain too mnch saccharine matter, which can easily be corrected hy the skill of the manufacturers, which we recommend should bo done.

(Signed) R. K. REID, M.D.,
I. S. TITUS, M.D.,
H. B. PLATT,
M. DE BLAINVILLE.

CLASS IV—HORTICULTURAL—APPLES.

Best collcction in the district, to Joseph Putnam, $10.

Second best, to Peter N. Young, $5.

Best five varieties or over, to G. C. Holman, framed dip.

PEARS.

Best collection in the District, to Geo. West, $5.

Second best, to P. N. Young, $3.

Best five varieties, five each, to Wm. Kuhl, $3.

QUINCES.

Best 12 varieties, to P N. Young, $3.

Second best, to Mrs. Dr. Reid, $2.

GRAPES.

Best collection, to Geo. West, $10.

Second best do, to P. N. Yonug, $5.

Third best do, to Joseph Putnam, $3.

Best five varieties, to Geo. West, $5.

Second best do, to Peter Young, $3.

Best single variety, to Geo. West, $2.

Best eight hunches Rsisiu Grspes, to Geo. West, $5.

FIGS.

Best collection, to Thos. Murray, $3.

Second best do, to Robert Reid, $2.

POMEGRANATES.

Best six specimens, to Mrs. R. K. Reid, $3.

FRUITS IN GLASS, PRESERVED IN SPIRITS.

Best Gooseberries, to Mrs. Joseph Hale, $2.

Best Peaches, to Mrs. Joseph Hale, $2.

Best Pluma, to Mrs. Joseph Hsle, $2.

Best Blackberries, to Mrs Joseph Hale, $2.

Best Cherries, to Mrs. Joseph Hale, $2.

Best Grapes, to Mrs. Joseph Hale, $2.

FRUITS PRESERVED IN SUGAR.

Largest and best exhibit, to Mrs. Joseph Hale, $5.

Second best do, to Mrs. J. C. Reid, $3.

Best Quinces, to Mrs. J. C. Reid, $2.

Best Plums, to Mrs. Joseph Hale, $2.

Best Crab Apples, to Mrs. Joseph Hale, $2.

Best Pears, to Mrs. J. C. Reid, $2.

Best Peaches, to Mrs. Joseph Hale, $2.

Best Apricots, to Mrs. Joseph Hale, $2.

JELLIES.

Best apricot jelly, to Mrs. Jos. Hale, $2.

Best crab apple jelly, to Mrs. J. C. Reid, $2.

Best grape jelly, to Mrs. Jos. Hale, $2.

Best plum jelly, to Mrs. J. C. Reid, $2.

Best quince jelly, to Mrs. J. C. Reid, $2.

Best currant jelly, to Mrs. Jos. Hale, $2.

Best blackberry jelly, to Mrs. J. C. Reid, $2.

PICKLES.

Best pickled cucumbers, to Mrs. Jos. Hale, $2.

Best pickled tomatoes, to Mrs. Jos. Hale, $2

Best pickled pears, to Mrs. J. C. Reid, $2.

Best mixed pickles, to Mrs. Jos. Hale, $2.

Best pickled figs, to Mrs. J. C. Reid, $2.

DRIED FRUITS.

Best box of figs, to Mrs. J. C. Reid, $3.

Best box of raisins, to Mrs. Uriah Martin, $3.

CLASS VI—HOME-MADE BREAD.

Best home-made bread, to Mrs. Austin Sperry, $2.

Best home-msde brown bread, to same, $2.

Best two losves by Miss under 16 yrs, to Miss Bessie Reed, $2.

Special premium offered by J. P. Spooner, for best loaf of bread made hy a young Miss under 18 years, awarded to Miss Florence Bugbee, photograph, $10.

Special premium offered by W. J. Belding, dealer in dry goods, El Dorado street, awarded to Mrs. S. W. Sperry, for 2 loaves of Graham bread, $5.

CLASS VII—DOMESTIC MANUFACTURE.

Best 10 pounds confectionary, to Lutje & Gross, $5.

Besl wheat flour, to R. B. Lsne, Stockton, $5.

Best cornmeal, to same, $3.

The Commitee on silk and other fabrics recommend a special premium to Joseph Green for exhibit of silk ribbons produced at his factory in Oakland, which in point of quality and variety of shades, compsre favorably with imported goods of the same character.

Third Department.

MACHINERY, IMPLEMENTS, NEEDLEWORK, ETC.

CLASS I—AGRICULTURAL IMPLEMENTS.

Best display of agricultural implements, to the Grange Union, $10.

Best threshing machine, to H. C. Shaw for the Pitts' Gold Medal Machine, $10.

Best header, to Matteson & Williamson, $10.

Best self-raking reaper, to the Grange Union, $5.

Best mowing machine, to the same for the Champion Mower, $5.

Best broad-cast seed-sower, to the Grsnge Union (Gun Patent, April 2, 1867, and January 2, 1872), $5.

Best harrow, to D. T. Gillis, $3.

Best straw cutter, to Grsnge Union (Hocking & Co.), $3.

Best hay press, to Kimball & Co., for the Eagle; special premium, framed dip.

Best horse fork, to Matteson & Williamson, $5.

Best grain lifter, to John Hart, $5.

Best sepsrator, to Grange Union for Nssh & Cutt's, frsmed dip.

Best cultivstor, to H. C. Shaw, $5.

Best plow, to the Grange Union for the Eureka Plow, $5.

To the Moline Plow, special mention.

Best gang of four 8-inch plows, with seed-sower attached, to H. C. Shaw, $5.

Best single steel plow, to Matteson & Williamson, $5.

CLASS II—WHEELWRIGHT WORK.

Best display of carriages, special premium recommended to Ha ry Bernard, Sscramento, for splendid display, consisting of 1 family carriage, 3 top buggies, 1 open buggy and a skeleton wagon, all of superior style and finish, framed dip.

One two-seated family wagon, to Rodman & Braids, Stockton, $5.

These were ths only wagons manufactnred in this district.

Special preminms are recommended to the following: Three spring wsgons, Sweepstakes, manufactured at Ssn Lorenzo.

One four-horse iron axle Bsin wagon, and ons four-horse thimble skein wsgon, exhihited by H. C. Shaw, agent.

One-six horse wagon, manufactured hy P. S. Schutzler, Chicago, exhibited by H. C. Shaw, sgent.

Studebaker spring and four-horse wagons, exhibited by H. C. Shaw, agent.

One Mitchell four-horse wagon, exhibited by Grange Union.

One lwo-horse wsgon, msnufsctnred by Wm. Harrison, Grand Rapids, Michigan, exhibited hy C. G. Ives, agent.

CLASS III—HARNESS AND LEATHER.

Best display of harness and ssddlory to H. T. Dorrance, Steckton, $5.

Best set carriage harness, same, $5.

Best single harness, ssme, $5.

Best saddle, same, $5.

Best lsdy's saddle, ssme, $5.

Best bridle, same, $3.

Best one-hslf dozen calf skins, to C. Kinderman, dip.

Best side upper leather, to same, dip.

Special premium recommended to J. H. Andrews, for two horse collars.

CLASS IV—MACHINERY AND BLACKSMITH WORK.

One steam engine, made by Gan, Scott & Co., Richmond, Indiana, M. C. Hswley & Co., agents, special mention.

Best horse shoes, to Hatch & Holmes, $5.

CLASS VI—CABINETWARE.

Best dressing bureau, to Frank Bros., Stockton, $5.

Best sofa, same, $5.

Best lounge, same, $3.

Best set of parlor chairs, same, $5.

Best center table, same, $3.

Best set of parlor furniture, same, $5.

Best display of furniture, same, $5.

Best set of bed room furniture, same, $5.

Best display of upholstery, same, $5.

Best school furniture, to Ellsworth & Washburn, Stockton, $5.

CLASS VII—MISCELLANEOUS.

Best display of tinware, to Ruhl & Meirles, Stockton, framed dip.

Best display of stoves, to ssme, $5.

For vapor cooking and heating stovcs, exhibited by Kennedy & Miller, special mention.

Best exhibit of stair posts and building material, to C. N. Payson, $5.

For exhihit of stsir posts made from trees grown in Court House square, by Ellsworth & Washburn, special mention.

Firearms, best display, to W. H. VanVlear, Stockton, $5.

Boots and shoes, best display, to Charleson & Morris, Stockton, $5.

Best sewing machine for family use, to Wheeler & Wilson, framed dip.

Best snd greatest vsriety of work done by any sewing mschine, frsmed dip.

CLASS VIII—NEEDLE AND FANCY WORK.

Best display of ladies' and childrens' clothing, to Mrs. Frank Stewart, $10.

Best hand-made shirt, to Mrs. R. S. Ellsworth, $2.

Special notice of shirts made by Mrs. Robinson and Mrs. Welch, s lady 67 ycsrs of age.

Best display of knitting, to Mrs. Wm. S. Smith, $3.

Special notice to Mrs. Dr. Stockton and Mrs. Batchelder, for fine display.

Best worked quilt, to Mrs. John Bird, $2.

Best silk quilt, to Mrs. Spear, $2.

Best patchwork quilt, to Mrs. N. B. Jenks, $2.

Best child's affghan, to Miss Amy Kelsey, $2.

A very meritorious piece of work is entered by Miss Bessie Reed, which deserves mention; also, two quilts made by Mrs. Rebecca Brown.

Mrs. Dr. Stockton and Mrs. Titus exhibit fine specimens of work, which deserves notice.

Best display of crochet work, to Mrs. C. J. Smith, $3.

Best crochet tidy, to Mrs. J. A. McDougall, $2.

Best embroidered child's dress, to Miss Mary Allen, $2.

Best Chinese silk embroidery, lo Mrs. Dr. Stockton, $2.

Best sofa pillow, to Mrs. Dr. Myers, $2.

Best tatting collar, to Mrs. Alton M. Stowe, $2.

Best home embroidery, to Mrs. A. G. Brown, $2.

Best bead work, to Miss Maud A. Ingalls, $2.

Best home-made rug, to Mrs. F. Robinson, $2.

Best affghan, to Mrs. Dr. Stockton, $2.

Best embroidered picture, to Miss Louisa Garry, $2.

A child's dress entered by Mrs. Dr. Stockton, made by a lady 60 years or age, deserves special mention as a fine specimen of hand sewing.

Best phantom leaves, to Miss Clara Fanning, $2.

Best autumn leaves, to same, $2.

Best pressed flowers, to Miss A. A. Cory, $2.

Best feather flowers, to Mrs. M. J. Ingalls, $2.

Best moss work, to Mrs. J. H. O'Brien, $2.

Best exhibit of wax work, to same, $3.

Best hair work, to Miss A. A. Cory, $2.

Best fancy work, to Miss Hattie Baldwin, $2.

Best brsid work, to Mrs. F. Robinson, $2.

Best bouquet of native grasses, to Mrs. Jos. Hale, $2.

Best quilt by Miss nnder 16 years of age, to Miss Bessie Reed, sged 11 years, $2.

Best stocking darning, to same, $2.

Fourth Department.

FOR THE ENCOURAGEMENT OF THE YOUNG PEOPLE—BOYS AND GIRLS UNDER EIGHTEEN YEARS.

Best specimen of mechanical ingennity, to Master A. D. Bowden, for knife box, $2.

Best map of California, to Miss Gertrude Collins, $3.

Best animal drawing, in pencil, to Master H. Brock, $3.

Best landscape drawing, in pencil, to Miss Chillie White, $3.

Best composition, written by a pnpil of the public schools of the city of Stockton, to Miss Alice Ashley, the special preminm offered hy the county Superintendent of public Schools, $10. Also, Society's premium.

PENMANSHIP.

Best specimen of penmanship to Thos. Lonttit, of Washington High school, Society's premium, $2.

To Weber First Grade, framed dip.

For best single specimen, to Katie Pool of Weber First Grade, gold pen and case.

To Jefferson Second Grade, framed dip.

For best single specimen, to Ralph P Lane of Washington Second Grade, gold pen and case.

A specimen hy Addie Hamlet of Franklin Second Grade, deserved special notice.

To Jefferson Third Grade, framed dip.

For best single specimen, to William Murphy of Jefferson Third Grade, gold pen snd case.

A specimen by Mary K. Lovejoy of Washington Third Grade, deserved special mention.

To Vineyard Fonrth Grade, framed dip.

For best single specimen, to Emma Rowden of Vineyard Fourth Grade, gold pen snd case.

DECLAMATION.

The committee were nnable to decide between the merits of Masters Frank Kelsey and W. W. Westbay, and recommended a division between the two of the special premium offered by the teschers of ths Stockton High school, $10.

Fifth Department.

FINE ARTS.

CLASS I—PAINTINGS AND DRAWINGS.

Best landscape painting, in oil, to Miss Carris Pelty, 17 yrs old, $5.

Best exhibition of animsl painting, in oil, to Mrs. Dr. Titus, $3.

Best specimen of crsyon drawing, to Miss Mary Allen, $3.

Best flower painting, in oil, to Miss R. L. Simpson, $3.

Best specimen pen drswing, to Mr. W. W. Westbay, $3.

Best exhibit photographs J. P. Spooner, $10.

SPECIAL.

This cmbraces a list of all articles exhibited for which no premiums were offered hy the Society, which the Board of Managers desire, for the gratificatiion of exhibitors and in justice to them, to notice particularly.

Misses Robins and McKenzie exhibited specimens of bnck gloves, manufactnred hy them, for which a special premium is recommended by the committee who examined them; awarded dip.

YEAST POWDERS.

The special committee appointed on this article award premium to Dohrmsn & Co., framed dip.

They also recommend special mention to Dr. E. S. Holden, Stockton, and to Bowen & Co., of San Francisco, for the same article exhibited hy them respectively.

D. A. Learned of San Joaquin county, exhibited a variety of grapes, not entered for premium, which deserve special mcution.

Joseph Linds, San Francisco, for fine display of shell work, special mention.

Capital Sugar Refinery, Sacramento, for samples of beet sugar, dip.

Pacific Paper Mills, Stockton, for exhibit of a large assortment of paper produced at their mills, special mention.

Chalmers Bros., Stockton, for the splendid display of carpets, rugs, etc., from their warerooms on El Dorado street, special notice is due.

To Joseph Couturier, Stockton, for the fine display of human hair work, perfumery and hair dye, special mention.

G. Alagretti exhibited for B. R. Prince, of Calaveras county, a fine collection of silk worms, cocoons, floss, silk, etc., which deserves special mention.

Alexander Mackay exhibited samples of rag carpets which deserves special mention.

William Graham, Stockton, exhibited a case of hardware, comprising a variety of useful articles, which deserves special mention.

N. Gilmore, of El Dorsdo county, exhibited samples of carriage robes made from the skins of Angora goats, which are very fine, and deserve special notice.

Julius Steiny, of Stockton, exhibited a miniature ship, built by himself, which is a specimen of rare mechanicsl ingenuity, and demonstrates his skill and tsste in ship-building.

Lutje & Gross, confectioners, Stockton, exhibited a bride's cake, which deserves special mention, as being very beautiful, and much admired by the ladies.

R. H. Baird exhibited a case of patent safety lamps, which deserve special notice.

Mrs. J. T. Boyd exhibited two vases with boquets, and haskets of colored rice, very beautiful.

Mrs. S. E. White, Sacramento, exhibited a fine collection of shell and moss work, done by herself, which show great skill and taste, and deserve special notice.

John C. Bell, San Francisco, placed on exhibition an easy chair, of very superior workmanship, which is entitled to special mention.

W. P. Plummer had on exhibition two photographs from oil paintings, very fine.

Mrs. B. D. Allen exhibited a bedspread fifty years old, in a good state of preservation.

S. M. Woods, Stockton, exhibited specimens of hand and fluting irons, of new and improved style.

J. R. Meacham, Stockton, exhibited a model of patent fruit crate.

To Chas. Haas, jeweler, El Dorado street, Stockton, the thanks of the Society are due for his magnificent display of dismonds and jewelry of every description; also, a combination clock, which attracted great attention. His exhibit was one of the most attractive features of the fsir.

The model of the "Dexter Windmill," entered by H. C. Shaw, agent, deserves notice.

J. H. Hoyt exhibited a fine collection of birds' eggs.

Mrs. Bertha Bohn exhibited a pair of stockings, knit on one pair of needles, a feat in knitting never hefere accomplished or heard of.

Mrs. Elizabeth McKee exhibited specimens of needlework, done by herself at the advanced age of 70 years, which is scarcely surpassed by any of the young folks.

Weister & Co., A. Callahan, agent, exhibited a patent washing machine which for simplicity, durability and cheapness, is entitled to special mention. The same party also exhibited vise and anvil combined, an excellent article for farmers.

Mrs. C. J. Smith exhibited two cane-bottom chairs, reseated hy herself in a workmanlike manner.

Mrs. Spelr exhibited a table cover, made by herself when 78 years old.

To Thomas Murray the thanks of the Society are due for pyramids of grapes, not entered for premium, but intended to adorn the hall.

J. Fugazzi, Sacramento, made a fino display of perfumery; hair dyes, cosmetics, etc., produced at his fac tory, also a self-acting fountain. His display was an attractive feature in the Hall. Framed dip.

REMARKS.

The managers return their thauks to Mrs. Eckstrom and E. E. Washburn, Esq., for loan of show-cases for display of fancy needlework.

In conclusion they also return their sincere thanks to exhibitors, one and all, for their assistance in making this Annual Fair a success. If there has been any omission of mention of a single article, they ask pardon and assure the parties neglected that it was not intentional and are ready and willing to correct as far as possible any mistake that may have occurred in the hurry and confusion of the moment. Their sole object has been, and is, to do justice to all without partiality. They also return their thanks to all those who have served on the different committees, whose decisions, so far as they can learn, have been fair and impartial, and given general satisfaction. To all parties who have so liberally contributed to the society by subscription, enabling the managers to expend over seven thousand dollars for the benefit of the society in constructing a new race track, a new grand stand, new fences, stalls, and other permanent improvements, making this Fair the most successful ever held in this district, they beg leave to express their obligations. All members of the society are requested to bear in mind that the annual election of officers will be held at the City Hall, Stockton, on the first Saturday in December, 1874.

COMMITTEE REPORT.

STOCKTON, October 2, 1874.

To the officers and members of the San Joaquin Valley Agricultural Society—Gentlemen: Your Committee on Agricultural Implements (Class No. 1) have made a thorough examination of all the machinery on exhibition in that class, and beg leave to report as follows:

The best display of farming implements is awarded to the Grange Union.

Best threshing machine to H. C. Shaw—Pitts' Gold Medal Machine. The reasons why your committee give this machine the preference are as follows: First, on account of the threshing capacity of the cylinder, having fewer bars and more teeth; second, it saves grain in the shoe better than the Buffalo Pitts. The latter separates the grain hetter than the Gold Medal Pitts, but it loses it at the shoe, being one count in faver of the Buffalo Pitts to two in favor of the Gold Medal Pitts.

Best header, to Matteson & Williamson.

Best self-rakiug reaper, to Grange Union.

Best mower (Champion), to Grange Union.

Best broad-cast seed-sower (Gem, patented April 2d, 1867, and January 2d, 1872), to Grange Union.

Best harrow to D. T. Gillis.

Best straw cutter (Hocking & Co.), to Grange Union.

Best hay press (Eagle), built by Kimball & Co. We would recommend a framed dip.

Best horse fork; to Matteson & Williamson.

Best grain lifter, to John Hart.

Best grain cleaner (Nash & Cutts), to Grange Union.

Best cultivator, to H. C. Shaw.

At the plowing contest there were several plows entered, all of which did excellent work, but your committee award the premium to the Eureka plow, entered by the Grange Union. We would also make special mention of the Moline plow, which in a lighter soil would give excellent satisfaction.

Best gang of four 8-inch plows, with seed-sower attached, to H. C. Shaw.

Best single Steel plow, to Mattesen & Williamson.

All of which is most respectfully submitted.

(Signed) J. M. GARWOOD,
C. L. ROBINSON,
J. R. W. HITCHCOOK.
CUTLER SALMON.

Santa Clara Fair.

The time announced for holding the Santa Clara Fair expired on the evening of Oct. 11th, but owing to the large attendance on that day and the unflagging interest manifested by the public, the managers concluded to extend the time of visiting the Pavilion one day longer.

This Society will please accept our hearty congratulations on the marked success which attended their fifteenth annual exhibition. Following is a list of premiums awarded:

THOROUGHBRED HORSES.

Best stallion 2 yrs old, R. T. O'Hanlan, of San Jose; Turf gallery, $20.

Best stallion 1 yr old, Wm. Boots, of Sau Jose; Bob Woodiug, $10.

Best sucking colt, Wm. Beots, of San Jose; no name, $5.

Best mare, 3 yrs old and upwards, Wm. Boots of San Jose; Miami, $20.

Best mare 2 yrs old, R. T. O'Hanlon, of San Jose; Sallie Hart, $15.

Best mare 1 yr old, R. T. O'Hanlon, of San Jose; Omega, $10.

FAMILIES.

Best mare with family of 4 or more colts, Geo. W. Wilson, of San Jose; Rchel Daughter, $20.

R. T. O'Hanlou, of San Jose, Winona; second premium, $15.

HORSES FOR ALL PURPOSES.

Best stallion 3 yrs old and upward, A. A. Wetherill, of Monterey; Fred Patchen, first premium, $30.

Best stallion 2 yrs old, Charles E. Mitchell, of San Juan; first premium, $20.

Best stallion, 1 yr old, J. Martin, of Alvise; no name, $10.

Best sucking colt, Wm. Hamilton, of San Jose; Dale, $50.

Best mare, 3 yrs old and upwards, Robert Welch, of San Jose; Kit, first premium, $20.

Best mare 2 yrs old, Charles Luce, of San Jose; Lucy, $15.

Best mare 1 yr old, J. P. Dudley, of San Jose; Lady Allen, $10.

Best sucking filly, Wm. Hamilton, of San Jose, Young Winona, $5.

JENNIES AND MULES.

Best jenny, John Cooney, of San Jose; Black Maria, $10.

Best pair of mules owned by one man, C. P. Worthington, of San Jose.

ROADSTERS.

Best stallion, 4 yrs old and over, Wm. A. Matthews, of San Jese; George M. Patchen, Jr., $30.

Best stallion 3 yrs old, Wm. Hamilton, of San Jose; Honest Allen, $20.

Best mare 4 yrs old and over, Wm. Hamiltou, of San Jose; Fannie, $20.

Best mare 3 yrs old and upward, Geo. Wilsou, of San Jose; Belle Patchen, $15.

CALIFORNIA DRAFT HORSES.

Best stallion, 3 yrs old and upward: Thos. Blake, of San Jose; John Barnes, $30.

Best stallion, 2 yrs old: J. P. Dudley, of San Jose; Billy, $20.

Best mare, 3 yrs old aud upward: A. N. Story, of San Jose; Kate, $20.

Best mare 2 yrs old: T. Andrews, of San Jese; Lady Washington, $15.

Best mare, suckling: T. Andrews, of San Jose; Sallie Washington, $5.

Best span of draft horses, in harness, Geo. Wilsen, of San Jose; Sam and Mellie, $20.

Best imported draft stallion, 3 yrs old aud upward: Thomas Blake, of San Jose; Captain Thompson, $30.

CARRIAGE HORSES.

Best span of carriage horses, ownod and used as such by one man: John Barry, of San Jose; Jackson and mate, $20.

SWEEPSTAKES.

Best stallion of any breed or age: Jesse D. Carr, of Monterey; Membrino, $30.

Best mare of any breed or age: Wm. Boots, of San Jose; Miami, $20.

GRADED HORSES.

Best stallion, 2 yrs old: Wm. Hamilton, of San Jose; Frank Malone, $15.

Best stallion, 1 yr old: G. K. Hostetter, of San Jose; El Capitan, $5.

Best mare, 4 yrs old and over, with colt: W. Hamilton, of San Jose; Santa Clara, $15.

Best mare, 2 yrs old: E. A. Kennedy, of Saratoga; Princess, $5.

DURHAM CATTLE.

Best Durham bull, 4 yrs old and upward: Colonel Younger, of San Jese; Thorndale, $30.

Best Durham bull, 3 yrs old: C. B. Polhemus, of San Jose; Phil Sheridan, $20.

Best Durham hull, 2 yrs old: Colonel Younger, of San Jese; Moonlight, $15.

Best Durham hull, 1 yr old: Jones & Co., of San Jose; Mason Duke, $10.

Best Durham calf, nnder 1 yr old: Wm. Quinn, of San Jose; Duke of San Jose, $5.

Best Durham cew, 4 yrs old and over: Carr & Chapman, of Saliuas; Lady Solway, $20.

Best Durham cow, 3 yrs old: Jones & Co., of Sau Jose; Geraldiue, $15.

Best Durham cow 2 yrs old: Jones & Co., of San Jose; Caroline, $15.

Best Durham cow, 1 yr old: Colenel Younger, of San Jose; Forest Rose, $10.

Best Durham heifer, under 1 yr old: Col. Younger, of San Jose; Rosa Nell, $5.

SHEEP—SPANISH MERINO.

Best ram, B. F. Watkins, of Santa Clara; Eugenle T. Sawyer, $10.

Best ewe, B. B. Watkins, of Santa Clara; Wool, $10.

Best 3 ram lambs, B. B. Watkins. of Santa Clara, $10.

Best pen of not less than 5 ewe lambs, B. F. Watkius, 5 ewe lambs, $10.

FRENOH MERINO.

Best ram, E. A. Kennedy, of Saratoga; no name, $10.

Best ewe, E. A. Kennedy, of Saratoga; no name, $10.

Best 3 ram lambs, E. A. Kennedy; no name, $10.

COTSWOLD.

Best lamb, Lewis & McCracken, San Jose; Pajaro, $10.

Best ewe, Lewis & McCracken; Mary, $10.

Best 3 ram lambs, Lewis & McCracken; 3 rams, $10.

Best pen of not less than 5 ewe lambs, Lewis & McCracken; 5 ewe lambs, $10.

LEICESTERSHIRE.

Best ram, Jesse D. Carr, of Monterey; Lord Leicestershire, $10.

SOUTHDOWNS.

Best ram, Jesse D. Carr, Monterey; 1 ram, $10.

Best ewe, Jesse D. Carr; 1 ewe, $10.

Best 3 ram lambs, Jesse D. Carr; 3 ram lambs, $10.

SWEEPSTAKES.

Best ram for all purposes, B. F. Watkins of Santa Clara; Eugene T. Sawyer, $10.

Best ewes for all purposes, Lewis & McCracken, of San Jose; $10.

SWINE.

Best bear of auy breed, R. S. Thompson, of El Dorado; Young Comet, $10.

Best sow of any hreed, R. S. Thompson; Beauty 2d, $5.

Best pair pigs, of six months or under, J. C. Mills, of Alvarado; pair of pigs, $5.

POULTRY.

Best pair Narragansetts, J. C. Mills; $3.

One trio Partridge Cochins, Fred. Collins, Sau Jose, $3.

One pair white Leghorns, B. F. Watkins, of Santa Clara, $3.

Oue pair bronze turkeys, C. H. Worthington, $3.

One trio white crested Polands, Maria H. Welden, $3.

One coop chickens, buff Cochins, J. A. Correndale; $10.

Two pairs golden breasted Polands, James Vinsonhaler.

One pair light brahmas, T. Lenzen.

DEVONS.

Best Devon hull, 3 yrs old and upward, Thos. Blake, of San Jose; Devonshire Billy, $20.

ALDERNEYS.

Best hull, 3 yrs old and upward, Polhemus, of San Jose; Prince Johu, $15.

Best hull, 2 yrs old, John Coeucy, of San Jose; Yankee, $10.

Best cew, 3 yrs old and upward, C. B. Polhomus, of San Jose; Prince Royal, $10.

Best cow, 2 yrs old, C. B. Polhemus, of San Jose; Princess Louisa, $10.

Best cow, 1 yr old, C. B. Polhemus, of San Jose; Beatrice, $5.

SWEEPSTAKES.

Best bull of any hread or age, Jones & Co. of San Jose; Mason Duke, $30.

Best cow of any breed or age, Col. Younger of Sau Jose; Sprightly, $20.

Best dairy cew, Wm. Quinn, of San Jose; Alice, $10.

GRADED CATTLE.

Best cow, 3 yrs old and upwards, Wm. Quinn, of Sau Jose; Fredericka, $15.

Best cow, 2 yrs old, Wm. Quinn of San Jose; May Queen, $10.

Best cow, 1 yr old, Chas. Clark; Mollie, $5.

HERDS OF CATTLE.

Best herd of cattle of any one breed, and not less than 6 head, owned by one person, Col. Younger of San Jose; Moonlight, Red Rose of Wooding, Rose of Sharon, Fairy Queen, Gem, and Forest Rose, $30.

ANGORA GOATS.

Best huck, Lewis & McCracken, San Jose, $10.

Best ewe, C. P. Baily, $10.

Best herd of 10 goats, N. Gilmoro, $10.

A special premium was awarded to N. Gilmore on Angora goats.

BEST FARM.

Only four farms were entered, and the committee awarded the premium to W. W. Montague, for the best improved and cultivated farm.

BEST NURSERY.

For the best nursery, John Rock's and S. Newhall's were the only two entered. Premium awarded to John Reck.

MANUFACTURED ARTICLES.

Best straw-burner, J. Enwright of San Jose. S. Denner, best exhibit of willow and rustic work, $20. Marcus C. Hawley & Co., best gang plew, cultivater and reaper, $35. D. McKenzie, best herse-power, harrow and grain sewer, $25. Haskell & Mott, best well-borer and blacksmith work, $15. Auzerais & Pomeroy, hest mower and plow, $20; hay cutter, dip. Kimball Manufacturing Company, hay-press, $15. D. M. Harwood, road-scraper, $5. The committee recommeuded a dip. to the Kimball Manufacturing Company for road-scraper and leveler. L. Chaize, brass-work, $5. D. McKenzie, heavy castings, $10. H. Messing, harness-work and saddlery, $55. Jacob Eberhard, tanned leather, etc., $45. John Stock, ceoking stove and tinware, $10. J. F. Faulkner, freight wagon, $10. P. W. Reardon & Co., express wagon, $10. Bolback & Crydenwise, family carriage, $30. W. G. Adel, one-horse top and open buggy, $20. Wm. Harrison, farm wagon, dip. J. S. Wood. hats and caps, $5. Alex. Mackay, rag carpet, $5. Mrs. J. M. Owen, patchwork woolcu quilt, $5. Mrs. N. A. Weatherhead, cotton home-made stockings, $2. L. Leou & Co., glovcs, $15. Mrs. W. C. Wilson, plain needlework, $5. Mrs. Eliza Bradley, hed quilt, special premium recommended. Wheeler & Wilson, best sewing machine for all purposes and best work, dip. Fred Jung, carriage painting, $5. Greimyer & Young, same, $10. J. Green, exhibit of ribbons, $10. W. P. Higginbotham, silk cloth, $10. J. S. Bennett & Ce., exhibi of cabinetware and set parlor furniture, $25. O. A. Jagar, cabinetware chamber furniture, $10. J. B. Price, set parlor furniture, spring bed, upholstery, $25. C. A. Jagar; easy chair, $5. A. Steiger, pottery, $10. Field, Combs & Gregory, marble work, $20. S. Ellis, statuary in plaster and medallions in plaster, $10, and special mentien.

FARM PRODUCTS.

John Stanfield, wheat and barley, $10. Moody & Bro., buckwheat flour, cornmeal and flour, $15. John Rock, potatees, $3. Isaac Dixon, flax seed, $5. A. Matty, hams, lard, etc., $25. George Zimmermau, corned beef, $5.

HAND TOOLS.

A. Callahan, washing mackines, $5; bee hive, dip. G. A. Dabney, grain and seed separator, dip.; churn, $5. E. K. Dunlap, ring iron, dip. Auzcrais & Pomeroy, lawn mower, dip. D. McKenzie, deep-well pump, dip. Wm. Aram, combination grafting iron, dip. E. Harrison, derrick fork, dip. G. Richard, squirrel trap, dip.

GARDEN PRODUCTS.

W. A. Z. Edwards. squashes and carrots, $4. J. H. Comwaithe, onions, $3. M. Nelson, tomatoes, $2. C. Cappelli, cucumbers and all kiuds of vegetables, $12. M. Fernandez, melens, $2.

FRUITS.

S. L. Broughten, collection of apples and pears, $20. A. M. Ogler, single variety of apples, $5. John Rock, peaches, prunes, gooseberries currants and pomegranates, $19. D. M. Harwood, foreign and native grapes, $16. S. P. Stockton, collection of wine grapes, $10. J. M. Dawson & Co., exhibit of canned fruit, $10. Mrs. L. J. Watkins, fruit hermetically sealed in glass, $10.

PRESERVES AND DRIED FRUITS.

Mrs. L. J. Watkins, $10. L. A. Gould, best dried apples, apricots, cherries, currants, blackherries, rhubarb, onions and tomatoes, $16. Alden Fruit Preserving Company, prunes, plums, pears and peaches, $9.

NUTS.

L. A. Gould, collection of nuts of all kinds, $10. J. J. Roberts, soft shell almonds, $3. Mrs. L. J. Watkins, hard shell almouds, $2. A. M. Ogier, chestnuts, $2. Wm. Boots, English walnuts, $2.

PLANTS AND FLOWERS.

John Reck, collection of ernamental and evergreeen plants, etc., four premiums, $45. L. F. Sauderson, green-house plants, flowers, etc., seven premiums, $55. A premium was recommended to S. Tonner, for hanging haskets.

DAIRY PRODUCTS.

O. W. Farnsworth, hest cheese, $10. William Boets, best butter, $5.

BREAD AND PASTRY.

Mrs. L. J. Watkius, best wheat and brown hread, $4. Charles McGettigau, six loaves, baker's, $5. Emily Rogers. cakes, $5. Laura Hellyer, aged 11 years, hest bread, special premium recommended.

MILLINERY, DRESSMAKING, EMBROIDERY, ETC.

Mrs. J. Lorjed, display of bounets and hats, $15. Mrs. J. Demar, dressmaking, $10. Mrs. C. W. Clark, hest waxwork, $5. Mrs. L. F. Chipman, crochet work, $2. Mrs. A. Boardman, cone work, $2. S. P. Sanchez, rug, tufted, and worsted work, $7. Mrs. A. Armsden, knitting work, $2. Miss M. D. McChain, silk embroidery, five premiums, $16. Miss Emily Lightsloy, hair work, $2. Miss M. D. McChain, afghan, $2. J. Liuds, shell work, $5. Miss S. J. Watkius, wax shell werk, dip. Mrs. W. E. Wilson, lady's collar, etc., $6. Mrs. J. Demar, fancy needlework, special premium.

FINE ARTS.

Toland Hart, painting on canvas, $10. Edward Lewis, crayon painting, $5. C. J, Lightsten, penmanship, drawing with pen, $10. Carl Browne, painting and portrait in oil, $20. Emil G. Pcelor, pencil drawing, $5. Toland Hart, laudscape painting, $20. Mrs. L. M. Curtis, portrait in water colors, $5. S. P. Sanders, photographic views, $10; special mention to Miss C. Ellis and Miss Matilda Letz.

NATIVE WINES AND LIQUORS.

C. M. Klotz, dry white wines, $3. S. P. Stockton, sweet dry red, sweet red, port wine, grape and peart hrandy, $23. D. M. Harwood, Madeira, Catawba, Augelica wines and vinegar, $12. S. P. Stockton, exhibi of wines, $10.

THE ETHERIAL BLUE COLOR OF THE SKY is due to minute particles of matter which float in the air. Were these particles removed, the appearance of the sky would be dead black. It is a fact in optics that exceedingly fine portions of matter disperse or scatter the blue rays of light, coarser portions scatter red rays, still coarser portions scatter all the rays, making white light. The atmosphere is full of aqueous vapor, the particles of which diffuse white light in all directions. When these particles are enlarged, they becomo visible in the form of clouds. The vapor particles of the white clouds are supposed to be finer and thinner than those of the dark clouds. That the diffusion of light in our atmosphere, the blue coloriug of the sky, and the colors of the clouds, are due to the presence of matter floating in the air, has been conclusively proven hy Tyndell.

L. L. ROBINSON, the owner of Los Medanos or New York raucho, containing 9,000 acres, adjoining Antioch, has leased it in quantities of two and three hundred acres to substantial farmers. Mr. Robinson proposes to erect neat and commodious cottages upon each subdivision so leased.

Smoke Consumption.

A correspondent of the *Scientific American* offers the following suggestions bearing upon the subject of smoke consumption: "In nearly all the furnaces used under boilors there is too little space between the grate bars and the bottom of the boiler (it is often 12 inches to 15 inches; when it would he better 24 inches to 30 inches), and that every fireman, taking boiler, grate and furnace exactly as he has it, can control and very largely prevent the smoke by simply firing on one sido only of his furnace at a time, leaving the other side of the fire clear and hot until its own turn for firing comes, and by a careful admission of air by merely leaving the door slightly open. It may be urged that there is nothing new in either of these suggestions (which is perfectly true) but a wise attention to them—and wisdom, even in a fireman, is an essential element to success—will go a long way toward remedying the evil."

What the above correspondent says in regard to space between the grate-bars and boilers is corroborated by the following, which we find in an exchange: "A steam boiler of novel construction has been recently placed in Franklin, Upton & Co.'s tannery at Peabody, Mass. Its principal merit lies in the fact that the gases and smoke given out by the burning fuel, and which usually go out of the chimney, are thoroughly consumed, and therefore the waste of power is reduced to a minimum. Hitherto it has been the practice for the fire grates to be placed within 18 inches of the boiler, and the bridge wall carried up to within six inches of the boiler, in order to secure the best results. In this case we learn that the distance from the grates to the boiler is 30 inches, and from the bridge wall to the boiler 13 inches. There is a space one inch wide between the outer wall and the inner fire wall, through which air from the outside passes, and becoming heated *in transitu*, is admitted into the flame through a perforated iron plate. By this means an almost perfect combustion is caused."

Leatherette—A New Material.

The British *Trade Journal*, describes the above article—a new patent imitation of leather—as follows: It is so good an imitation that a superficial observer would, in nine cases out of ten, take it for the real article. The grains of the different kinds of leather, such as basil, seal, morocco, etc., are reproduced with a fidelity quite remarkable. In the process of "graining," a real skin of leather of any given description, which it may be desired to imitate, is taken as a mould, and from this an impression is obtained on sheets of fibrous pulp hy the exercise of enormous pressure. Thus the grain of the imitation article is an actual fac-simile of that of the real. Leatherette is obtainable in any color, and, while it is only about one-eigth the cost of leather, possesses some manifest advantages over the latter, which will scarcely fail to make it a commercial success. For instance, it is stronger than leather of the same thickness, and is of uniform quality, so that forty or fifty forms may be cut at a time, while the blemishes that occur in leather necessitate each form being cut singly, and that by experienced, and therefore expensive hands. It is not so prone to soil, and is waterproof. The scope afforded in different trades for the utilization of such an article is obviously great. Upholsters, hat liners, box makers, purse makers, bookbindors, etc., may, among others, turn it to useful account. For book-binding it is admirahly adapted, and probably in this branch of trade will work no small revolution, seeing that it affords handsomo and realistic bindiugs at a reduced cost. There can he no doubt that leatherette is an important invention.

SALT IN SICKNESS. — The celebrated Dr. Scudder remarks, with regard to this condiment in sickness: "I am satisfied that I have seen patients die from deprivation of common salt during a protracted illness. It is a common impression that the food of the sick should not be seasoned, and whatever slop may be given it is almost innocent of this essential of life. In the milk diet that I recommend in sickness common salt is used freely, the milk being boiled and given hot. And if the patient cannot take the usual quantity in his food I have it given in his drink. This matter is so important that it cannot be repeated too often or dwelt upon too long. The most marked example of this want of common salt I have ever noticed, has been in surgical disease, especially in upon wounds. Without a supply of salt the tongue would become broad, pallid, puffy, with a tenacious pasty coat, the secretions arrested, the circulation feeble, the effusion at the point of injury serious, with an unpleasant water pus, which at last becomes a mere sanies or ichor. A few days of a free allowance would change all this and the patient get along well."

RIGHTEOUS LAW.—In the French penal code it is provided that any person or persons who shall combine to raise or depress the price of articles of food above or below what it would be in the natural state of trade at the time, shall suffer two months' imprisonment and pay a fine of not less that $200 nor more than $400.

THE Consolidated Tobacco company, of Gilroy, is holding on to its products for a raise in the price, which is likely to follow in consequence of the partial failure of the crops in Virginia and other Eastern States.

Agricultural Notes.

California.

ALAMEDA.

New Warehouse.—Livermore *Enterprise*, Oct. 10: The sides are up and part of the roof put on the new Esdom warehouse. A large amount of grain is already piled upon the floor, and by the middle of the coming week it will be filled.

Fine Fruit.—We were presented by Mr. M. Mendenhall on Tuesday with a box of very choice assorted fruit, grown on his place one mile west of town. The apples were of several varieties and very large. The pears were monsters, and considering that the orchard is but five years old and has never been irrigated, of a delicious flavor. It has often been said that fruit could not be raised in our valley, but if any one has doubts just let them call at Mr. Mendenhall's ranch and be convinced to the contrary.

COLUSA.

Fine Apples.—*Sun*, Oct—: In former years it was thought that apples could not be grown successfully upon the soil of California, but of late such ideas have been entirely dispelled. Yesterday Archy Wood presented us with some large and beautiful apples, which we believe to be of the R. I. Greening varieties, grown in the elegant orchard of C. Grimes, at Grimes' Landing, Grand Island, which remind us of the Fall Pippins we gathered on the banks of the Hudson, New York, during the happy days of our boyhood. We are glad to find such productions in Colusa county, and are told by Mr. Wood that Capt. Grimes has thousands of the same sort in his prolific orchard.

The celebrated Merrifield ranch of 2,000 acres, in Colusa County, has been purchased by Harris & Chase, of Vacaville. The parties selling the ranch purchased it two ago years for $24,000, have raised about $40,000 worth of wheat upon it since then, and finally sold for $50,000.

EL DORADO.

New Potato.—*Republican:* Dr. Glynn has produced a new variety of potato that excels nearly all the known varieties in most respects. This variety was propagated from the seed three years ago, and this season the doctor has raised nearly a half a ton of them in his garden, at the lower end of town. In appearance and taste they resemble the kidney potato, but are larger than any we ever saw, are very solid, cook beautifully, and are as good as we have ever eaten. The inside is slightly flocked, similar to the Neshanock. They come to maturity in from three to four months after planting, and are very prolific, a single seed-end producing from eight to ten pounds. They have been kept until the first of June in perfect condition, and no rot has ever appeared. They have been named the Glynndales.

KERN.

Tobacco. — *Southern Californian*, Oct. 8: Kern county—that is the Kern valley portion, will soon be numbered among the tobacco counties of this State, we think. It has been experimented with by some persons, and found to grow well. A gentleman in this valley this season had some forty thousand plants, and sold his entire crop at 13 cents per pound for sheep dip. It would be a good crop if it could only be used for that purpose, as we have a large home demand. We learn others will give it a trial next season—men who understand the cultivation and curing of the "weed."

LAKE.

Sheep vs. Cattle.—*Bee*, Oct. 8: The majority of mountain ranches in this region are now stocked with sheep. Many who have been raising cattle for years are selling off and going into the sheep business, well convinced that the change will be to their advantage. Many who have been averse to sheep, considering them troublesome and destructive to pasture, find by observation that they are as easily managed as cattle; that they are the best known fertilizers; and, when properly cared for, very enriching to their proprietor's purse.

MARIN.

Wood Transportation.—*Journal*, Oct. 8: A very important industry, in this county, and one which for many years has employed a large number of men and animals, is the hauling of wood and lumber. But this is the last season of the teamster's good things. The railroad, with its larger and fleeter wagons, will supersede them, and whisk them off into oblivion without so much as saying by your leave. The cost of hauling a load of wood from the forest to this place is $3; by rail it will not probably be $1.75. Taking off these heavy teams will have the incidental effect of giving us much better carriage roads at much less cost.

MONTEREY.

Sale of Land.—Monterey *Democrat*, Oct. 10: The sale by Mr. Laird to Mr. Lynn of 1,000 acres of land at $30 per acre, has been recorded this week. The land is part of the Buena Esperanza grant, next the Gabilan range, and about 12 miles distant from this place.

Blooded Stock.—Messrs. Pinkerton & Jackson, owners of the Plieto rancho, in the San Antonio country, are determined not to be behind their brother stock-owners in the march of improvement. We saw this week at the railroad depot a car occupied by a number of fine animals. There were two bulls and two heifers of the short horn variety; soft-skinned, fine-haired and mild eyed, with broad buttocks and straight back. Then there was a section filled with bucks and ewes, full-blooded Spanish merinos, that would bear the closest criticism of touch and eye. Among them was the buck "Fremont," who took the first premium at the State Fair. Besides the above was a lot of Berkshire and Essex pigs, of which there were several that ranked first at the fair. The cattle came from the herds of Younger and of Blacoe, and the sheep were purchased from Severance & Peet, importers and breeders of blooded sheep.

NAPA.

Hop Shipment East.—St. Helena *Star*, Oct. 9: As an illustration of the esteem in which California hops, and particularly those of this section, are held in the Eastern market, by reference to our export list of last month it will be seen that 31,384 pounds were forwarded from St. Helena last month. Three days since Messrs. Clock & Storey sent two car loads of hops across the continent to a firm in New York, who assert that the hops from this valley are the cheapest and best in the world.

Big.—Two large bunches of Tokay grapes, one bunch weighing four pounds, with every grape perfectly developed, and as fine as any that we have ever seen, was presented to us by Mr. J. S. Kister.

Cheese Shipments.—*Register*, Oct. 10: We noticed a large lot of fine looking cheeses at the Express warehouse for shipment to-day, and on inquiry learned that they were from the celebrated Caymus dairy, near Yountville, now run by Mr. F. J. Willoughby, and consigned to the popular house of Stuart & Elder, San Francisco. The lot consisted of 146 cheeses, weighing about 4,380 pounds. A similar shipment of 130 cheeses was made by the same steamer last Saturday.

Sale of Morrisania.—William G. Morris and wife have sold to J. C. McCeney, for $40,000 some 900 acres of land. The property is well known as Morrisania, and comprises a magnificent homestead. It was in different tracts.

One of the finest orchards and vineyards in Napa valley is that owned by Frederick A. Mann. It is situated one and a-half miles from Napa. He cultivates 17,000 vines of choice varieties.

The enormous quantity of 461,690 pounds of grapes was shipped by rail from St. Helena, Napa county, last month.

NEVADA.

Seeds of the Forest.—Truckee *Republican*, Oct. 8: A gentleman from Prussia is now in Truckee gathering cones from the several varieties of the mountain pine in this section. Nearly a ton of these cones have been dried and are now ready for shipment to Europe. They will be planted in both public and private forests, parks and botanical gardens in various localities in Prussia and Belgium.

F. Burckhalter & Co. have just received 3,000 pounds of Sierra Valley butter. The dairy season in that valley has been propitious and the cows have done their whole duty.

Fruit Drying.—Grass Valley *Union*, Oct. 7: Any person walking around Grass Valley can see, and that too, without very closely observing, that there is the greatest need of a fruit drying establishment here. Tons and tons of fruit of the very best quality and of almost every variety are rotting on the ground. These fruits are not the insipid and tasteless kinds that grow in the lower valleys of the State, but are superior to any not grown in a mountain region. The waste of such fruit is almost criminal. To prevent this waste a company to build and operate fruit drying machines should be formed.

SACRAMENTO.

Ranch Sold—*Telegraph*, Oct. 10: William Beckman has sold his ranch in Florin, in this county for $20,000 and the personal property for $5,000. The vineyard is a splendid one and produces fine grapes. The land is gravelly, and similar to the soil about Folsom. A few years ago it was not considered worth anything, and now it is considered the best grape land in the county.

Oranges.—In Judge Crocker's garden in Sacramento, there can be seen two large orange trees, with a ripe crop on them; also green oranges and orange blossoms.

Sugar.—The Capitol Beet Sugar Company have a splendid crop this year on their lands in Brighton township, and are now engaged in turning out a splendid article of sugar, superior to any made here or imported.

Cotton.—On Maulive's ranch, near Sacramento, is a field of cotton in full, healthy growth. The plants are now about four feet in hight, and will average about 75 bolls to the plant.

The Foot-hills.—About a hundred boxes of grapes have this season been shipped from the Aldor creek vineyard, belonging to the Natoma Water and Mining Company. This is remarkable, as the vineyard was only set out one year ago last spring. The grapes are splendid in appearance, and are of the finest European varieties. The soil is red, and is in the commencement of the foothill region on the American river, about two or three miles west of Folsom. The foothills here challenge the rest of the State to make a showing like the above. Now make your showing. Here are hundreds of acres of the same kind of land, on the hills, open to settlers. Come this way if you want the best fruit land in the world.

SAN DIEGO COUNTY.

Honey.—San Diego *Union*: Mr. Harbison, the apiarist, will have over six hundred cases more honey for exportation than he estimated at the beginning of the season. He will clear over $25,000 from this year's operations.

San Diego will this year export 400,000 pounds of honey.

Charles Manhair, of Tiajuana valley, San Diego county, this season raised 35 bushels of corn from one-quarter of an acre of land. Other farmers in the valley average 75 bushels per acre.

SANTA CLARA.

Dried and Canned Fruits.—San José *Mercury*, Oct. 9: No more important industry has yet been established in this valley than that of the preservation of our abundant fruits. We have now two large fruit-drying establishments, one operating by the Stevens' process, under the management of Mr. Anderson, and one by the Alden patent, superintended by Mr. Settle; and one canning establishment by J. M. Dawson & Co. We regard these enterprises as the beginning of an immense industry in this valley, which will result in a large source of revenue.

Shipment of Dessicated Fruit.—The San José Factory shipped on Monday five tons of assorted fruit, through the firm of J. C. Merrill & Co., San Francisco, to Sydney, New South Wales, per steamship "City of Melbourne." This is but one of a number of large shipments made from the above factory the present season. The proprietor of said factory, Mr. John Anderson, informs us that 50,000 pounds of assorted fruit has been ordered at his factory during the last two months by the Steven's process.

Judge Eatin, who resides about five miles southwest of Santa Clara, is experimenting with tobacco on his place. He has plants now standing six feet high, and which are of the finest quality.

SANTA CRUZ.

A Fine Place. — Watsonville *Pajaronian*, One day last week we had the pleasure of visiting the chicken farm in the edge of town, owned by George D. Rodgers. He has 10 acres of excellent land, all devoted to fowls—500 chickens and about 300 ducks. The fowls are all looking finely, and their surroundings neat and pleasant. There are four or five hen houses, each in a commodious yard or run, and built with a strict regard for neatness and thorough ventillation. Mr. Rodgers proposes to increase his stock of ducks to a thousand or more, as he finds from experience that they do finely even without a regular, large pond of water, generally thought necessary for these fowls. In place of a pond or lake, he runs water from the pump to several places in the duck yard, where small puddles are formed, which answers every purpose. The ducks looked plump, large and glossy, and would command a good price in market. The business of raising hens and ducks is very interesting and pleasant, and Mr. Rodgers finds it highly remunerative, and is the only person in this section of the State, we believe, who has entered upon the business on a large-scale plan.

SONOMA.

Agricultural Notes.—Sonama *Democrat*, Last spring A. J. Peterson sowed, for an experiment, 800 pounds of Sonora wheat on 11 acres of new tule land. It yielded 563 bushels or 51 bushels to the acre. He sowed 800 pounds of White English club head on adobe land; the yield was 375 bushels. Eight hundred pounds of Smith and Oregon mixed, on good land, Santa Rosa creek bottom, yielded 433 bushels. He sowed also 50 pounds of Proper wheat on ⅜ of an acre of rich upland, which yielded 23 bushels, which is at the rate of 52 bushels to the acre. The Sonora and Proper weighed 140 pounds to the sack; the English, Club and Oregon weighed 130 pounds to the sack—sacks all the same size.

John L. Cook threshed this season in Santa Rosa township, Mark West creek, the Guilucos and Beunett valleys, 44,997 bushels of wheat. Santa Rosa, Mark West and the Guilucos averaged 28¾ bushels to the acre; Bennett valley, 21 bushels to the acre; general average of all places named, 23 bushels to the acre.

E. Tants, who resides east of Windsor, sold his grapes to Taylor on Wednesday, for $20 per ton. His vineyard yielded about four tons to the acre. This is $80 to the acre less cost of cultivation, which was all done by Mr. Tants himself.

Notes of the Vintage.—The reports from Sonoma of the vintage now in progress are very favorable. The yield of grapes is larger than ever before known, running as high as four and five tons to the acre. From a few acres of Zinfindel Gen. Whallon took 6½ tons to the acre, which was sold for $34 per ton.

Twelve hundred tons will be crushed from the vicinity of Santa Rosa, of which I. De Turk has engaged about 800 tons, and Wm. Taylor about 400.

Grapes are hauled here from the Laguna, from Sebastopol and Windsor. It is probable that at least two large wine factories will be erected in Santa Rosa this season.

SOLANO COUNTY.

County Notes.—Benicia *Tribune*, Oct. 10: We learn that since the last rains, hay on the top of the stacks has acquired a much greater gravity than at the bottom.

The heavy rains of last week saturated some of the grain stacks on the point near South Vallejo to the depth of six feet, and many of them had to be opened and dried out; the threshing machines having to stop temporarily, in consequences.

A Contract.—We take from the *Sonoma Democrat* the following item concerning Solano county. Mr. Hawkins and Mr. Broughton of Solano county, live near together. They each have a hundred-acre field adjoining. The soil a alike. Year after year these fields have been sown in wheat, until the average crop was not more than fifteen or twenty bushels to the acre; besides this the little thistle, as some call it, had almost taken possession of them. During the month of February, last year, Mr. Hawkins put 600 sheep on his, and let them remain until August. In the mean time they eat up every particle of vegetation, and tramned the whole field into a perfect dust-bed. Yet when they were taken off they were perfectly fat. Last winter it was put in wheat, and when harvested produced fifty-eight bushels to the acre, the whole being perfectly free from thistles, while Mr. Broughton got only fifteen from his, and any amount of thistles. May not farmers learn a lesson from this? This land did not lie profitless as fallow ground does, but the sheep were a source of revenue. While they enriched the soil, they cleared it of weeds, and prepared it for a more abundant yield.

SAN LUIS OBISPO.

Fine Sheep.—*Tribune*, Oct. 10: Mr. H. M. Warden, of this place, has lately made a very valuable addition to his stock in the shape of 12 thoroughbred Spanish merino ewes, which have been bred to the first premium bucks of the State. Mr. Warden last year introduced into his flock the same number of thoroughbred bucks, and expects to have, the coming season, the finest showing of thoroughbred sheep in the county. He is one of the few that believe in quality rather than quantity, and we trust that his efforts will be crowned with the success that enterprise merits.

Agricultural.—We have not been enabled to gather all the statistics we would wish in regard to this year's crops in our county. Once in a while, however, some kind friend furnishes us with an item. For instance, we have just learned from J. B. Hazen, that he has just got through with the season's work on his steam-thresher, with a total result of 90,000 bushels of wheat and barley for his machine alone. Others have threshed out between them about 40,000 bushels. This has been done in the section of country lying between the Corral de Piedra rancho and the Morro, the coast and the Santa Margarita summit. This is but a small portion of our county, and we should be glad if some more of our farmers would forward us their returns.

TULARE.

Power of Vegetable Growth. — Tulare *Times*, Oct. 3: A watermelon of good size was brought to our office this week, which grew under a fence and raised the ends of 13 rails a foot off of the ground. This gives a very striking proof of the silent but powerful force of vegetable growth. The melon grew on Mr. D. L. Atwell's place near town.

YOLO.

Large Yield.—Yolo *Democrat*, Oct. 9: We are informed that James McCradle, of Merritt Island, in this county, raised on one and one-half acres of land on his farm 4,220 pounds of beans. The land of Merritt Islanders has been proven to be of superior quality, and capable, when put under a proper state of cultivation, of producing extraordinary crops.

Davisville.—A project is already being considered for the erection of beet sugar works in Davisville. We learn that a company has been organized for that purpose, and hope soon to be able to record the event as a fixed fact. No better location could be found for the erection of sugar mills. The land adjacent is peculiarly adapted for the culture of beets. Four hundred acres of the finest beets in the State have been raised in the immediate vicinity this season.

A flour mill will soon be started at Capay city, Yolo county.

Oregon.

Fine Stock.—*Oregonian*, Oct. 10: Mr. Yoakum, of Yamhill county, went up to the State fair yesterday with seven fine pure blood Angora goats which he has just brought up from California to improve his flock. Mr. Wm. Landrum, of Watsonville, California, who has been for 14 years engaged in breeding these goats is on hand with five splendid specimens from his ranch.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Oct. 13th, 1874.

For Week Ending Sept. 29th, 1874.*

Cartridge for Exterminating Burrowing Animals.—Lysander Collins, Alma, Cal.

It is a matter of great importance to our agricultural friends in the country to know that Plowmen, Farm Laborers, Engineers, Teamsters, Blacksmiths, Millers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description is sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery steeet, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

No office is better qualified to select skilled and unskilled labor and has greater facilities to fill your orders. ag22-tf

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Oct. 14th, 1874.

The Receipts of Domestic Produce for the past week have been fully up to the average of previous weeks. Those of Flour, Oats, and Wine show a decline, but receipts of Barley, Sugar Pine, and a few other articles show an increase. The following are the details: Flour, 25,242 quarter-sacks; Wheat, 210,042 centals; Barley, 15,553 ctls; Oats, 2,775 ctls; Corn, 88 ctls; Bran, 1636 sacks; Middlings, 350 do; Hay, 14,117 bales; Straw, 1,140 do; Hops, 493 do; Wool, 4,077 do; Potatoes, 3,628 sacks; Onions, 1,505 do; Wine, 15,288 gallons, Hides, 2833; Pelts, 133 bdls; Leather, 83 rolls; Granite, 200 tons; Paper, 1,960 reams; Straw, bound, 100 bdls; Quicksilver, 262 flasks, Copper ore, 824 ctls; Sugar Pine Lumber, 101,000 feet; Butter, 683 ctls; Cheese, 636 do; Tallow, 383 do; Mustard Seed, 101 sacks; Broom Corn, 937 bdls; Beans, 1,077 sacks; Salt, 70 tons; Ore, 239 ctls; Tan Bark, 90 ctls; Flaxseed. 365 sacks; Skins, 79 bales; Aimonds, 154 sacks; Chicory, 178 bales; Doors, 3 cases; Lime, 500 bbls; Ice, 94 tons. Butter—California has been a little off for the last few days, but the depression is only temporary. Eastern is fair. Over a car load was received last week. Cheese—California is firm. There is but slight demand for Eastern. Eggs are weak.

Alden Fruits—We have to add to our list Prunes at 30c, Blackberries at 3 2½c,

Beeswax—Weak at 25c@27½c.

Broom Corn—Still holds its own at 5c@8c, although the receipts last week were pretty large—937 bundles.

Bread—There continues an active local demand, at the regular prices.

Beans—Arrivals have been very large during the week, and prices have weakened a little.

Barley—The price has remained stationary. Receipts of Coast light—7,781 sacks; of Bay, 15,553 ctls; an increase on last week. We note sales of 1,000 sacks of good Feed, at $1.05; 200 do dark Coast, at $1; 2,000 do Coast, at $1.07½; 5,000 do brigbt Coast, at $1.07½@$1.10; 1,450 do at $1.10; 2,000 do Fair Brewing, at $1.15; 200 do Old Brewing, at $1.17½; 600 do Good Brewing, at $1.20, and 1,500 do Choice Brewing st $1.25. Exports per "R C Wylie" to Iquique, Peru, of 12,710 ctls.

Buckwheat—No transactions. Nothing to report.

Cranberries—Still continue at $14.50@$16. Receipts last week have been large, equaling 854 bbls.

Corn—Remains as last week. Sales of 200 sacks of old crop Yellow, at $1.30.

Cotton—There have been no sales since our last. We quote it firm at 18c.

Cornmeal—Feed has dsclined again to $30@$32, and Table ¼c ₱ lb, in consequence of the fali in the price of Corn.

Flour—Quotations for Extra and Superfine has not cbanged during the week, and there has been only a few hundred bbls by the Golden Age sold for export. The Star Mills, Vaiiejo, have contracted to deliver 20,000 bbls of Extra in the city in a couple of months, at private rates. Exports last week 671 bbls.

Feed—Bran is firm a $17, Middlings have advanced to $27, while Oil Cske Meal is without change.

Fresh Meat—We report a decline of 1c in first-class Beef and of ¼c in dressed Pork.

Game—Is in medium supply this week. No change in prices.

Hay—Is a little better, choice bringing $15.

Hops—One firm in this city has shipped 5 car-loads during the last ten days, the price here consequently continues to advance slightly. They can be bought from the shippers for 32½c@37½c, and sold to brewers at an advance of 2½. We note one sale at 35c by a farmer toa brewer.

Honey—Is a little scarce on account of continued shipments to New York, nevertheless prices do not improve.

Onions—Are lowsr still, Yellow only bringing 70c.

Oats—Have remained during the week without change. Receipts of Cosst 5,890 sacks, of Bay 2,775 ctls. Tbe "Aristos," to Melbourne, took 13,338 centals, worth $21,007. We note sales of 4,000 sacks choice Oregon at $1.60@$1.62½, and 400 sacks fair at $1.45.

Potatoes—Receipts of Coast and Bay, 17,672 sacks—larger than the previous week. In consequence of this prices have declined in all save Sweet Potatoes which have gone up to $1.37½. There are no Mission in the market. We note sales of a cargo of Cuffey Cove, at $1.10@$1.20; 1,500 sacks of Pigeon Point, at $1.15; 200 do choice at $1.17½; 900 do Tomales, at 87½c@$1.07¾; 100 do Half Moon Bay, at 80c and 300 do do, at $1.

Poultry—A fair supply at quoted rates.

Rye—No receipts last week. Price remains nominally at $1.02½.

Straw—Is weaker and quotable at 50c per bale.

Tallow—Is dull, the large city buyers having shut off for a month,

Vegetables—Green Peas and String Beans are cheaper than last week; Garlic and Lima Beans have advanced.

Wool—Market quiet. We note sales of 175,000 lbs at 13c@20c; 70,000 do, at 18½c@20c; 150,000 do, at 14c@22c; and 8,000 do at 18c@22c. Total for the week 450,000 lbs. The following is the latest by telegraph from New York:

"Notwithstanding unsatisfactory reports as to the position and prospects of the market for Woolen Goods, the raw material rules very firm. Holders are anything but eager sellers, some of them not offering supplies at all, as they anticipate a stronger range of vslues later on. Manufacturers at present are purchasing Wool as tbey need it for prompt use, and generally in limited amounts, whioh, however, make a fair aggregate. New California Fali to hand has attracted some little attention, but sales chiefly have been made at figures somewhat below views of receivers. Spring has also met with some demand, but no change in rates has been made. Ths sales comprise 180 hls Fail lambs, at 22¾c; 180 hls new Fall, 25½@27½c; 30 his old Fall, private; 205,000 lbs Spring, 31c@34c; 5,000 lbs Pulled, 36½c; 14 bls Scoured, private. At Boston the market has been very quiet. A few lots of Fall have arrived, of which sales of 10,000 lbs, in excellent condition, bave been made at 26c. The major part of these Wools are more than usually burry. Sales are 60,830 lbs at 33½@37c for Spring; 26@34c Fail; 72½c@85c for Scoured."

Wheat—The market remains firm at $1.40@1.45 for Shipping, and $1.45@1.50 for Milling. There has been another decline in Liverpool, of one cent on California average, as compared with last week. The qnotations telegraphed last evening were: California Average, $2.41@2.49; do Club, $2.51@2.61. The prices in Liverpool of California Average on Oct. 13th, for the past three years, have been as follows:

Year.	Price.
1874	$2.41@2.49
1873	3.02@3.08
1872	3.20@3.24

This shows a falling off in the Liverpool market of 60c as compared with 1873. and 77c as compared with 1872. Sales for the week—2,000 sks Shipping at $1.40, 5,000 do Choice Milling at $1.47½, 24,000 do $1.45, 11,000 do at $1.50, 100 do Choice Milling at $1.45 and 4,900 do at $1.25.

Receipts last week, 210,042 ctls Bay and 712 sacks of Coast. Exports aggregated 184,380 ctls as follows,

Ship.	Destination.	Cargo.	Value.
Payton	Queenstown	23,131	$34,696
Agustina	Cork	25.779	38,700
Carroilton	Liverpool	46,682	69,993
Nightingale	Cork	18,000	26,730
Star	Liverpool	36,007	54,000
Oberon	Liverpool	34,801	52,202
Total		184,380	276,321

DOMESTIC PRODUCE.

WEDNESDAY M., Oct. 14, 1874.

BEANS.

Beans, sm'l wh. ₱	3¼	@	—
do. butter	4½	@	—
do, bayo	2¾	@	—
do, pink	2	@	—
do, pea	—	@	—

BROOM CORN.

Per ton	$100	@	160

COTTON.

Cal. 1874. ₱ lb	—	@	18

DAIRY PRODUCE

Butter. Cal. choice			
₱	50	@	55
do, good	45	@	55
do, inferior	32½	@	45
do, firkin	30	@	35
do, pickled	35	@	42
Cbeese, Cal. new	12½	@	17
do. Eastern	12	@	17

EGGS.

Eggs, Cal. fresh	—	@	42½
do, Oregon	20	@	25
do, Eastern	15	@	25
do, Ducks'	40	@	42½

FEED.

Bran, per ton	—	@	16 00
Middlings	—	@	7 00
Hay	9 00	@	14 00
Straw, ₱ bale	—50	@	— 55
Oil cake meal	—	@	30 00
Corn Meal	—	@	32 00

FLOUR.

Extra	4 25	@	5 62½
Superfine	3 90	@	4 30

FRESH MEAT.

Beef, fr quality	₱ 7	@	8
oo, second do	6	@	7
do, third do	4½	@	5
Veal	4½	@	5
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed	6¾	@	6½
do, dressed	8½	@	8¾

GRAIN, ETC.

Wheat, coast	1 30	@	1 40
do shipping	1 40	@	1 45
do milling	1 45	@	1 50
Barley, coast	1 05	@	1 10
do brewing	1 15	@	1 25
Oats, cb ice	1 50	@	1 65
do oommon	1 35	@	1 55
Corn, White	—	@	1 35
do, Yellow	—	@	1 35
Buckwbeat	2 75	@	3 00
Rye	—	@	1 02½

HOPS.

California, 1874	35	@	40
East'rn, '73 ch'ice	—	@	—

MISCELLANEOUS.

Beeswax, per lb	25	@	27½
Honey in comb	18	@	22½
do Strained	5	@	10
Pulu	9	@	10½
Onions	60	@	90

NUTS—JOBBING.

Cal. Walnuts	14½	@	12½
Peanuts per lb	7	@	9
Chile Walnuts	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds b'd sbell	10	@	12½
do, soft	20	@	25
Filberts	17	@	18
Cocoanuts, 1000,6	00	@	—

POTATOES.

Sweet, per cwt	1 37½	@	—
Cuffee Cove	—	@	1 10
H. M. Bay	1 00	@	1 05
Pigeon Pt	—	@	1 20
Humboldt	—	@	—
Petaluma	—	@	—
Mission	80	@	90
Salinas	50	@	70
Bodega	—	@	—
St Barbara	—	@	—
Ssc. River	—	@	—

POULTRY & GAME.

Live Turkeys,			
hens per lb	16	@	17
do gobblers	16	@	17
Hens, per dz	5 00	@	6 50
Roosters, young,			
large	5 00	@	6 50
Broilers, small	2 00	@	3 00
do large	3 00	@	4 00
Ducks, tame, doz	5 00	@	8 00
Geese, per pair	2 00	@	2 50
Hare, per doz	3 00	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	1 75
Mallard Ducks	3 00	@	4 00
do small	—	@	2 00
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	50	@	75
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 25	@	1 50
do tame	5 00	@	6 00
Venison, per lb	8	@	9

PROVISIONS.

Cal. Bacon, Ligbt	—	@	16½
do Medium	—	@	15½
do Heavy	—	@	13½
Eastern do	14	@	16
Hams, Csl	14	@	14½
do Whittakers	—	@	17
do Duffield, ch	—	@	15½
do Plankton & Arm ur	—	@	15
do Boyd's	15	@	16½
do Stewart's	—	@	16½
Eastern Should's	9	@	9½
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	14½	@	17

SEEDS.

Alfalfa, Cbili	—	@	11
oo California	—	@	14
Canary	4	@	4½
Cotton	5	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	3	@	4
do. Brown	2	@	2½
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	—	@	11
Timothy	11	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungerian do	10	@	13
Lawn do	50	@	60
Meequit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Alsike	—	@	60

WOOL, ETC.

FALL—			
Good to choice	19	@	22
Fair grade	16	@	18
Heavy free	14	@	16
Defective	12	@	15
Hides, dry	19	@	20
do wet salted	8½	@	9
Tallow, Crude	5	@	6
do Refined	6½	@	7½

FRUITS AND VEGETABLES.

WEDNESDAY M., Oct. 14, 1874.

There has been but little change in tbe Fruit market since last week.

FRUIT MARKET.

Tahati, Or. ₱ M	—	@35	00
Lorita, do	—	@—	—
Cel. do	—	@—	—
Limes, ₱ M	15 00	@20	00
Cal. Lemons, ₱ M	—	@30	00
Australian do	—	@—	—
do per box	—	@—	—
do Sicily ₱ b'x	—	@—	—
Bananas, ₱ bnch	3	@4	—
Cocoanuts, ₱ 100	—	@—	—
Pineapples, ₱ dz	5 00	@7	50
Apples, ₱ box	40	@1	25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries ₱ lb	15	@	20
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	2	@	3
Peacbes, bskt	1 00	@1	50
do, ₱ box	—	@	—
do ext Mountain	5	@	8
Pears, Bart't, bx	—	@2	50
do Cooking	40	@1	25
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel's ₱ 100	6 00	@10	00
Muskm'l's ₱ 100	5 00	@10	00
Pomegran's ₱ 100	6 00	@ 7	00
Figs	—	@	3
Grapes, Bl'k H'g	—	@	3
do Muscat	—	@	3
do Malavo'e	3	@	4
do Sweetw'r	1½	@	2½
do Mission	1	@	2
do Rose of Peru	—	@	3
do Tokay	—	@	3
do Morocco	8	@	8
do St. Peter	—	@	—

DRIED FRUIT.

Apples, ₱ lb	7	@	8
Pears, ₱ lb	10	@	11
Peaches, ₱ lb	9	@	10
Apricots, ₱ lb	10	@	12½
Plums, ₱ lb	8	@	10
Pitted, do ₱ lb	—	@	15
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	5	@	—
White, do	10	@	15
Prunes	6	@	8
do German	16	@	20
Citron	30	@	35
Zante Currants	8¾	@	8½
Dates	12½	@	—

VEGETABLES.

Asparagus	—	@	—
Beets	—	@	1
Cabbage, ₱ 100 lbs	50	@	75
Carrots, ₱ 100 lbs	60	@	62½
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	8	@	10
Green Peas	3	@	3½
Green Corn ₱ doz	15	@	20
Sum'rSquash, box	—	@1	00
Msrro'fat Sq'sb, ₱ lb	1	@	2
Artichokes, ₱ doz	15	@	25
String Beans, ₱ lb	2¾	@	3
Lima Beans	4	@	5
Parsnips	12½	@	15
Sheil Beans	—	@	4
Peppers, green ₱ lb	6	@	7
Okra ₱ lb	—	@	8
Okra, Green	6	@	8
Cucumbers, box	50	@	—
Tomatoes, box	62½	@	75
Egg Plant, box	1 50	@	—
Rhubarb	—	@	—
Lettuce	10	@	—

LUMBER.

WEDNESDAY M., Oct. 14, 1874.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16	00	
Rough refuse, ₱ M	12	00	
Rough clear, ₱ M	32	50	
Rough clear refuse, M	22	50	
Rustic, ₱ M	30	00	
Rustic, refuse, ₱ M	24	00	
Surfaced, ₱ M	26	00	
Surfaced refuse, ₱ M	18	00	
Flooring, ₱ M	30	00	
Flooring, refuse, ₱ M	20	00	
Beaded flooring, ₱ M	32	50	
Beaded floor, refuse, M	22	50	
Half-inch Siding, M	22	50	
Half-inch siding, ref, M	16	00	
Half-inch, Surfaced, M	25	00	
Half-inch Surf, ref, M	18	00	
Half-inch Battens, M	22	50	
Pickets, rough, ₱ M	13	00	
Pickets, rough, p'ntd	16	00	
Plokets, fancy, p'ntd	25	00	
Shingles, ₱ M	2	25	

PUGET SOUND PINE —Retail Price.

Rough, ₱ M	20	00	
Fencing and Stepping, M	37	50	
Fencing, 2d quality, ₱ M	30	00	
Fencing, ₱ lineal foot			1c
Flooring and Step, ₱ M	30	00	
Flooring, narrow, ₱ M	32	50	
Flooring, 2d quality, M	25	00	
Latbs, ₱ M	3	25	
Furring, ₱ lineal ft			¾

REDWOOD—Retail.

Rough, ₱ M	20	00	
Rough refuse, ₱ M	16	00	
Rough Pickets, ₱ M	18	00	
Rough Pickets, p'd, M	20	00	
Fancy Pickets, ₱ M	30	00	
Siding, ₱ M	25	00	
Tongued and Grooved, surfaced, ₱ M	32	50	
Do do refuse, ₱ M	22	50	
Half-inch surfaced, M	40	00	
Rustic, ₱ M	35	00	
Battens, ₱ lineal foot			¾
Shingles ₱ M	2	50	

GENERAL MERCHANDISE.

WEDNESDAY M., Oct. 14, 1874.

There have been few changes during the week. Coffee will doubtless he shakenby the result of to-day's sale. Sugar is dull. Tea is dull, and will be rendered still more so hy the next great sale. Rice is dull; so are Candies, at least Eastern. Iron manufactured has dropped ½c ₱ lb, as also Pig Iron, which is now selling to arrive at $39@40, a reduction. English Chemicals are ½ to ½c less than the previous week. Cask Claret has declined and is now as low as $46. Absintbe has advanced to $15.25@16, and Medium Cal. Bacon, ½c. Table Fruits sustain the advance of 25c noted last week, Hardware is dull; Nails have declined to $4.25 jobbing; Domestics are unsatisfactory; Foreign Dry Goods have been very satisfactory; Boots and Shoes sell well; Clothing is dull; Drugs are dull.

BAGS.

Eng. Stand Wht	—12¼	@	12½
Detrick's Machine			
Sewed, 22x36 E	—	—@	13
do 22x36, do E W	—	—@	13¼
do 20x40, do A	—	—@	13½
Flour Sacks ½s	9½	—@	11½
" " ¼s	6	—@	7
Stand. Gunnies,			
double seam	15	@	15½
single seam	13¾	@	14
" Wool Sacks	60	@	67½
Barley Bags 24x36	—	@	14
do 23x40	—	@	14½
do 24x40	—	@	15
do 28x36	—	@	16
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in.gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15

CANNED GOODS.

Asst'd Pie Fruits			
in 2½ ₱ cans	2 75	@	—
do Table do	3 50	@	4 00
Jams & Jellies	3 75	@	4 00
Pickles ½ gl	—	@	3 50
Sardines, qr box	1 85	@	—
do hf boxes	3 25	@	—

COAL—Jobbing.

Anstralian, ₱ ton	10 25	@	10 50
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11—
Cumberl'd, cks	—	@	18 00
do bulk	16 00	@	17 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	17 00
Liverpool	10 50	@	11—
West Hartley	11 00	@	—
Scotcb	9 50	@	10 00
Soranton	—	@	13 00
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60

COFFEE.

Sandwich Island	—	@	22
Central Americ'n	19	@	20
Costa Rica per ₱	19	@	22½
Gnatemala	19	@	20½
Java	—	@	27
Manilla	19	@	20
Ground in cs	—	@	27
Chicory	9	@	10

DYE STUFFS.

Pac. Dry Ood. new	5	@	—
cases	—	@	—
do boneless	11	@	12
Eastern Ood	—	@	—
Salmon in bbls	9 00	@9	25
do ½ bbls	4 50	@4	75
do 2½ cans	—	@3	00
do 2 ₱ cans	2 65	@2	75
do 1 ₱ cans	1 75	@	—
Do Col. R. ½ b	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@8	50
" Extra	—	@9	00
" in kits	2 00	@2	50
" Ex mess	3 00	@3	50
" Ex mess. ½ bs	—	@12	00
Sm'k Herr'g, bx	50	@	60

NAILS.

Assorted size, ₱ lb	4 37½	@7	50

OILS.

Pacific Glue Co.			
Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No. 1	—	@1	75
do do No. 2	—	@1	60
Cocoanut	60	@	65
Olive Plagniol	5 00	@	—
do Possel	4 75	@	—
Palm ₱ lb	9	@	—
Linseed, raw	—	@1	05
do boiled	—	@1	10
China nut in cs	82½	@	88
Sperm, crude	—	@1	40
do bleached	—	@2	20
Coast Whales	60	@	—
Polar, refined	50	@	55
Lard	1 15	@1	30
Coal, refined Pet	37½	@	—
Oleophine	20	@	23
Devoe's Bril't	25	@	28
Long Island	20	@	23
Eureka	—	@	—
Devoe's Petro'm	20	@	23
Barrel kerosene	20	@	23
Olive	4 00	@9	50
Downer Kerose'e	—	@	37½
Gae Light Oil	—	@	26

PAINTS.

Atlan. W. Lead.	6	@	10¾
Whiting	—	@	2
Putty	4	@	5
Chalk	—	@	2½
Paris White	2¾	@	—
Ochre	2	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@2	10

RICE.

Chins No. 1, ₱ lb	6½	@	6¾
do 2, do.	5½	@	5¾
Japan	—	@	6½
Siam Cleaned	5½	@	—
Patna	5½	@	5¾
Hawaiian	7¾	@	8
Carolina	10	@	10½

SALT.

Cal. Bay, per ton	10 00	@14	00
do Common	5 00	@ 7	00
Carmen Island	11 00	@13	00
Liverpool fine	—	—@22	00
do coarse	16 00	@—	—

SOAP.

Castile ₱ lb	10	@	11
Local brands	5	@	8

SPICES.

Cloves	45	@	50
Cassia	26	@	27
Citron	—	@	30
Nutmeg	1 20	@1	25
Whole Pepper	18	@	19
Pimento	—	@	15½
Gr'nd Allsp'rd	—	@1	12½
do Cassia do	—	@1	50
do Cloves do	—	@1	50
do Mustard do	—	@1	20
do Ginger do	—	@1	00
do Pepper do	—	@1	00
do Mace do	—	@2	00

SUGAR, ETC.

Cal. Cube per ₱ lb	11½	@	—
Part'l Pro. Cube			
bbl or 100 ₱ bxs	—	@	11¾
do in 50 ₱ bxs	—	@	12
do in 25 ₱ bxs	—	@	12¼
Circle A crusbed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	—
Golden C	—	@	10½
do Rey'g grade	—	@	6½
Cal. Syrup in bls	—	@	70
do in ½ bls	—	@	67½
do in kegs	—	@	75
Hawaiian Molasses	25	@	27½

TEA.

Oolong, Canton, ₱ lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@1	00
Gunpo'der, Oant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@1	25
Yng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 ₱ bxs	45	@	90
do pl'n bx, 4½ ₱ lb	35	@	65
do ½ & 1 ₱ paper	30	@	55

TOBACCO—Jobbing.

Bright Navys	50	@	55
Dark do	50	@	55
Dwa.f Twist	65	@	70
12 inch do	60	@	70
Light Pressed	65	@	75
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Ohio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine ct cbe'g, gr	8 50	@9	25
Fine cut chewing, buc'ts, ₱ lb	75	@	90
Banner fine cut	9 00	@9	25
Eureka Cala	—	@9	00

TURPENTINE.

Eastern	65	@	70

LEATHER.

WEDNESDAY M., Oct. 14, 1874.

Leather is now held quite firmly. The fall trade is fully as fair as was anticipated. French has an upward tendency and Domestic stock is quite firm.

City Tanned Leather, ₱ lb	26@29
Santa Cruz Leather, ₱ lb	26@29
Country Lesther, ₱ lb	24@28
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, seoond oboice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	60 00@ 64 00
Cornellian Females, 14 to 16 Kil	66 00@ 74 00
Beaumcrville, 15 Kil	60 00@ —
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon. 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 35
California Kip, ₱ doz	40 00@ 60 00
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Baoks, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all oolors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@ 5 25
Good French Calf Boot Legs, ₱ pair	4 00@ 4 75
French Calf Boot Legs, ₱ pair	4 00@ —
Harness Leather, ₱ lb	30@ 37½
Fair Bridle Leather, ₱ doz	48 00@ 72 00
Skirting Leather, ₱ lb	33@ 37½
Welt Leather, ₱ doz	30 00@ 50 00
Buff Leather, ₱ foot	17@ 23
Wax Side Leather, ₱ foot	17@ 23
Eastern Wax Leather	—@— —

RETAIL GROCERIES, ETC.

WEDNESDAY M., Oct. 14, 1874.

Still further reductions on Flour, Sugar, Coffee, Candles and Kerosene. Syrup has advanced rapidly.

Butter, Cal. ch'ice	50	@	65
do common	40	@	55
Cheese, Cal., ₱ lb	12½	@	17½
Lard, Cal., ₱ lb	13½	@	15
Flour, ex. fam, bl	4 75	@5	00
Corn Meal, ₱ lb	2½	@	3½
Sugar, wn. crab'd	11½	@	12
do lt. brown, ₱ lb	7	@	9
Coffee, Sbarboro's family gr'nd, ₱ lb	32½	@	—
Coffee, green. ₱ lb	21	@	22½
Tea, fine blk, 50, 65, 75		@1	00
Tea, finst Jap, 55, 75, 90		@1	00
Candles, Admant'e	14	@	20
Soap, Cal., ₱ lb	6	@	10
Can'd Oysters, dz	1 75	@2

Stock Notices.



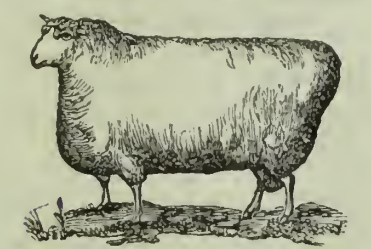
300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

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—OF—

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ALL GRADES.

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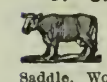
N. GILMORE,
El Dorado, El Dorado county,
11v6-eow California.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

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Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

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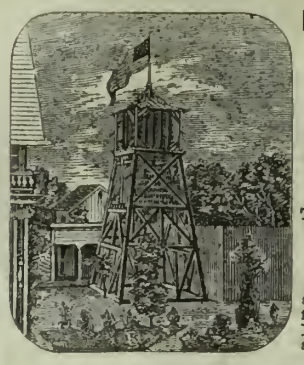
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DEXTER,

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It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the Plains of Kansas, Nebraska, Missouri, Iowa and Illinois, where no other mills have been known to stand any length of time. All we ask is a full investigation of the DEXTER.

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Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. City Office—315 California Street, San Francisco.

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Manufacturers and Importers of and General Dealers in

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GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

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Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

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COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

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POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain-fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is sure DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins, at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz.:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.
J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,
J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, O. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, ETC.

For Sale, wholesale or retail, by

B. F. WELLINGTON,
(Successor to E. E. Moore).
425 Washington St., San Francisco. 22v7-1y

Hooper's South End Grain Warehouse,

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rate. Storage taken at lowest current rates. 4v8-tf

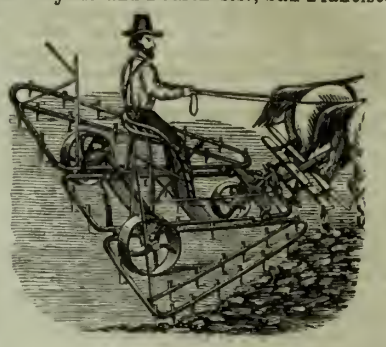
Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

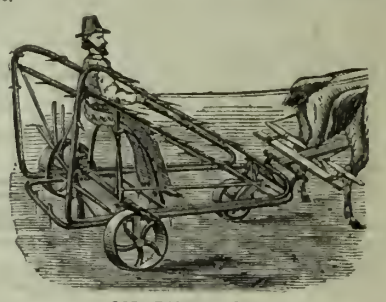
FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,
v7-2m-3m Cor. J and 10th Sts., Sacramento.

THE CELEBRATED MITCHELL WAGON



15v7-3m

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

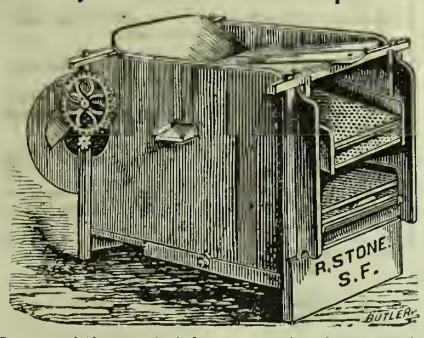
The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

THE PATENT
Novelty Mill and Grain Separator



Is one of the greatest improvements of the age for cleaning and separating grain, while it combines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

For further information, apply to

R. STONE,
10v8-eow-3m 422 Battery street, S. F.

C. OREGO. S. O. BOWLEY.

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

OALIFORNIA STREET.....SAN FRANCISOO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Ooffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

O. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,
No. 9 Merchants' Exchange, California street,
24v5-3m San Francisco.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

Took the Premium over all at the great Plowing Match in Stockton, in 1870.

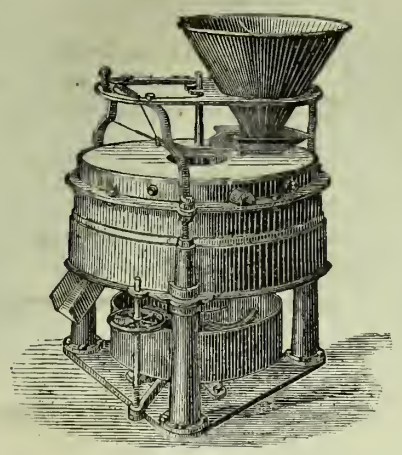
This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

J. WAGNER,

MANUFACTURER OF

FRENCH BURR MILL STONES AND PORTABLE MILLS.



General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. 13v7-3m-2am

The Pacific Mutual Life Insurance Company of California.

No. 41 Second street, - - - Sacramento.

ACCUMULATED FUND, NEARLY

$1,250,000.00.

$100,000 Approved Securities, deposited with the California State Department as security for Policy holders everywhere.

LELAND STANFORD.....President
J. H. CARROLL.....Vice-President
JOS. CRACKBON.....Secretary

All Policies issued by this Company, and the proceeds thereof, are exempt from execution by the laws of California. THE ONLY STATE IN THE UNION that provides for this exemption.

☞ Policies issued by this Company are non-forfeitable, and all profits are divided among the insured.

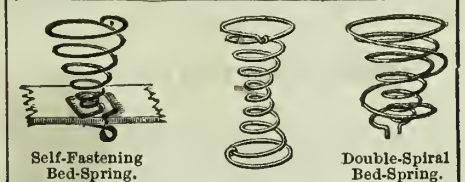
Policies may be made payable in Gold or Currency, as the applicant may elect, to pay his premium.

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SCHREIBER & HOWELL,

11-29-eow-bp-3m General Agents, Sacramento.



Self-Fastening Bed-Spring. Double-Spiral Bed-Spring.

We manufacture all sizes of BED and FURNITURE SPRINGS, from No. 7 to the smallest Pillow Spring; also, the Double Spiral Spring, which is the most durable Bed Spring in use. It is adapted to upholstered or skeleton beds. We have the sole right in this State to make the celebrated Obermann Self-Fastening Bed Spring. Any man can make his own spring bed with them. They are particularly adapted to Farmers' and Miners' use. Send for Circulars and Price List to

WARNER & SILSBY,
14v28-eow-bp-3m 147 New Montgomery St., S. F

Anglo-Californian Bank.

LIMITED.

Successors to J. Seligman & Co.

London Office.....No. 3 Angel Court.
San Francisco Office.....No. 412 California street.

Authorized Capital Stock, $6,000,000,

Subscribed, $3,000,000. Paid in, $1,500,000.
Remainder subject to call.

DIRECTORS IN LONDON—Hon. Hugh McCulloch, Renben D. Sassoon, William F. Schonfield, Isaac Seligman, Julius Sington.

MANAGERS:
F. F. LOW and IGNATZ STEINHART,
SAN FRANCISCO.

The Bank is now prepared to open accounts, receive deposits, make collections, buy and sell Exchange, and issue Letters of Credit available throughout the world, and to loan money on proper securities. 2v27-eowbp

THE ALDEN
Fruit Preserving Company
OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

Brittan, Holbrook & Co., Importers of

Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento.

ARE YOU GOING TO PAINT?

THEN USE THE BEST.

THE AVERILL CHEMICAL PAINT

WILLLAST THREE TIMES AS LONG as the best lead and oil, without CHALKING; is of any desired color. It is prepared for immediate application, requiring no Oil, Thinner or Drier, and does not spoil by standing any length of time. It is equally as good for inside as outside work; over old work as well as new; in fact, where any paint can be used the AVERILL CHEMICAL PAINT will be found superior to any other. Any one can apply it who can use a brush, which truly makes it the FARMER'S FRIEND.

IT IS JUST THE PAINT FOR THE AGE.

IT IS SOLD BY THE GALLON ONLY.

One gallon covers 20 square yards 2 coats.

For further information send for sample card and price list.

MANUFACTURED BY

The California Chemical Paint Company.

TYLER BEACH, Pres't. M. C. JEWELL, Sec'y.

Office—Corner Fourth and Townsend streets, San Francisco. 16v7-eow-bp-3m

EUREKA WAREHOUSE,

Cor. Montgomery and Chestnut Sts., S. F.

RATES OF STORAGE ON GRAIN, JULY, 1874.

First m'th 50 cts ₱ ton } If delivered on Eureka wharf.
Afterwards, 30 cts ₱ ton }

Season Rates, fixed at time of storing, $1.50 per ton. If hauled with teams, first month 25 cts per ton. Afterwards, 30 cts per ton. Second Weighing, 10 cts. Grain received on Dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to E. E. Morgan's Sons, S. F.

sep19 A. J. GOVE, Manager.

PEPPER'S NURSERIES,

PETALUMA, CAL.

Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

Address, W. H. & G. B. PEPPER,
21v6-1y Petaluma, Sonoma Co., Cal.

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER,
22v6-1y President Board of Directors.

ANNUAL MEETING.

The annual meeting of the stockholders of the Grangers' Bank of California, for the election of Directors, will be held at the office of the Bank on Tuesday, the 13th day of October next, at 1 o'clock P. M.

C. J. CRESSEY, Vice-President.
415 California street
San Francisco, Sept. 8th, 1874. sep12-4t

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.
Works, King street, bet. Second and Third. fe15-eow



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 45 Cal. Market, S.F

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,
Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.
21v2-1v



PEACHES.

An enormous stock of trees, exceedingly cheap, embracing the BLOOD-LEAVED RIVERS', and other new varieties. Our assortment of FRUIT and ORNAMENTAL TREES is unusually complete. New Trade List sent free.

HOOPES, BRO. & THOMAS.
Cherry Hill Nurseries,
10v8-6t Westchester, Pa.

A. W. THOMPSON,

Attorney at Law,

No. 6 Leidesdorff street, - - San Francisco

sep12-tf

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

14v7-3m PIERCE & CO., 627 Sacramento St., bet. Montgomery and Kearny Sts., S. F

Lands & Homes For Sale

RANCHOS
FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STRLET,
ap25-tf N. E. Cor. Montgomery.

RICH FARMING AND DAIRY LANDS

In Alameda County for sale at a bargain.

The undersigned offers for sale 800 acres of farming and grazing lands in Alameda County, lying between the Bay of San Francisco and the Central Pacific R. R., and equi-distant from Niles, Warm Springs, Decoto and Washington stations. The land is rich alluvial loam, and is the best locality in the State for vegetable gardening and dairying, as rapid and frequent communication with the city is afforded by the railroad and steamers, touching at a wharf near the property. Apply to

B. B. MINOR,
Room No. 4, No. 411½ California street, S. F., Cal.

WANTED—A RANCH ON SHARES.

If there is a rancher of means who would desire a good tenant and the privileges of a home with a small family, he can secure such by addressing W.,
Stockton, Cal.

Everything furnished by owner first year. References exchanged.

Shipping---Vessels Up.

FARMERS' LINE.

THE SPLENDID IRON SHIP,



CITY OF YORK,

1255 Tons. A 1.

AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co.

RODGERS, MEYER & CO.,
aug15-tf 212 Battery street.

IMPORTANT TO FARMERS!

X Line to Liverpool.

DIRECT.

The New A 1 Clipper Ship

.....

Is intended to sail with dispatch.

Freight taken in lots to suit shippers.

Apply to E. E. MORGAN'S SONS,

320 California Street,
San Francisco.

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

To be obtained of Messrs. CROSS & CO.,
San Francisco.

Davis & Sutton, Commission Merchants,

For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; O. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal.

3v5-1y

DEWEY & CO.

American & Foreign Patent Agents,

OFFICE, 224 SANSOME STREET, S. F.

PATENTS obtained promptly; Caveats filed expeditiously; Patent reissues taken out; Assignments made and recorded in legal form; Copies of Patents and Assignments procured; Examinations of Patents made here and at Washington; Examinations made of Assignments recorded in Washington; Examinations ordered and reported by Telegraph; Rejected cases taken up and Patents obtained; Interferences Prosecuted; Opinions rendered regarding the validity of Patents and Assignments; every legitimate branch of Patent Agency Business promptly and thoroughly conducted.

Our intimate knowledge of the various inventions of this coast, and long practice in patent business, enable us to abundantly satisfy our patrons; and our success and business are constantly increasing.

The shrewdest and most experienced Inventors are found among our most steadfast friends and patrons, who fully appreciate our advantages in bringing valuable inventions to the notice of the public through the columns of our widely circulated, first-class journals—thereby facilitating their introduction, sale and popularity.

Foreign Patents.

In addition to American Patents, we secures with the assistance of co-operative agents, claims in all foreign countries which grant Patents, including Great Britain, France, Belgium, Prussia, Austria, Victoria, Peru, Russia, Spain, British India, Saxony, British Columbia, Canada, Norway, Sweden, Mexico, Victoria, Brazil, Bavaria, Holland, Denmark, Italy, Portugal, Cuba, Roman States, Wurtemberg, New Zealand, New South Wales, Queensland, Tasmania, Brazil, New Grenada, Chile, Argentine Republic, AND EVERY COUNTRY IN THE WORLD where Patents are obtainable.

No models are required in European countries, but the drawings and specifications should be prepared with thoroughness, by able persons who are familiar with the requirements and changes of foreign patent laws—agents who are reliable and permanently established.

Our schedule prices for obtaining foreign patents, in all cases, will always be as low, and in some instances lower, than those of any other responsible agency.

We *can and do* get foreign patents for inventors in the Pacific States from two to six months (according to the location of the country sooner than any other agents.

Home Counsel.

Our long experience in obtaining patents for Inventors on this Coast has familiarized us with the character of most of the inventions already patented; hence we are frequently able to save our patrons the cost of a fruitless application by pointing them to the same thing already covered by a patent. We are always free to advise applicants of any knowledge we have of previous applications which will interfere with their obtaining a patent.

We invite the acquaintance of all parties connected with inventions and patent right business, believing that the mutual conference of legitimate business and professional men is mutual gain. Parties in doubt in regard to their rights as assignees of patents, or purchasers of patented articles, can often receive advice of importance to them from a short call at our office.

Remittances of money, made by individual inventors to the Government, sometimes miscarry, and it has repeatedly happened that applicants have not only lost their money, but their inventions also, from this cause and consequent delay. We hold ourselves responsible for all fees entrusted to our agency.

The principal portion of the patent business of this coast has been done, and is still being done, through our agency. We are familiar with, and have full records, of all former cases, and can more directly judge of the value and patentability of inventions discovered here than any other agents.

Situated so remote from the seat of government, delays are even more dangerous to the inventors of the Pacific Coast than to applicants in the Eastern States. Valuable patents may be lost by the extra time consumed in transmitting specifications from Eastern agencies back to this coast for the signature of the inventor.

Confidential.

We take great pains to preserve secrecy in all confidential matters, and applicants for patents can rest assured that their communications and business transactions will be held strictly confidential by us. Circulars free.

Engravings.

We have superior artists in our own office, and all facilities for producing fine and satisfactory illustrations of inventions and machinery, for newspaper, book, circular and other printed illustrations, and are always ready to assist patrons in bringing their valuable discoveries into practical and profitable use.

DEWEY & CO.,

United States and Foreign Patent Agents, publishers Mining and Scientific Press and the Pacific Rural Press, 224 Sansome St., S. F.

Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The Rural Press—established Jan., 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

Neither Politics or Creeds.

We refer with satisfaction to the Independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our Home Circle department, which from the first has been a popular feature of the Rural.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfluities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast; that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation, might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

Fine Engravings,

Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

Faces of Prominent Farmers

Who, as pioneers in the development of agriculture on this Coast, or as active laborers in the "Farmers' Cause," are worthy of the distinction they enjoy, and the favor with which they are looked upon by our many readers at home and abroad.

Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the Rural has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than have been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the Rural Press.

The S. F. Market Reports

Will receive greater attention in the department of Domestic Produce than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

Kind Words and Acts

Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the Pacific Rural Press. We commence the new year with a regular circulation of

Over 5,000 Copies.

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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, OCTOBER 24, 1874. [Number 17.

Cocoa Nut Palms.

The Oriental scene represented on this page shows a group of cocoa-nut trees. These trees are found all over the tropical regions; but generally growing within reach of the sea or salt water, and often taking root on sandbanks or thinly covered reefs almost directly after they appear above high water. The tree rises from 60 to 90 feet in hight and affords food, drink, oil, clothing and shelter to the natives. It has a soft fibrous stem marked on its bark by rings. In hot climates every part of the tree is made use of. The natives chew the root as a substitute for the areca; the stems are used as uprights and supports for houses, and for making many domestic implements; the leaves form a thatch or are made into umbrellas, baskets, buckets and lanterns; their ashes yield potash in abundance. The fibre from the nut is woven into cloth, ropes, mats, sacking, etc. From the juice of the stem is obtained an oil. also a coarse sugar, and by distillation a kind of an ardent spirit; while the pith, dried, ground and washed forms a farinaceous food similar to sago. The fruit itself is a wholesome food and its milk a cooling beverage and forms the chief aliment of many of the natives. The fibre of the shell is used for brushes; the shall is turned and polished into drinking cups and measures, while the substance of the nut itself when pressed, yields a large quantity of oil which is used for many purposes. The unexpended buds of the tree form, when boiled, a delicate and much esteemed food.



GROUP OF PALM TREES.

ALASKA AGRICULTURE.—A visitor to this far off region writes: There is a general impression that nothing will grow in Alaska, and that it is a region of hostile winter and savage icebergs, all of which is extravagant nonsense. On open land and among the streams, succulent grasses grow luxuriantly, and sometimes to a hight of three feet and a half. Red top and wild timothy abound on the island, and on the main land something very like Kentucky blue grass grows extensively. Considerable hay has been made this year, the haying season being nearly the same as in Oregon. Heretofore the Government has been paying $70 a ton for imported hay, in gold; but this year the natives are cutting and storing native hay for about $30 a ton in currency. Barley was raised last year and it yielded as well as elsewhere. Potatoes, turnips, onions and the like, have all been produced on the islands, and generally turn out as in other places."

BENEFITS OF GETTING MAD.—It is reported that there was a man in Murray county, Wisconsin, who got mad when he found that the grasshoppers had called for his wheat, so he got a big roller and crushed wheat and grasshoppers together into the ground. It killed the insects, and a succession of showers revived the wheat so that it was as good as new. It pays to get mad now and then.

ANOTHER AVENGER. — Edward J. Muybridge, a San Francisco photographer, shot and killed Major Harry Larkyns, a somewhat noted literary and artistic character, in Napa county, last Saturday night, for trespassing on his marital preserves. Muybridge is 47, his wife 23.

Weight of the Angora Fleece.

One of our city contemporaries, in a recent issue, published in an article headed "A shadow on the Angora goat," a statement which if correct, would scarcely leave enough of the Angora to produce a shadow. The principal authority for this statement is obtained from the *Country Gentleman*, a correspondent of which declares that Dr. Davis, of Atlanta, Georgia, who possessed some of the original Angora importation, informed him that the Angora goat does not yield fleeces by pounds, but by ounces; and that *eight ounces* would be about a fair yield.

As a refutation of this statement it is comforting to be able to produce some facts and figures furnished us by N. Gilmore, of El Dorado county. Mr. Gilmore says that a one-year old buck 63-64 grade, yielded a clip which weighed three pounds two ounces. Another buck, pure blood and three years old, was sheared last April, the fleece weighing four pounds 12 ounces. Mr. Gilmore is now expecting returns from the large worsted factory of Hall & Turner, Jamestown, N. Y., for a 600 lb bale of Angora fleece, which was delayed in its transmission.

We have been shown a letter from the above mentioned firm, under date of August 17th, which says: "Our machinery and workmen are now in capital order, and we could produce some goods that would introduce American mohair to the best firms of the country, etc."

The circular of John L. Bowes & Brother, of Liverpool, issued August 8th, 1874, quotes mohair at 40d per lb, for fair average Turkey fleece.

HOPS IN SAN JOSE.—We are informed by one of the hop growers of San Jose that the seasons' yield of this product in that vicinity will amount to about 600 bales: aggregating about 138,000 lb. Growers are in good spirits, as well as they may be, having harvested a good crop for which they are receiving remunerative prices. About two-thirds of the crop has already been sent east.

THE Southern Pacific railroad company are to build at once 20 more miles of road in the San Joaquin valley.

Nevada State Fair.

The first exhibition of the Nevada State Agricultural and Mechanical Society was held at Reno this week. It opened on Tuesday the 20th, and at first was intended to continue three days only; but the number of entries made being unexpectedly large, and other indications of success being greatly in advance of what was anticipated, the trustees determined on adding two days to the allotted time of the exhibition. The managing committee have received great credit for the energy and tact displayed. The stock was in splendid order, and would have done credit to a much older state. The exhibition of fruit, grain and vegetables, was also unexpectedly fine, and will probably cause people to be a little chary hereafter in speaking of Nevada as the "Sage Brush State." It is evident that the attention which has been attracted to Nevada—like that which has been drawn to the mining districts of our State—has been so concentrated on the mineral wealth of the country that people have been neglectful of the agricultural resources of the State in both cases, and are even now scarcely conscious of what is being done, agriculturally, in their own neighborhood. Even the pioneers of Nevada were surprised at the exhibit at their recent State fair.

FRATERNAL.—Mrs. Belle Lynch, proprietress and editress of the *Independent Dispatch*, Ukiah, Mendocino county, favored us with a pleasant call this week. After a chat in the editorial room Mrs. Lynch reviewed the mechanical department of the PRESS, manifesting a high degree of interest in the machinery and appliances connected therewith. This lady is a practical printer and fully capable of appreciating such a mechanical display as our establishment exhibits. Our folding machine was of course the principal point of attraction as it is to all visitors. Mrs. L. comes to San Francisco on this occasion to purchase printing material for the approaching winter. Being located where freight has to be hauled thirty miles by team over what is claimed to be as bad a road as California can boast, it behooves the people living there to lay in their winter stores before the rainy season commences.

Care for the Home.

This is the season of all others when ready money is most plentiful with farmers, and as the year has been a prosperous one, various improvements of property long held in contemplation will be made. We hope that in the general bettering of things the home will come in for a large share. There is always a tendency among farmers, and especially in a new country like California, to become over practical. As a result we see throughout the State a general lack of appreciation of the beautiful and picturesque in our farm houses. Bare, bald buildings, destitute of ornament, and giving no sign that the inhabitants care for anything save shelter, are found every where and in the majority. Of late years there has happily been improvement in this respect, but ugly houses are yet in the ascendant. Nothing is cheaper than beauty. A little labor is all that is needed to make the most common-place house an object which will give pleasure to the eye. A few trees and a vine or two readily transform the shanty into a cozy-looking home.

To a cultivated taste nothing can be more disagreeable than the barren yards, staring walls and ruinous dusty *ensemble* so frequently seen as to be the rule. Sharp real estate men in the cities, having new houses to sell, set out a little garden and start a few vines. They know by experience that they thus materially increase the chances of a sale. Even those people who would never take the trouble to do the work themselves, instantly, and frequently unconsciously, appreciate the result, and will pay for it.

But not the outside alone stands in want of beauty. The difference in cost between a cozy, tastefully furnished room, and a slatternly, rawhide and bare boarded one is not a great deal, but the difference in comfort is as wide as the space between vulgarity and refinement.

A proneness to undervalue all that cannot be eaten or worn is too common among farmers, who forget that it is precisely those things which cannot be eaten or worn, or indirectly conduce to those useful purposes, which make us a civilized people. A few dollars expended on engravings and good chromos will give a soul to a room. Little things impart that intangible essence which we call "home." It is more want of thought than anything else which prevents farmers from paying due attention to home matters of this sort. If they paused to consider the grave effect that all those apparent trifles have upon their growing families they would no longer appear small.

FINE SAMPLES OF RAISINS.—We have received from the Vacaville Alden Factory samples of its raisins. The subject of raisin curing is at present one of the most prominent points of the great fruit question; and the samples alluded to were accordingly examined with a good deal of interest, and were pronounced by all who saw them the finest raisins they had yet seen. The fruit clings firmly to the stem. The skin is pliable, though sufficiently tough to prevent breaking and gives no indication of the softening quality which has been observed in raisins generally that have been cured by artificial processes. Their appearance is attractive, and is also a guarantee of their keeping quality. They are of the White Muscat and other varieties.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Alfalfa Parasite.

EDITORS PRESS:—Enclosed I send you a specimen of alfalfa parasite which I discovered this morning in my little field here. My attention was first attracted by the peculiar yellow appearance of about a yard square of ground, which, on examination, I found to be thickly matted with this fine golden colored fiber, and which had encircled the alfalfa with a most tenacious grip, completely stopping the growth of the latter. The parasite, as you will see, produces flowers and seeds upon the stalk of the clover, extending its tendrils in all directions, exterminating everything else. Query; What is it? Will it, to any great extent, injure alfalfa? Can it be destroyed? A. KAMP.

San José, Oct. 17th, 1874.

[The sample of the alfalfa parasite alluded to above was duly received, and is evidently the same as those sent to us on former occasions from various parts of the State; though this, being taken later in the season, is in a more advanced stage of growth, showing small, white blossoms, which are quite numerous on the wire-like stalks. These blossoms are filled with seed, and it is undoubtedly upon this seed that the parasite is dependant for reproduction. According to present indications the seed of this parasite will only mature late in the season; and we may reasonably hope that the cutting of the different crops of alfalfa during summer will prevent the reproduction of the parasite.

In regard to the name of this parasite, there is, apparently, no doubt that it is the "dodder;" though a party who has just examined the sample alluded to declares that it is of a different species from that found in the Eastern States, and which is particularly prevalent in the growing flax crops there.

N. B.—Be careful in cutting alfalfa for seed, to give a wide berth to those fields where this parasite has been seen.—EDITORS PRESS.]

Butter Cows.

EDITORS PRESS:—Not many days ago, a prominent Granger inquired: "What are the pecular merits of the Alderney or Jersey cattle?" As the reply seemed to convey to him some new points, I infer that there may be others who would appreciate a few words on the same subject.

Cattle coming from either of the Channel Islands, Guernsey, Alderney or Jersey, are now usually classed in this country as Jersey. Their most peculiar merit is butter making, and in this respect they greatly excel any other cattle so far as at present known or demonstrated. The cream in Jersey milk will rise in less than one-half the time required for other milk, and will rise more completely. Jersey milk or cream can be churned into butter in less than one-quarter the time required for the milk of other breeds of cattle, and will usually make butter of a better quality. The reason for this difference has been rendered obvious by microscopic observations.

Under the microscope the oil globules of which the cream is composed in Jersey milk are found to be of more uniformly large size than in any other milk examined. In Ayrshire milk there are a few oil globules as large as in Jersey milk, but there are also many minute globules which, for the sake of distinction, have been termed granules. Each of these globules is covered with a thin pellicle, which seems to be thinner and more easily ruptured in the large globules than in the smaller. The oil globules are lighter than the milk and hence rise to the surface. The pellicle covering the globule is thought to be heavier than the milk, and the smaller the globule of course the greater proportionate weight of pellicle. Hence the minute globules or granules, may be perfectly suspended in the milk, or rise but very slowly to the surface. Therefore we find that skimmed Jersey milk has a very blue, watery appearance, because the cream has so completely risen to the surface; while skimmed Ayrshire milk retains more of its opacity and whitish color because the minute granules have not risen to the surface.

The cream of Jersey milk being composed of globules comparatively uniform in size, is quickly and perfectly churned as they are easily broken and with comparitive uniformity. With Ayrshire cream the larger globules may be soon churned into butter, but it requires long continued churning to burst all the minute granules. In the mean time the butter which first came is liable to be over-churned and converted into a homogenous oily mass; the nice graining texture of the butter being destroyed it becomes more or less salvy as it is termed.

It has been found by careful experiment that if a given quantity of Jersey milk is mixed with the same quantity of Ayrshire milk less butter will be obtained than if the two qualities are churned seprately, and the reason is obvious. Ayrshire milk has been named as offering a fair contrast with Jersey milk in the character of cream globules. The milk of several other breeds, but not all, has been similarly examined and tested, and found to correspond more in character of globule with the Ayrshire than with the Jersey. There is no reason to suppose, judging from known facts that the milk of any other breed of cattle with which we in this country are familiar, equals that of the Jersey in the desirable qualities of butter making that have been here stated, and the statements may be easily verified. It seems to be apparent that as a butter cow purely, the Jersey has no equal. Her qualities in this respect commend her very strongly to the dairyman whose chief object is butter making. If his object is to sell milk or make cheese the case is quite different. Even if it is important to him to sell his aged cows to the butcher for a good price, he may question the propriety of adopting the Jerseys. If a portion of a herd is Jersey it is plain that their milk should be kept separate and churned separtely if butter is made. Pure Jersey butter commands a higher price than any other in the Eastern markets.

As family cows where only two or three are kept, it seems to me that the Jersey is unequaled. They are gentle, docile, easily made pets of, readily adapt themselves to circumstances, gentle to lead or be picketed, and give the best quality of milk for children, for cream or butter for the table, and are easily kept. They will thrive on feed that would scarcely keep larger and cosrser breeds.

L. D. MORSE, M. D.

Oakland, Cal., October 19th, 1874.

Sheep for California.

I enclose some hints on the improvement of sheep in California. I know it has become fashionable to laud the far-famed English Cotswold, Leicester, Southdown and other breeds; and all of these are fine grades of sheep, well suited to the high cultivation and rich pastures of England; but, in my opinion, they are not so well suited to the requirements of this country, as the smaller, much hardier, and not less symmetrical Cheviot. They take their name from a district of high table-land in the north of England, where they are justly prized for their superior qualities. They are a nice, tidy, prolific sheep, very hardy constitutions, and accustomed to range a considerable distance over their native pastures. This breed, and the improved Irish long-wooled sheep, are hardier and more adapted to this country than the more pampered breeds named above.

Another hint to my brother farmers, and I have done. It seems there is a great loss in selling, and paying freight on unwashed wool. The dirt usually contained in a foul fleece is of more weight than the clean staple, and of course you do not get near the price you would if you had a clean, bright sample. Why not establish washing stations as in Australia, where any number of sheep can be thoroughly washed at moderate cost, and the wool by this simple operation be fit to compete with any wool in the world. The freight saved each year since this custom was established in Australia amounts to a very large sum. RUFUS.

Oakland, Oct. 17th.

Santa Clara Items.

EDITORS PRESS:—I like the RURAL PRESS very much, I am not a writer, but will furnish you with an item or two from this outside world.

It was thought when I came here that wheat could not be grown to perfection in this valley. On that account I have been growing corn, rye and barley; and cutting my wheat for hay, which yields five ton per acre. But last winter I thought I would try some wheat on what we call "tumble weed," and salt grass land; and to my surprise when I threshed it, I found the velvet-bean sowed turned out 60 bushels per acre, and Chilli seed 50 bushels per acre, right along side of it, and on the same quality of land, I had only 36 bushels of rye per acre. So you see I shall leave off sowing rye next year.

L. ROBINSON.

Santa Clara, October 6th, 1874.

CHINESE CIVILIZATION.—We notice this week another indication of Chinese advance in civilization. A Chinese washman in St. Helena, Napa county, has advertised his wash house in the newspaper there, the St. Helena *Star*. He says washing and ironing neatly and nicely done, and puts "NO MISTAKES" in small caps. Not only has he advertised, contrary to the custom of his kind, but he has also prevailed on the editor to give him a "puff" in the local columns, in connection with his advertisement. The puff is as follows:

Mow Hing—"*Charley.*"—This enterprising Chinese wash-house-man has advertised, "melican fashion," to-day. He says, "me savey printer ink belly good. You tell em I makee no mistakes. I wash em well."

This circumstances go to show that the Mongolians in this State are fast advancing, and learning some of the "tricks that are dark" of the American citizens. Chinese advertisers are new things under the sun.

POULTRY YARD.

Classification and Nomenclature of the Varieties.

CLASSIFICATION.—As it is not possible to class fowls by following the probabilities of their origin, we have made a classification formed upon the size, or the usefulness, or the peculiarity of the plumage of each variety.

We have divided the known varieties into four great categories:—1. The great European varieties. 2. The great exotic varieties. 3. The new varieties called fancy. 4. The dwarf varieties.

We have only mentioned the well-known varieties, putting on one side those which are lost, and those which are doubtful.

EUROPEAN VARIETIES.—Houdan, Creve-Cœur, La Fleche, France; Dorking, England; Spanish, Spain; Breda, (fowl with a Rook's beak,) Holland; Bruge, Belgium.

The French sub-varieties are:—The Caux, Cammont, Mans, Barbezienx, Bresse, Resme, Angers, Arganta. These are only varistions of the principal French varieties. Some, as the Barbezienx and the Bresse, are lost.

EXOTIC VARIETIES.—Cochin China or Shanghsi, of which there are sub-varieties, Buff, Lemon, Partridge, Black, White, Cuckoo and Silky.

It is known that silky plumage is generally produced by the same causes as albinism, and is to be met with in all varieties after a certain time of moulting and certain conditions.

BRAHMA POOTRA.—*Sub-varieties.*—White and Partridge.

MALAY.—Of many shades.

NEW AND FANCY VARIETIES.—*Padua or Polish.—Sub-Varieties.*—Silver-spangled, Gold-spangled, White, Black, with black crests, Cuckoo, Chamois, whole, colored or speckled. These are six varieties recognized by closely-judging amateurs. All other variations are obtained by means of these, and are of less interest.

THE DUTCH.—*Sub-varieties.*—Blue (spangled) with a crest; Black with a white crest; Blue with white crest. The English kinds are Golden and Silver.

HAMBURG.—*Sub-varieties.*—Gold-spangled Silver-spangled Black(hen Pheasant-plumaged), Golden-penciled and Silver-penciled.

JERUSALEM (RUMPLESS).—Short-legged without tails.

THREE CUCKOO VARIETIES.—These, though forming seprate varieties, do not positively belong to known varieties, but are of too much interest to be quite omitted. Shaded French Cuckoo, Shaded Rennes Cuckoo, shaded Dutch Cuckoo.

DWARF VARIETIES.—*Bantams.—Varieties.*—Gold Sebright, Silver Sebright, Black, White, Game, Black-breasted and Brown-breasted.

Java.—Dwarf Feather-legged English, Negro and Silky crest. M. Jacques does not mention the Scotch Dumpies and the Sultans.—*Rural New Yorker.*

How to Ship Poultry.

Secure plump, well-fatted birds. Bleed them in the throat. Scald enough to make the feathers come off easy; pick both feathers and pin-feathers all off nicely, taking great care not to bruise or break the skin in any way. If one or two of the lot should accidentally get bruised, or have the skin broken, sell or use at home, as they would hurt the sale of the whole lot. Leave all the entrails in, and heads and feets on.

After they are dressed hang them in a cool place, where they will dry off and get stiff before packing. Pack in boxes or barrels in nice, clean rye straw; if this cannot be obtained, dry oat straw may be used Be sure and pack solid, so that they will not bruise in transit. Pack with breast down. Poultry prepared in this way always find a ready market, while poor, half-dressed, sweaty (caused by packing while warm) and bruised lots will not sell well at any time.

Many farmers make a practice of feeding their half-starved fowls all they will eat just before killing, and then send them to market with full crops, in order to get the price of poultry for corn. In this they make a mistake; the crop being swollen to an unusual size turns black after being packed awhile, and not only shows clearly the dishonest intentions of the packer, but injures the sale of the fowls a great deal more than is gained in weight. Feed meat only for at least two days before killing.

Remember it is the appearance of goods that sells them. Nice, large, fat, plump, white turkeys, ducks, chickens or geese always bring outside prices.

When is the best time to ship? This question is often asked. We answer: Any time after cool weather. But if sent for the holidays, send them at least three days before Christmas or New Year's. Keep the largest turkeys for New Year's.—*Cor. Poultry Record.*

CHICKEN CHOLERA.—To cure the chicken cholera, I give corn twice a week with coal oil mixed in. I give it in feed to my young chicks once a week as a preventive of gapes. I advised a neighbor of mine, who had gapes badly among his young chickens, and it acted like a charm.—*Ex.*

Two ounces of common carbolic acid dissolved in three quarts of water, applied once a week through the aid of a watering pot, after the house has been carefully swept out will rid fowls of all pests in the way of vermin.

STOCK BREEDERS.

Management of Bulls.

Every bull should have a ring put in his nose when he is about ten months old, because it is so easy to accustom him to be led at that age, but the best way is to teach him to lead, first of all, with a halter, which is a nice job for any strong, good tempered boy who will not play with or tease him. Of course a good man would be better if he has time to do it. The ring can be put in by throwing the animal and tying his legs; many breeders have straps with buckles to put on above each foot, and a ring attached, through which a rope runs, and this prevents any chance of accident. With everything in readiness, by tying the head to a firm post, or anything else strong enough not to give way, a ring can be put in all right in five minutes. There are three edged punches for making holes between the nostrils, which can be purchased at such stores as Allen's in New York city, but a common pocket-knife with a sharp point will answer the purpose if carefully used.

When the ring has been in long enough for the soreness to have left the nose, the rope of the halter can be passed through to accustom him to the use of the ring in that way before using the bull staff, which is in such common every-day use now as not to need description. This has a stiff stick, so strong as not to give way, and and thus when the nose has become used to the feel of the ring, it acts as easily as a bit in a horse's mouth, but there is just the same difference in bulls' noses as in horses' mouths—some are tender, others just as they should be, while a few will be so very hard or tough as to make it more difficult to guide them.

It is an excellent plan to have every heifer calf well and thoroughly broken to lead with a halter; it saves a great deal of running about when, for instance, a single cow about to calve, or for other cause, is wanted at home away from the herd she has been pastured with, for a halter can be put on and she walks quietly along the same as a horse would do, and when horns become things of the past, cows and oxen will be led as commonly as horses are. Doubtless all the bovine race would have been handled as conveniently about the head from the earliest times, but for these superfluous and most abominable nuisances.—*Country Gent.*

Failure to Bear in Cows.

Can anything be done to bring into productiveness a cow which shows no inclination? She should have calved on the 24th of April last. She has shown no disposition to take the bull since she was served in June, 1873. As I dried her off preparatory to calving, she is a dead expense upon my hands; but as she is an extraordinary fine cow giving, when fresh, within a fraction of 16 pounds of butter per week, I am very unwilling to sell her to the butcher. I have volumes of the *Rural* and other agricultural papers for years back, but have examined them in vain for any help. What can be done?—R., *Baltimore Co., Md.*

It is not an unusual thing for heifers, after having one calf, to "go over" one season without showing any inclination to have another. With the return of spring they are usually willing, and things go on as usual. This is easily accounted for. A heifer two years old, somewhat exhausted with her first calf, is too much occupied with recruiting her health and condition and with milk-giving to attend to having any other calf during that season of the year when it is most natural for bovine animals to come in heat, namely, the early summer.

Our correspondents "R.'s" cow is probably of mature age, or she would not have given nearly 16 pounds of butter per week, and her case is more obscure. She is now, doubtless, very fat, and that might be a hindrance, although it is less likely to be with cows than with some other animals. Were she our own, we would turn her into an upland brush pasture with young stock—one and two-year old heifers. She will here have a variety of food and abundant exercise to get it. The heifers will be coming into heat now and then, and in this there is a sympathetic contagion, and she should be watched to detect any positive symptom of the same. Some cows make very little demonstration, while others are almost crazy.

HOG-BREEDING.—The hog is subject to remarkable changes of form and characters, according to the situations in which he is placed. When these characters assume a certain degree of permanence, a breed or variety is formed; and there is none of the domesticated animals which more easily receives the character we desire to impress upon it. This arises from its rapid powers of increase, and the constancy with which the characters of the parents are reproduced in the progeny. There is no kind of live stock that can be so easily improved by the breeder, and so quickly suited to the purposes required. And the same characters of external form indicate in the hog a disposition to arrive at an early maturity of muscle and fatness, as in the ox and sheep. The body is large in proportion to the limbs, or, in other words the limbs are short in proportion to the body; the extremities are free from coarseness, the chest is broad, and the trunk round. Possessing these characters, the hog never fails to arrive at earlier maturity, an with a smaller consumption of food, than when he possesses a different conformation.

Useful Information.

Mixing Putty.—We give below a number of valuable formulas for making putty for various purposes.

Common window putty.—Mix whiting and linseed soil to a stiff dough.

Carriage painters' putty.—Take dry white lead and mix with one part brown Japan and one part carriage rubbing varnish. A common wagon putty is made by using whiting in the place of dry white lead and adding a small quantity of white lead in oil, from the keg. This putty shonld be kept in water when not in use, to prevent drying.

Cementing putty, for wafer or gas pipes.—Take red lead and white lead, equal weight, and mix with boiled oil.

Putty for furnitnre.—Mix whiting, Indian red and lampblack in equal proportions, with carriage varnish, adding a small piece of beeswax to the putty, by heating the same and pounding it well with a mallet, until thoroughly amalgamated.

Hardwood putty.—Take fine sawdust of the same kind of wood, and mix with strong glue.

Putty for walls.—Whiting mixed with glue, or calcined plaster (gypsum) and water.

How Imitation of Gold is Made.—Pure copper, 100 parts; zinc or preferrably tin, 17 parts; magnesia, 6 parts; sal ammoniac, 3.6 parts; quicklime, 1.8 parts; tartar of commerce, 9 parts. Copper is first melted, then the magnesia, sal ammoniac, lime and tartar are added, separately and by degrees, in the form of powder; the whole is now briskly stirred for about half an hour, so as to mix thoroughly; and the zinc is added in small grains, by throwing it on the surface and stirring until it is entirely fused; the crucible is then covered and and the fusion is maintained for about 35 minutes. The surface is then skimmed and the alloy is ready for casting. It has a fine grain, is malleable and takes a splendid polish. It does not corrode readily, and for many purposes is an excellent substitute for gold. When tarnished, its brilliancy can be restored by a little acidulated water.

Marbling.—A fine white marble imitation is made by painting the work with white lead paint, finishing it with China gloss. Then when dry and hard rub the surface until smooth, with fine pumice stone and water, wash clean, dry well, and then holding a lighted candle near the surface, allow the smoke to form the various shades, tints and veins desired. A black crayon may also be used to form fine irregular lines; then, with a very soft hair varnish brush apply a light coat of white Damar varnish, being very careful not to disturb the smoked figures.

Black or variegated marble is made by streaking the snrface with colors mixed with carriage varnish and turpentine, using a feather to form the fine lines, and a sponge or crumpled paper smeared with color and then daubed on the work.

The sugar insect is never found in loaf or other refined sugars. All impurities are entirely removed in the process of refining, and nothing remains but pure saccharine matter, with sometimes a trace of salts. The sugar insect, *Acarus sacchari*, inhabits brown sugars, from 42,000 to 268,000 being found in a pound weight. If a spoonful of raw sugar be dissolved in a wine-glass of water, the insects will come to the snrface, where they may be seen with a mioroscope swimming about vigorously. Many scientific men consider the sugar insect identical with the *Acarus scabei*, or common itch insect. Brown sugar is neither so economical nor so healthful as white, and could one but once look through it with a microscope, or see the refuse from the filters in a sugar refinery, he would never eat any other than refined sugar.

To Prevent Rusting.—Boiled linseed oil will keep polished tools from rusting if it is allowed to dry on them. Common sperm oil will prevent from rusting for a short period. A coat of copal is frequently applied to polished tools exposed to the weather. Woolen materials are the best for wrappers for metals. Iron and steel goods of all descriptions are kept free from rust by the following: Dissolve ½ oz. of camphor in 1lb. of hog's lard, take off the scum and mix as much black lead as will give the mixture an iron color. Iron and steel, and machinery of all kinds, rubbed over with this mixture and left with it on for twenty-four hours, and then rubbed with a linen cloth, will keep clean for months. If machinery is for exportation it should be kept thickly coated with this during the voyage.

Fastening Leather upon Metals.—The following is said to be a good recipe for fastening leather upon metals: Digest one part of nutgalls six hours with eight parts distilled water, and strain. Glue is macerated in its own weight of water for twenty-four hours, and then dissolved. The warm infusion of galls is spread upon the leather, the glue solution upon the toughened surface of the warm metal; the moist leather is pressed upon it and then dried, when it adheres so that it cannot be removed without rearing.

A new tubular petroleum lamp has been constructed by MM. Defienne. It consists of ten small circnlar wicks in place of one large one. They are arranged in a circle, and are attached to a frame movable by a single rack.

Removing Nitric Acid Stains.—The yellow spots produced by nitric acid may be removed from brown or black woolen goods, while fresh, according to Th. Wegler, by repeatedly dipping them into a concentrated solution of permanganate of potash, and then washing with water. The yellow spots on the hands may be removed in the same way, the brown stain produced by the permangate being removed by an aqueous solution of sulphurous acid. Old stains cannot be removed by this or any other process, nor will it answer for cloth or any other color but black or brown.

Fastest Steaming and Racing.—The fastest time on record for steamboats, it is said, is that of the "Mary Powell," which recently made the 28 miles from New York to Piermont, in one hour, which is at the rate of one mile in 2 minutes 8½ seconds, with a boiler pressure of 37 pounds. The fastest time on record for horse-racing, is that of the mare "Goldsmith Maid" at Mystic Park, Boston, which was 2 minutes 14 seconds per mile, corresponding with almost 27 miles per hour.

Utilizing Carbolic Acid.—The immersion of hides for hours in a two per cent. solution of carbolic acid, and then simply drying them, has been recently substituted for the tedious and expensive process of salting them for transportation from South America and Australia, and with most satisfactory results. Bones have been similarly treated for transportation.

Experimental Cremation.—A trial has been made at Breslau, before the National Science Congress, of Dr. Reclam's new cremation apparatus. In half an hour the soft parts of the body were thoroughly consnmed, and within an hour the bones were reduced to white ashes.

Good Health.

Milk Diet in the Treatment of Disease of the Heart.—Dr. Pecholier, of Montpelier, attribntes great importance to the milk diet, not only in dropsy, like some of his predecessors, but also in other diseases, and especially those of the heart. He states that in active hypertrophy—namely, in those cases where the consequences of the development of the muscnlar fibres prevail over the embarrassment of the circulation caused by the dilatation of the cavities, the contraction of the orifices, or the insufficiency of the valves, and where, in consequence, the tension of the blood is great in the arteries, and the radial pulse is full and hard; in such cases, at their commencement, the milk diet, together with the use of digitalis, and sometimes without it, will, if continued long enough, induce at once an amendment of the symptoms, and even at last, all absorption of the superabundant muscnlar tissue, and thus effect a cure. But in order to secure success, the patients must strictly observe the injnnctions given to them; and hence the treatment is more successful in those cases where the lesion has produced great inconvenience and suffering than in those where the patients suffer little, because in the latter case they are unwilling to submit to the rules of diet. Under the influence of the milk diet, it is found that the impulses of the heart diminishes, together with the palpitations, and the congested condition of the face, the brain, and the lungs. The patient experiences an unexpected improvement, and by the adoption of this plan life may be prolonged and rendered more supportable; and even where a cure cannot be hoped for, a great pallliation of the symptoms may be induced.—*Brit. and For. Med. Chir. Rev.*

The Benefits of Exercise.—Exercise is health-producing, because it works off and out of the system its waste, dead, and effete matters; these are all converted into a liquid form, called by some "humors," which have exit from the body throngh the pores of the skin, in the shape of perspiration, which all have, and which all know is the resuls of exercise, when the body is in a state of health. Thus it is that persons who do not perspire, who have a dry skin, are always either feverish or chilly, and are never well, and never can be as long as that condition exists. So exercise, by working out of the system its waste, decayed and useless matter, keeps the human machine "free"—otherwise it would soon clog up and the wheels of life would stop forever. Exercise improves the health, since every step a man takes tends to impart motion to the bowels; the proper amount of exercise keeps them acting once in every twenty-four hours. If thoy have not motion enough, there is constipation, which brings on very fatal disease; hence exercise—especially that of walking—wards off innumerable diseases, when it is kept up to an extent equal in inducing one action daily. Exercise is healthful, because the more we exercise the faster we breathe—we take that much more air into the lungs; and it is the air which we breathe which purifies the blood, and the more air we take in, the more perfectly is that process performed. The purer the blood is, the better the health must be. Hence, the more the consumptive stays in the house, the more certain and speedy is his death.

Bee Stings.—It is said that a few drops of coal oil applied to parts stung by bees, wasps or hornets, will give instant relief.

Hay Fever And its Cause.

In a book entitled "Experimental Researches on the Causes and Nature of Catarrus Æstivus, (Hay fever or Hay asthma)," Mr. Blackley publishes some very interesting conclusions respecting this singular disease. He finds that it is peculiar to the educated classes, but is not aristocratic like the gout, being more common in proportion to the spread of mental culture and the intensity of intellectual occupation. And yet a highly organized state of the mind, is not the only element in its propagation, for race qualities seem to have a marked effect upon it. Thus in Europe it is most common in England, after which follow Germany, France, Belgium, Switzerland, Scotland, Italy, Russia, Ireland. Climate, therefore, has no influence upon its propagation, for England and Ireland, which are geographically contiguous, form the extremes of the above list. Out of 152 patients, 81 were English, 36 German, and only one Irish. As to the actual inciting cause of the disease, it has been referred to summer heat, dust, ozone, the odor of flowers, the pollen of blossoms, and especially of grasses. The author's experiments lead him to the conclusion that it is to the pollen of flowering plants (including grasses) that the disease is due. He collected pollen grains from the atmosphere, and gives curves showing the number of grains which gathered on a square centimetre of surface from May 28 to August 1, 1866, the highest number, 880, falling on June 28. By using kites he ascertained the proportionate amount of pollen at high levels in the atmosphere, with the somewhat remarkable result that at 1,500 feet above the earth the pollen was found to be more abundant than on the surface. The author found that germs and spores of other plants generally outnumbered the pollen, and he thinks that "if these should resemble the pollen in its capacity for absorbing water and discharging granular mattor under the influence of moisture, we may have a form of finely divided vegetable and animal matter thrown into the air which the best modern instruments might fail to discover the nature and origin of, but which might, nevertheless, be a powerful cause of disease." As to the places least likely to be affected by the disease, the author found hay fever least common in those localities where pollen is least likely to be plentiful, such as the centers of large cities, the seashore, and high-lying districts giving up to pasturage.

Why Children Die.—The reason why children die is because they are not taken care of. From the day of their birth they are stuffed with food, choked with physic, suffocated with hot rooms, steamed with bed clothes. So much for indoors. When permitted to breathe a breath of air once a week in summer, and once or twice during the cold months, only the nose is permitted to peer into daylight. A little later they are sent out with no clothes at all, as to the parts of the body which need most protection. Bare legs, bare arms, bare necks, girted middles, with an inverted umbrella to collect the air and chill the other parts of the body. A stout, strong man goes out on a cold day with gloves and overcoat, woollen stockings, and thick double-soled hoots. The same day a child of three years old, an infant in flesh and blood, and hone and constitution, goes out with soles as thin as paper, cotton socks, legs uncovered to the knees, neck bare; an exposure which would disable the nurse, kill the mother in a fortnight, and make the father an invalid for weeks. And why? To harden them to a mode of dress which they never expected to practice. To accustom them to exposure, which a dozen years later would be considered downwright foolery. To rear children thus for the slaughter pen, and then lay it to Heaven, is too bad.

A Rapid Cure for Tapeworm.—A. J. Schafish, of Washington, says that in treating some cases of tapeworm he employed no preliminary provisions beyond forbidding the patient to take any breakfast the day on which it is intended to remove the worm, and giving him a large dose of Rochelle salts the preceding night. At 10 o'clock in the morning he had the following at one dose: Recipe, bark of pomegranite root, ½ ounce; pumpkin seed one-half dram; ethereal extract of male fern, 1 dram; powdered ergot ½ dram; powdered gum-arabic, 2 drams; croton-oil 2 drops. The pomogranate bark and pumpkin-seed were thoroughly bruised, and, with the ergot, boiled in 8 ounces of water for fifteen minutes, then strained through a coarse cloth. The croton oil was first rubbed up with the acacia and extract of male feru, and then formed into a emulsion with the decoction. In each case the worm was expelled alive and entire within two hours. No unpleasant effects followed. In each case the worm was passed with the head firmly fastened to the side of its body at about the widest part, from which it was with difficulty removed; and the worm was twisted and doubled into various knots.—*The Druggists' Circular.*

Catarrh Remedy.—Take a wide-mouthed glass bottle loosely filled with cotton and pour on it the following mixture: Pure carbolic acid, 80 grains, aqua ammonia (sp. gr. 0.96) 90 grains, distilled water 160 grains, rectified spirits of wine, 80 grains. Inhale frequently through the nose and now and then into the mouth.

Domestic Economy.

The Reason Why.

Why does boiling fast render meat hard?

Because the excessive action of heat causes the albumen of the meat to set solid, crisp up the fleshy fibres, and prevents heat having a gradual access to the interior.

Why, when a good soup or broth is required, should the meat he put into cold water?

Because, as the heat is developed very gradnallly, there occurs an intermixture betweeu the juices of the flesh and external matter. The soluble and savory part of the meat escapes and enriches the soup.

Why are stews generally healthful and digestible?

Because, being compounds of various substances, they contain all the elements of nutrition, and as the office of the stomach is to liquify solid food before digesting it, the previous stewiug assists the stomach in this particular.

What causes the cracking noise when lard is put into a frying pan?

Lard always contains some portion of water, and it is the expansion of that water into steam, forcing its way through the fat, which causes the cracking noise. The heat at which fat or oil boils is much greater than water. When the cracking ceases the water is gone, and when the fat bubbles its heat is very high.

Why should fish or meat that is being fried be frequently turned?

Because the turning assists the evaporation of the water. When the fish or meat is allowed to lie too long steam is generated under it, and the steam is driven off, the surface catches to the hot pan and becomes burnt and broken?

Why is broiled meat so juicy and savory?

Because the action of the fire hardening its surface seals up the pores through which the juices might escape. A fork should not be used for turniug it as the tines open a way for the escape of the juices, thus wasting the best part of the meat.

Why should the water upon cabbage be changed in cooking?

Because (according to Dr. Paris) cabbage contains an essential oil which is apt to produce bad effects, and he recommends that it should be boiled in two successive waters, till it is soft and digestible.

Pop Corn---Every farmer shonld provide this cheap luxury; see that the boys have a patch, and let the young folks indulge in it freely. It is good for wormy children, good for all persons having dropsical habits, waterbrash, dyspepsia, etc. It is good pounded in a mortar, or ground and soaked in milk, or made into a cake, or mush. It is pleasant eating for most folks, especially for those having good teeth. It is quite a treat when young folks have company in the evening. It keeps well after it is parched. Make pop-corn candy; it is much healthier than colored sugar for children.

Jellies.—In making jellies of apricots, quinces, peaches, apples or plums, peel, remove the stones or cores, cut in pieces, cover with water, and boil gently till well cooked; then strain the juice gently through a jelly bag and add a half pint of sugar to a pint of juice. For berries, a pound of sugar to a pint of juice; boil till it ropes from the spoon, or from fifteen to twenty minutes. In making raspberry jelly use one-third currants and two-thirds raspberries.

Breakfast Bisouit.—Take a piece of risen bread dough, and work into it one beaton egg and a teaspoonful of butter or lard. When it is thoroughly amalgamated, flour your hands and make it into balls the size of an egg; rub a tin over with milk, and set them in a qnick oven for twenty minutes, and serve them hot for breakfast. When eaten, break them open: to cut would make them heavy.

Artificial Oysters.—Take green corn, grate it in a dish; to one pint of this add one egg well beaten, a small teacup of flour, half a cup of butter, salt and pepper, and mix them well together. A tablespoonful of the batter will make the size of an oyster. Fry them a light brown, and when done, butter them. Cream, if it cau be procured, is better than butter.

Sweet Pickles.—Twelve pounds of fruit, six pounds of sugar, and a qnart of cider-vinegar, cloves and cinnamon. Let the fruit boil in above until soft; take out, put carefully on a dish, let the syrup boil down, then put on fruit again and boil a few minutes; fill jars and seal with tissue paper dipped in white of egg.

Plum Preserve.—Plnms are equally good done in molasses as sugar. If sugar is used, take an equal quantity of fruit and sugar. Make a clear syrup and boil the plums gently forty minutes. They will require heating over once if to be kept.

Jelly Cake.—Take three eggs, one cup of sugar, two-thirds cup of milk, two cups flour, a piece of butter the size of a butternut, two even teaspoonsful of cream of tartar, and one even teaspoonful of soda. This makes an excellent jelly cake, and does not break when taken from the pan.

Pound Cake.—One cup of sugar, one-half cup of butter, one cup of flour, and three eggs beaten separately. This makes one loaf.

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

1. G. Gardner, State Agent; Executive Committee Rooms; Fruit Growers' Associations, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, and Farmers' Mutual Life Insurance Company, 415 California street, S. F.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

Official Visits.

The following work having been assigned me by the Executive Committee of the State Grange, I hope to meet as many members as possible of the following Granges in Los Angelos and San Bernardino counties, at the dates mentioned. The object of these official visits is to confer with our brotherhood about the various interests of the Order, and to labor together to perfect our work.

Los Angelos.

District Council, Los Angeles, November 3d .. 10 A. M.
Los Angeles and Florence Granges, at Los Angeles, November 3d.....7 P. M.
Compton Grange, November 4th.....3 P. M.
Enterprise Grange, November 5th.....10 A. M.
Los Nietos, November 6th.....3 P. M.
New River and Silver Granges are requested to meet with Los Nietos.
El Monte, for Alliance, also, November 7th.....3 P. M.
Azusa Grange, November 9th.....7. P M
Spadra, for Eureka also, November 10th.....7 P M.
Fairview and Westminster, at Anaheim, Nov. 11th 7 P. M.
Orange, November 12th.....10 A. M.
Fruitland, November 12th.....7 P. M.
Vineland, November 13th.....7 P. M.

San Bernardino County.

Rincon, November 16th.....7 P. M.
Riverside, November 17th.....7 P. M.
San Bernardino, November 18th.....7 P. M.

About the 20th I shall leave Los Angeles for San Diego, to visit the Grange in that county, and will organize such Granges as will be ready at that time.

Toward the close of November, I wish to visit Ventura, Santa Barbara and San Louis Obispo counties The dates of these latter visits will be given in a future number of the Rural Press.

J. W. A. Wright, Lecturer,
California State Grange.

The Failure of E. E. Morgan's Sons.

Probably many of our readers have already been as astonished as ourselves at the announcement of this failure, which occurred on Monday last. It is a deep misfortune to all Patrons, and all farmers, besides those who suffer individual losses. The extent of the latter cannot now be stated. The London and San Francisco Bank attached the firm for the sum of $165,000—rumored to be about one-half the amount credited by that institution. There is no getting any accurate estimate of losses at this time—Wednesday P.M. Rumors are numerous and wild—far beyond the truth. Until more reliable statements can be presented, the public cannot possibly pass a perfect sentence on the transactions and misfortunes of this firm. Another week we shall be able to give our readers full and reliable information of the failure, and the true connection held by the firm with the Order of the Patrons of Husbandry.

The effect on future shipments of wheat for the season cannot, so far as we can see, be injurious to any extent. Low freights must certainly rule.

The State Grange agency, at No. 6, Leidesdorff street, has continued, as before, to receive consignments of grain, and sell or ship the same to the best advantage, as the owners may direct.

One word. There is no reason why the business of the Grange shall not, in a very few days, be on a more sound and prosperous basis than ever before. The Executive Committee will be in session on Thursday and the report of their work we have no doubt will afford satisfaction to those most interested in their deliberations.

Grange Resolutions.

For want of space we shall be obliged in many instances, to give the sentiment, instead of the full text of grange resolutions. Apropos to this, Reading Grange, Shasta Co, in a series of resolutions opposes a change of text books in our public schools, but in the event of a change being unavoidable recommmend that home industry be encouraged and protected as much as possible by the adoption of home printed books.

West Grafton Grange has passed similar resolutions, that changes should be made *only* when imperative and then home manufactures should be patronized when the books are as good and as cheap as eastern books.

Likewise San Pedro Grange, San Buena Ventura, says that the books in use at present in our public schools "are good enough for all practical purposes" and opposes any change unless it can be done without increasing the expense.

The Salinas Grange is evidently in a very healthy condition. It now numbers in the neighborhood of one hundred and fifty members, and new members are being added to its fold at almost every meeting. Hereafter it will meet every week instead of every two weeks, as heretofore.

Alameda County Picnic.

It was our good fortune to be allowed the pleasure of being present at the picnic of the Alameda county Grangers, held at the grove, at San Loreuzo, on Saturday last, under the auspices of the Committee of the County Council and Eden Grange, of Haywood, of which Grange large numbers were present. All the other Granges in the county were represented. The day was beautiful; the air warm, soft and balmy; scarcely any wind, and the sun just sufficiently veiled by fleecy clouds of white as to temper its rays, and yet not sufficiently dark to cast a gloom over the spirits, as is often the case on such a day as the succeeding Sabbath presented. The grove has lost much of its beauty from the shedding of its foliage in a great measure, yet enough was left to afford all the shade the day required; and the gay, lithesome figures and lively colors of dress of the young folks so plentifully there assembled, supplied the place of many of natnre's vegetable charms there wanting at this late season of the year.

The pleasaut drive of twelve miles from Oakland, or even the swifter mode of traveling, after the snort of the iron horse, afforded one excellent opportunity to view the beauties and comforts, utility and luxury, of one of California's most fertile vales. Perhaps in no part of the State, or even in the United States, can there be found a more pleasant drive than that from Oakland to San Lorenzo. The road is almost as straight as the flight of a bee, fairly rounded up and graveled, and for a considerable part of the way kept well watered. Along the sides are planted various kinds of trees—small, yet destined at no far distant day to form a very attractive feature of the landscape. The whole distance is one continued garden and fruit orchard. Acres on acres of apples, pears, currants, tomatoes, etc., varied by an occasional corn field or wheat field more for the sake of variety, seemingly, rather than with the intention of really tilling the land for the sake of such crops.

Arriving at the ground we quietly hitched our horses at the provided place, and with baskets of picnicking material on one arm and wife and child on the other, each boldly approached the gate, prepared to give the cabalistic and usual sign of entrance to the Grange; but over the gateway, in letters of evergreen, was tastefully displayed a "Welcome" that showed to the stranger that be he Granger or "middleman," for the nonce he could take such liberties with the farmers' goods as he listed.

Entering the gateway we found roses upon thorns and figs upon thistles in verity; and even the buckeye, elderberry and ash, for the time being bore fruit as palatable as the Seckle or Bartlett. At the root of a large elderberry nestled two huge squashes, of the size of our waste basket, upon one of which the producer's name was grown in Granger text, "John Marlin's farm." Near by, upon an ash whose sere and yellow leaf betokened the approach of its winter siesta, were gracefully festooned and bunched numerous yellow ears of corn. Coming to the grand stand and dancing floor, we found the posts all tastefully decorated with evergreen, and the central pillar completely covered with vines and flowers, surmounted by a shock of green corn protruding through the roof. Evergreens and flowers in long ropes and wreathes decorated the speakers' and musicians' stands; baskets of edibles, boxes of grapes, and buckets of apples decorated every one of the numerous tables; a band of six pieces enlivened the air with their harmony; the prattle of children, the shouts of boys eagerly chasing a foot-ball, the laughter and gaiety of friends meeting from all parts of the county, made up a scene to touch the heart and stir up emotion in every beholder, were he one joined with them by the mystic tie, or only an invited guest for the occasion.

At 11:30 A. M. a procession was formed of the Patrons present in full regalia, and, with the music at the head, and following a banner inscribed "Patrons of Husbandry, victory is ours," the column marched down to the railroad station, to meet and escort up those expected from Livermore Valley. Upon the arrival of the train, it was learned that they were mostly coming down in private conveyance; and with laughter and gaiety back to the grounds the procession was ably marshaled by Bro. Munson, equaling anything known in history of similar retrograde movements. A call to order was now made, and Daniel Inman, Master of Livermore Grange, was elected Master of the day, and A. T. Dewey, of Temescal Grange, Marshal. After a prayer by Chaplain Webster, of Temescal Grange, and the singing of an openiug ode, Prof. Carr was introduced with much applause. The Professor delivered a masterly and interesting address upon "Agricultural Education," of three-fourths of an hour in length, which was attentively listened to throughout by old and young. Even boys hardly yet in their teens seemed to entirely understand and appreciate the discourse. In it he gave an interesting outline of the German agricultural schools and colleges.

Upon the conclusion of the Professor's remarks it was announced that the inner wants of the physical man would now receive the attention due after so long a ride, and so much heartily laborious hand-shaking. By a tacit understanding, the different tables scattered around the grove were filled to their utmost capacity with the good things provided for the occasion. It was the "old, old story"—chicken on your right, cold tongue on your left, sandwiches in front, boiled ham on the corner, roast beef in the center, bread and butter, cakes and pies four hands around, and fruit and wine cast off and up and down the middle. Strangers and visiting acquaintances were first provided for, and then it was "Lay on, Macduff, and shut his mouth who first cries, 'Hold, enough!'" Like the feast of the loaves and fishes—the empty baskets would scarcely hold the remains of the repast, so ample had been the generous provision of the fruits of the kitchen and the orchard.

As soon as the people began to leave the groaning tables, the music struck up a lively waltz, and several couples of youthful Grangers, oblivious to the fact that wheat was only one-forty, went pirouetting gracefully around the large floor. This was continued until the hour of three, when the sudden entrance of four stalwart stewards with long plank and benches reminded them that we were yet to hear from our worthy State Lecturer, J. W. A. Wright. From the strength and solidity of the seating material provided for the occasion it would seem as though knockdown arguments were expected from the speakers to be heard. Bro. Wright delivered an able address of half an hour or more, reciting the acts of the State Grange and Executive Committee for the past year, and touching lightly upon the University question. He was listened to with attention, and not interrupted with that untimely and useless applause which so often mars the pleasure of listening to anything really worth hearing. All the speakers were applauded at the close of their remarks, and by expressive countenances at other times.

Upon the close of Bro. Wright's address, a call was made for Sister J. C. Carr, who, while deprecating thus being forced to speak without preparation, vouchsafed a few words, and made the hit of the occasion. Her short speech referred mostly to the common practice of giving children a calf every spring, and selling it every fall, which she condemned in strong terms; she contended that farmer's children would much more contentedly endure and follow the farm routine if they were allowed a pecuniary interest therein, be it ever so small, than they now do under this ever continued give and take calf policy.

The farewell song was now joined in by the whole assemblage, and then the younger ones resumed their dancing and the older ones conversed in knots until sundown, when "home" was the word, and by the pale light of the moon we flitted past orchard and garden, and arrived at Oakland at 8 P.M.

By accident there were present one or two brothers from far distant counties; upon making themselves known as members of the Order, they were immediately introduced to old and young, and received upon all sides on the same footing as old acquaintances—the fact of their having been admitted to such membership being considered a sufficient recommendation to admit of their being cordially invited not only to share in the festivities of the occasion, but to also visit the individual homes of those who for the first time were thus brought in contact with them. This feature of the occasion most forcibly brought to the surface the eminent social qualities of the Order, and at the same time impressed upon the minds of the visiting brothers how necessary it was that care and judgment should be exercised to the end that at no time should unworthy persons have an opportunity to impose upon strangers by being admitted to fellowship with us. If every Grange uses ordinary care and discretion in the choice of its members the time will come when to be a Granger will be counted more honorable than it now is to be a Senator in Congress. May it be our fortune to attend many more such pleasurable reunions as the Alameda county picnic; and in this connection we would suggest that they be held a month or so earlier in the season. Let all look forward to and prepare for the coming pleasures of like nature next year.

Election of Officers.

Arroyo Grande Grange.—From B. J. Wood, October 17:—W. H. Nelson, M.; A. Fowler, O.; P. J. Washburn, L.; E. S. Shaw, A. S.; B. J. Wood, S.; Daniel Henry, T.; Jesse Casteel, C.; Eli Edwards, G. K.; Sabrina Henry, C.; Lizzie Nelson, P.; Sarah A. Fowler, F.; Maggie J. Farmer, L. A. S.

Suisun Grange.—Oct. 3d: J. M. Jones, M.; George B. McMullen, O.; P. Long, L.; J. Cunningham, C.; H. Pangborn, S.; J. G. Edwards, A. S.; J. B. Lemon, T.; Mrs. Canuon, S.; J. L. Miles, G. K., and Mrs. T. M. Swan, C.

The Grangers Bank of California.

We are pleased to say that the bank is not in any way materially affected by the failure of E. E. Morgan's Sons. Not one cent lost. Not a depositor has withdrawn his money from the bank by reason of the failure. There is no earthly reason why they should. The money on deposit and the subscriptions to its stock have in fact increased since the failure. We could only wish that all business concerns in our country were as carefully conducted.

Notes.

El Monte Grange has passed resolutions similar to those passed by other Granges concerning the removal of Prof. Carr, commending to action of W. M. Hamilton, and protesting against the apparent effort to change the University into a mere literary institution.

The rapidly increasing business of the Farmers' Mutual Life Insurance Association is making things lively for Bro. Blanchard and Secretary Baxter.

An enormous monopoly has been exposed by the ageney of the California State Grange, which has heretofore grasped from the farmer all but a bare living. It is one by which a person named Friedlander has controlled the whole wheat trade of the State, fixed his own prices for the grain, charged his own rates for transportation and storage, supplied bags at his own terms and figures, and loaned money to the farmers upon his own terms. By numerous agents and large capital he has held the farmers of the whole State, the railroads, docks, ships, and bag manufacturers in bondage. By the efforts of the State Grange the chains have been broken and the farmers released.—*N. Y. Tribune.*

Bro. Earl has taken a desk in the office of the State Agent, No. 6 Leidesdorff street, and is prepared to answer all questions pertaining to land, emigration, soil, climate, titles, etc.

Bro. Wm. Saunders, the raisin man, is on his way to Los Angeles in search of land suitable for the cultivation of the raisin grape. He has cuttings of the Uva Larga—sufficient to plant five acres—all rooted and growing nicely.

Potato growing Granges propose to help each other out of difficulties.

The Farmers Speaking Out.

It seems that ours is not the only University which needs to be "called to time."

The Knox County Council, at its last meeting, adopted the following resolution without a dissenting voice:

Resolved, That we request the proper officers of the Agricultnral Department of the East Tennessee University to spread before the farmers of this section any and all information they may deem proper and of most practical value to the farmers with regard to what they propose to do in the conduct of said institution.

Has the request been heeded? If so, when? The "proper officers" can not plead, in extenuation of their delinquency, want of time, for the resolution was adopted some weeks ago. Do they *intend* to heed it. We must have an unequivocal, yes or no. *We* may not be able to compel them to answer, but public opiuion *will*, sooner or later.

Orioinal Cost.—McCormick, the inventor of the McCormick reaper, swore in the courts of Chicago that his machine only cost, all told, *fifty dollars*, and yet when it reaches the market it is sold by agents at over two hundred dollars, and yet we are told that farmers have no right to interfere with business matters. No, they should pay just what traders ask and say nothing, because *farmers* should attend to their own business. They are beginning to attend to their own business, and one of their first duties is to get their agricultural implements, sowing machines, etc., at a fair price.

In our issue of the 10th we published a communication from "Visitor" in which he took grounds that agricultural implements could certainly be afforded at one-half their present sale price, and judging from the above he must have been nearly correct.

Editors Press:—We have had some very heavy rains for this season of the year. Many of our farmers still have their grain in the stacks. If the weather should continue good it would be three weeks before all could get through. Thus far the grain has turned out remarkably well; some wheat producing 30 to 40 bushels per acre. There is a great deal of hay to be baled yet. The crop of potatoes will be small, not more than two-thirds the average yield. Bloomfield and Tomales Granges are progressing finely. Bloomfield Grange, No. 81, will hold their annual meeting on the 12th inst., at 10 A. M., for the election of officers; also, a Grange harvest feast, then we hope to be able to get some subscribers for the Rural Press. A. B. Glover.

Bloomfield, Sonoma county, Oct. 10th, '74.

Stanislaus Granoe.—Brother Bangs, after giving a list of officers elected for the ensuing year for Stanislaus Grange says: "Our present and efficient Worthy Master, J. D. Spencer declined election for the third term, he having now served for two terms in succession. We are having more time in our Grange than formerly for discussion; the last discussion was on 'the best variety of wheat for the Paradise plains,' which was ably handled, and I regret my inability at this time, to give a full report, it was discussed by Messrs. Gardner, Cressey, Wood, Buckner, Finlay, Turner, Bangs and Vivian. The question for discussion at our next meeting is, 'The best means of seeding ground.' The discussion of these practical question will add, no doubt, to the interest of symbolic farming."

The True Principles of our Order.

[An address delivered before the Santa Rosa Grange, Cal., Sept. 26th, 1874, and published by vote of the Grange.

BY WM. R. DAVIS.

When the vessels of Columbus moved steadily up to the shores of the West Indies, the natives were struck with amazement at the marvelous swimming of those great birds whose wings of canvas brought loads of freight and men whose faces were white.

It is a good sight to those natives of the Indies to see a steady craft gliding over smooth water like a spirit of peace, or breasting the waves and winds of storm, keeping its course to port as true as the needle to the pole.

On the other hand, there is nothing to awaken admiration in seeing a shapeless, unorganized mass of floating timber, whether on a calm surface or a stormy sea. It is directed in its course by the winds; it is agitated or calm in its motions as the waters are agitated or calm. In the mass of timber there is no design, no plan; it is not put together, organized or controlled by a purpose; it is the sport of the wind and water—the mere driftwood of chance, its port anywhere, its destiny anything. A right-minded person who enjoys discovery or design, or enjoys doing things with a plan, a design or purpose, cannot find in himself any particular admiration for the floating driftwood which has about it no particular plan—in its course no purpose—its end no port. But the sails of the vessel means flight; its rudder means guidance; its prow means forward; its needle means a course, whose end is a particular port. Here is design—adaption of parts to the completion of the whole; and the completeness of the vessel is enough to call forth praise; but when beyond its symmetry and completenesa we see it move from its anchorage, and take its intended course whether the wind is fair or not, breast the way, divide the waters, obey the needle and reach its particular port, none but a dumb man can withhold his admiration.

As it is in nature, so it is also in human nature. No right-minded man can find in his conecioueness any admiration for the life of a man that is made up of days drifted together in a shapelesa mass on the ocean of eternity—a life that has no design, no couree, no guidance, no compass, no port but the barren beach somewhere where destiny may cast the drift ashore. We may have pity for a life like that on account of its possible fate; but there is nothing about it to admire. While on the other hand, fault-finding, shortsighted and uncharitable as we are, despondent and disheartened as we eometimes feel, there is always in the inmost consciousness in the heart of hearts a reverence for pure purposes, a veneration for the human will that will not be conquered in its holy aspirations; that will not give over the helm of its own destiny either to the bribe of bland corruption or to the hand of fate.

We intuitively and inevitably in our better moments endorse the life of a man who, in the consciousncss of his existence, haa a purpose in living—a will, a course, a compass, and beyond all a certain, peaceful port. I have said "in our better momonts"—better that all our lives were "better moments," then we should not be the little men we are; for the main difference between a great man and a small one is that ono lives almost always up to the standard of his better moments, while the other lives almost always below the same. Of course, a man may live a life of energetic will-force, deep design and intellectual power, all misdirected as to the end. If so, he will have many followers, for such lives give exercise to all the facultics except the moral, of which many men have a great lack.

From what has already been said it might be expected beforehand, from the innate tendency to admire excellence in any direction, that if a leading mind at a favorable time advocates a cause that promises sure wealth or fame on the one hand, or justice, equity, and the like on the other, he will find numerous followers. For, besides leaders, there are many who are ambitious, and many others who love equlty. If the cause be good, it will triumph sooner or later, and then live on in the hearts of good people. If bad, it may flourish for a while, but will eventually die; and if it ever finds resurrection, it will be in an accursed home among the snakes and dead mens' bones in the hearts of degraded men.

Let us see whether these things are true; whether men and causea have terminated in the way anticipated. In history we will find a denial or confirmation. History is the only witness worth bringing into court. Let history take the stand. She testifies that Cæsar led the Roman legions to victory after victory, till he pushed the outposts of her dominions to the very banks of the historic Rhine. And again she testifies that Philip II., the crafty king of Macedonia, conquered the outlying provinces of Greece, and then came down on the central city, the home of the Athenians.

Further on, Martin Luther, whose piety was little less than inspiration, led a host of men protesting for the right to think in matters of moral duty, as well as other things; hence arose the Reformation. And still later her testimony shows that one Patrick Henry spoke for freedom in the "Old Dominion;" that George Washington soon afterward led the Colonial army to the fields of the Revolution.

Now it is true that Cæsar led the Roman legions to almost certain victories; that Philip of Macedon trod on the powerful city of Olynthus, and knocked on the gates of Athena with the Macedonian spear till Athens opened her gates to the conqueror; also true, Luther was a central figure in the Reformation, and that one brave Patrick Henry and George Washington argued with tongue and sword for the Revolution. But this is not the whole truth, nor the most important part of it. However vallant the victorious Cæsar may have been; however brilliant the conquests of the crafty monarch of Macedon; however zealous the percecuted, pious Luther; however inspired the eloquence of Patrick Henry, and the patriotiem of Washington, these leadera and their fame are only bubbles on the crest of a few of the backward and forward surges of human civilization. Rome did not owe to Cæsar the acquisition of her vast dominions; she owed it to the regular Roman citizen who worshipped no goddess so much as Rome herself, and had no ambition like that for the predominance and supremacy of the sacred city of seven hills.

Philip of Macedon was not the cause of the decline of Athena: her own provinces were enemies of one another, and Greece tended as much to disintegration as Rome did to centralization. Even in Athens there was treason to Athens. It was those malcontente, traitors at heart, poisoned by the traitorous words of Æschines, that made Athens decline. There were snakes in the deserted temple of her old patriotism before Philip of Macedon came down from the north, so much so that the patriotic Demosthenes, the most powerful orator that ever spoke—a man who could fathom the human breast—found in Athens herself more treason than loyalty. Of course, the provinces, weak by themselves, and distracted through treason at Athens, their very heart, yielded to the Macedonian pike and phalanx. On the other hand, the same principle holds true in the case of Luther. It was not his zeal, or inspiration, however great these may have been, that gave vitality and soul to the Reformation. Undoubtedly Luther quickened the pulse by electrifying the nerves of Protestantism; but the true significance of the Reformation may be seen omitting Luther altogether; it was an early, almost unconscious desire of the human mind for freedom of thought, freedom of conviction, freedom from the bonds of an organization which they felt had for centuriee preached piety to the soul and doled out starvation to the intellect.

Need I say that the spirit and soul of the American Revolution were not dependent on Patrick Henry, or on even the sainted Washington? No American but lovea them both; but no American will deny that the Revolution would have come and would have succeeded if neither had ever lived. When General Gage seized Boston and the port, every sister colony answered—"The cause of Boston is the cause of us all." The air and the soil of the colonies and the hearts of the Fathers, from Massachusetts to Georgia, were full of the love of liberty. The stern rocks of New England and the immovable convictions in the hearts of the Pilgrims demanded deliverance; and the birds of the air, and the singing streams of the sunny South, and hope in the hearts of three millions of people sang the imperishable song of freedom.

Individnal men are but straws; the emotione of the human heart are the tornado. The leader in Church, or State, or battle, is but the bubble on the wave crest. It is the surging of the race, strnggling on to its own ennoblement, that rolls the tidal waves of civilization landward or seaward. The individnal leader is the organ of society—its mouthpiece in times of peace, its destroying hand in times of war. The difference between the leader and many a follower, is not in their individual or personal powere, but in the delegated power of others which the leader has vested in him. And only in proportion as there is confidence in and power delegated to the recognized leader, is he ablo to do anything for a given cause. Thus, so long as Cæsar fought for the extension of the boundaries of the Roman Empire and the supremacy of Rome, so long his legions were loyal and his name had weight at home and terror abroad. Indeed, a thanksgiving to the immortal gods was decreed by the Senate in honor of Cæssr's victories. But when he eought the crown with the insane ambition of being dictator, then there was desertion and civil war; and at last Brutus stabbed him in the aame Senate honse where thanksgiving in Cæsar'a honor had been decreed. He had but comparatively few followers when it became his battle for the crown; whereas they were an invincible host when it had been Cæsar's battle for Rome. When buried, Cæsar's cause died at his grave. The cause of Philip of Macedon experienced a fate similar to that of Cæsar. Philip, too, was ambitious; he lived his day, made his conquests, and, like Cæsar, left no grand, righteous cause to survive him. Their common motive was conqueet and ambition; their common lack was—a righteous cause, founded on a righteous principle.

On the other hand, in the case of the Reformation, when Luther, its leader was gone, his cause did not die, because there was in it, with or without Luther, a principle that is not aubject to the law of death; it is the effort of the human reason to force itself from honds or customs that are felt to be oppressive. Now, there are certain matters of consciousness in every rational being; among them there is liablo to be the consciousnees of a righteous deeire to inquire after that which is true; and while men continue to be as they are, there is no edict in Christiandom or out of it that can overawe that spirit of inquiry. The desire to know things as they are, to ascertain as far ae possible what is the truth, is a prime and fundamental emotion in the consciousness of every right-minded man; it wells up with the mysterious flow of his own being and is irrepressible. Various powers, singly and combined, have sought by human means time and again to suppress this impulse of inner consciousness, but ever it arises triumphant and flows on.

Luther living or dead, the principle that men have the inalienable right to think on questions of moral duty is alive eternally. This was the rock upon which he built; and when summoned before the court of Charles V, and aeked to unsay what he had said, and to abandon even the entertainment of such thoughts, he answered, "Here I take my stand; I can do no otherwise; so, help me, God!" There were hosts who felt the same holy and irrepressible movings in their own bosoms that Luther felt in his. And hence it was that there arose the doctrines and the disciples of the Reformation.

It is not necessary to dwell upon the principles advocated by Patrick Henry in the House of Burgesses in the Old Dominion; nor those of Washington through his life and in his farewell address. These are the common inheritsnce of us all—the political doctrine, creed and faith of all good men in the country. Who does not know that there were three millions of Americans who believed in the principles of freedom in '76? That the patriots laid down their lives hut not their principlee at Lexington and Bunker Hill, Boston and Charleston, and at Valley Forge, on the sea as well as the land, and that they beat back the last foe and drew free breath on the sacred field of Yorktown? They went together, clung together, and together buried their common dead, and then together turned on their common enemy because the inalienable right to political liberty was their common belief. Whatever our country may be now, or however corrupt it may become hereafter, the principlea of the Fathers are incapable of death. If followere are few now because we forget, while we enjoy the fruits of them, the principles of the founders, then the next generation, suffering from our neglect, will rouse itself and renew the virtues of the Republic which we have let fall into decadence. Or if Colnmbia, reveling in her prosperity, falls sick with national diseases induced by opulence, luxury and avarice, and eentinels desert her ramparts and her flags lie prone in the dnet, yet will the spirit of liberty, phœnix like, arise in its might and find a resting place on earth in Old England, or France, or the Fatherland. Then will there be liberty on earth, because the irrepressible love of it rises up in the human heart.

Thue I have endeavored to show that we might expect from the constitution of men'a minds that they would follow leaders in causes either of ambition or of principle. We have heard history testify that men have alwaye been doing so. Again, it has been endeavored to show that when the cause is selfish, founded in the baser emotions, it cannot exist long; and history attests this also. Again, we anticipated that good men would have common interests and would band together for the furtherance of them; and history records facts that confirm that view. Again, we saw rising up irreproseibly in the individual man a love of truth, justice and freedom. History says that there have always been men to foster and defend these principles. And first of all it should be observed that the safest way to look at any question is to do so dispassionately; throw the subject to a distance; consider it as if it helonged to other men and times; thus setting aside our personal interests and feelings.

First we see a certain orderly class of citizens in a certain country—America—rising up spontaneously, as if an army summoned by the bugle to battle. But it is not time of war; there is peace; and of all classes the land owners of any country are proverbially the least insurrectionary and revolutionary. History shows a plenty of agrarian insurrections, where slaves of land lords have demanded greater wages and renumeration; but she is silent on the question of a land swell of the land owners of a republic rising up for rights, lost little by little, to an oligarchy of millionaires and pretended patriots.

The organization of the Patrons of Husbandry does not resemble a feverish labor strike led by a few charlatans; nor does it look like a rank growth sprung from a hot-bed by partisan demagogues. There appear neither landlord master to revolt from, nor partisans purposes to further. All parties alike are found in agriculture, all alike lost in farming. It is no commune riot; rather a peace-army gathered together by a common sense of justice, by a common resolution to straighten certain crooks in business, and unbuckle certain burdens which are not just; by a common conviction of duty to themselves, and their country; by a common devotion to a cause of self-release, self-defence, and self-ennoblement. There are some I have no doubt who have joined their hands to this cause and have withheld that which is better. It would simply be a miracle if it were not so; selfishness and avarice may grow on American soil as they do elsewhere. Some few, I guess, between Main and Florida, the Carolinas and California, who have been induced to join rather from hearing the sound of lucre, than the call of duty. But these are but few, and by and by they will be weeded out. I have said self-release, self-defence and self-ennoblement, and have used the words advisedly. Perhaps there are some Patrons in far distant Maine or Minnesota, certainly none West of the Rocky Mountains, who hold self release, and that in a financial sense, above self-ennoblement; but, however this may be, that sort of sentiment is not the soul of this Order; neither did the Order depend on it for its birth, nor does it depend on it for its existence. To be rid of corporate rings, and to fight for that riddance is held to be good; to demand money due, and to enforce the demand is good; but these are not all the objecte aimed at.

Passionate Ireland has had many epidemics of insurrection on the labor and money question, and God knows with a good showing of justice. Emotional France has had governments of nearly every kind, including the lawless law of communism; and yet, the Green Isle of brave Robert Emmett is not free; and yet, the fair fields of France are not truly free.

And if in America, through the organization of the Patrons of Husbandry, men think that by the labor of capital and avarice against greater avarice they are to secure self-release, self-defence and self-ennoblement, those men are misguided by the tinkle of the wizard dollar. If that idea prevails ultimately, farmers will be no better off than the tenants of Ireland; little more successful than the communists of France. But I cannot believe that avarice is so prevalent in America from the north to the south, from ocean to ocean as to explain the spontaneous union of good, industrious liberty-loving men into lodges in every county in every state in the Union. To believe that would require a belief in the utter degeneracy and heart-rot of our times and our countrymen. It is not true. There is left us a sense of justice, and a will to demand it; a sense of the goodness of friendship between man and man, of an honest desire for self-improvement, and also the will to make sacrifice to attain these things.

Hence the tens of thousands of honest men are in council to-day, making a common release and defence, and seeking the inestimable good of neighborly intercourse and self improvement. This is the attractive and cohesive power. These days are not altogether degenerate after all. There are streake of day in the horizon. It is not an insurrection against law, but an association of honest men and true women under law, obedient to law, loving law. It is no unreasonable riot, but an organized reasonable coiumunity. It is not revolutionary and destructive of anything good, but conservative of all the cardinal virtues of the Fathers. It is not imperious and arrogant like communism or Cæsarism; but dignified, queenly, imperial like its grand prototypes Oddfellowship and Masonry. When asked Will it live, answer, Have they died? The cause of Communism was built on a principle as unsound as quicksand; of course the house fell. But is that sufficient to portend the fall of a house whose corner stones are faith in God, hope in justice, charity to all, fidelity in all things? If the builders build square, level and plumb on that foundation the heavens themselves will fall before such a cause, for the Almighty Himself will defend it.

Are not its precepts exalted? The plow and harrow, the axe and spade, are made to speak to the judgment and conviction about the most sacred duties of preparing the mind for the growth of the true spirit of the intellectual life.

The perishable grass, the kernel of corn are made to teach leseons of man's few days on the one hand, and his resurrection and immortal life on the other. The flowers and fruits are made to speak to the intellect and to touch the heart. And above all, there is an avowed recognition of that Divinity on whom we all lean and whom the soul of the atheist Tom Payne, when he was in his earthly dissolution, called upon saying—"O, God, if there be a God, forgive my soul if I have a soul."

It is around such principles that the honest class of agriculturists not only of America, but of England also, are gathering—I cannot think it is a lie and mockery—and then organized into lodges protected by the mantle of secrecy, and made sacred by lessons and precepte drawn from the inspired and luminous pages of the Bible. More than this, I cannot believe that in the presence of such sacred reminders and of such inspiring doctrines more than a million of our fellow men, our fellow citizene of this republic, have pledged their sacred honor merely to spit upon it. It cannot be. There is something in this Order not found in the ambitions creed of Cæsar, something better than the watchwords of the plundering armies of Philip of Macedonia as they moved on to classic Athens; something more than the shout and demoniac yell of the Commune in the smoky streets of passionate Paris; something rather like the organization of the communists, like the doctrines of the Fathers, like the resolution, the piety, the brotherly love of those who were faithful in the days that tried men's souls. And the building of the Fathers stands good. Shall not this? Is there not something here even as noble as the sentiments of Luther? Something not unlike the resolution of the Reformers who held that they had the right to think, and counsel together about their most sacred interests?

If I mistake not, there are some Luthers in this Order who, if summoned before a temporal tribunal, rather than stifle their own conviction and judgment would answer as he did, though death might be the penalty "Here I take my stand. I can do no otherwise; so help me, God."

In this noble Order are mothers whose souls have long been entrusted to the All-keeper, and whose prayers for their children are as sweet as the odors of mignonette; are they joining in an agrarian turmoil that has no judgment or reason in it, while at the same time they lead their own children with one hand and cling with the other to the precepts and promises of pious souls? It cannot be. Cæsar's ambitious cause died with ambitious Cæsar. But there is no Cæser hero—instead the prayers of pious mothers. Cæsar had ambition for conquest and the crown of dictator. Here there is no ambition taught but the holy ambition to make the mind broader, the purpose purer, the individual soul better—the ambition of a conquest over self insubordination, and for the extension of the domain of knowledge.

If Philip failed to build an enduring cause by his nefarious conquests, did the fathers also who brought patriotism instead of ambition, prayers instead of curses to freedom, their souls instead of the base passions of a crafty man? So, also shall stand another cause, built on the safe foundation of faith in God, hope in justice, charity to all, fidelity in all things. Here are the precepts to which the cauaes of Cæsar and Philip were strangers—the same precepts on which Washington and Patrick Henry and the rest took their stand. The precepts of the pious Luthor; of Odd Fellowship in the strength of its young manhood, and of venerable Masonry, whose head is silvery with age; the precepts of the Sacred Book of the Psalmists, the Prophe s and the Apostles. Whosoever says that a cause built upon such sacred foundation is the insurrection of agrarians, or the outbreak of the lawless spirit of communism, is guilty of blasphemy in the midst of sacred things.

With these precepts in the heart, and wisdom in the head, there is no power to fear, for such doctrines are reinforced by the awful energy of the Divine will. I am persuaded that the only peril is in the direction of imperfect understanding. This is the age of rational discussion. The aims of our popular education no longer end in the mysterious workings of a monastery, or the increased cunning of an aristocratic prince. This age offers the plowman all and more than mediæval learning offered to priest or prince.

Other men, with good motives, are setting their homes by the side of the fountain-heads of wisdom, and their children, like the robust laurel and the fair lily, are fair in the land. Education of hand and head and heart—this is self-ennoblement.

The aspiration of the soul of this age is for the rational and only real civilization—the civilization of soul-ennoblement. Who of those who profess to believe in it, and to be abreast with those who are going on to nobler days, will turn his back on his friends and his own best aspirations?

True greatness is inseparable from goodness. And every man's goodness depends upon the kind of counsel and faith he keeps with his own soul—the wordless dialogue. It will be a great day for humanity when humanity can sit down, look around itself and think—the eventful past, the burdened present, the possibilities of the hereafter!

Think and work—the past will yield up its treasures. Think and watch—the present will give promise. Think and pray—the hereafter is quickly come, the earth is left to your children and children's children. It would be a grand sight to see—the children behind you grown up like the strong oaks and laurels on the mountains; like the lilies and roses along the streams; when there would be in the land the robust strength of manhood, and the purity and strength of pure womanhood.

Important to Grangers.

The following preamble and resolutions were adopted by the Executive Committee of the State Grange of Louisiana, at its session held July 29th, 1874:

WHEREAS, The National Grange, having adopted the following resolution, viz: "That the National Grange recognizes the right of State Granges to have the legislative department of their body vested in representatives elected by the Masters of Granges in the various counties." Therefore be it

Resolved, That in view of the condition of the treasury, your Executive Committee, to save the State Grange the enormous expense attendant upon a full representation, as contemplated by the const tution, direct that members of the State Grange who would be entitled to vote shall meet within their respective parishes on or before the first day of November next following, and elect from among their number a representative to the State Grange, who shall at the time, be a Master, who shall be entitled to vote for each Grange in good standing within his parish.

Resolved, That at the same time and in the same manner an alternate shall be elected to represent said parish in case of the inability of the representative to attend. Provided, this shall not be so construed as to debar Masters, Past Masters and their wives who are Matrons, from attending the session of the State Grange and receiving the fifth degree.

Grange Items.

THE GRANGERS ON IMMIGRATION.—The Grange Committee on Immigration met at beadquarters Thursday, 15th. It consists of seven members. Three of those—Josiah Earl, O. L. Abbott and —— Dean were present; the others were represented by proxy. The business of the Committee is to assist Grangers of other States to homes in California by furnishing all essential information. Mr. Earl was appointed agent of the committee, and will take entire charge of the work in this locality. Mr. Abbott will act as Corresponding Secretary, and will furnish all those who desire to come to the coast, or those lately arrived, with details of soil, climate and available localities.

HE WAS A GRANGER.—Yesterday as the local train from the west arrived at the depot, and the passengers, composed principally of delegates to the State Grange, now in session here, alighted from the cars, a comical genius who drives a baggage wagon, with an eye to business, was heard to cry out, "Here's your Granger baggage wagons; no middleman on this line. I raise my own horses and make my own wagon; right this way for your Granger baggage." Whether be secured much baggage we are unable to say, but he certainly created considerable merriment and quite a sensation in his way.—*Stockton Independent.*

THE Grange mill at Waterford, Minnesota, has proved an undoubted success. Since the 28th of January last it has exchanged with the farmers 12,000 busbels of wheat, equal to 387,500 pounds of flour. It is now turning out 140 barrels of flour daily, which is shipped direct to this city, and commands a ready sale. Receiving from 1,000 to 2,000 bushels of wheat a day, at $1 04 cents a bushel, and exchanging 150 to 200 bushels, equal to 30 or 40 barrels of flour, the exchange paying the running expenses.

"DEAR GEORGE, how sweet and wavy that wheat is!" said a fair young lady, looking from a car window. "Yes, love, how beautiful!" says dear George, more intent on insinuating his arm around a twenty-four bone corset. "bow like a—a—dream!" "How like oats!" retorted a disgusted Granger, "them's oats, young man."

THE Georgia Granges have succeeded in establishing an extensive Direct Trade Union. It is expected they will ship direct from Savannah to Liverpool at least 100,000 bales of cotton by October.

THE next meeting of the State Grange will be held in San Francisco.

[Continued on Page 265.]



Promise.

O birds that flit by ocean's rim,
And make your plaint to silent sky;
O waves that lap horizons dim,
Ye shall be tranquil by and by!

O rose-tree, giving petals fair,
In some lost garden lone to lie—
Weep not because your stems are bare,
They shall re-blossom by and by!

O singer, singing in the night—
Turn not and curse the heavens and die;
Your heritage in peace and light,
You shall be richer by and by!

—*Scribner's.*

John Flint and His Clerk.

"Oh, how I wish I could stay and share your watch to-day!" said the young man as he bent over the pillow of the boy. "But I dare not be five minutes too late, or that iron-hearted miser would turn me off, and then where will the bread come from? Oh; it would be easy to serve a man with a soul, or even a fraction of a heart! Keep up your courage, Mary dear. I will be home the instant I can get away. Get Ruby everything he wants or needs. I'll pawn my coat before he shall ask for a luxury he cannot have."

"You can pray, Harry, wherever you are," said the wife, and, oh, pray that God will spare your only treasure! I cannot, cannot lose him," and she laid her head upon her husband's already overburdened heart, with a burst of anguish which only a mother's heart can know. He tried to speak words of comfort, and then, after a hasty attempt to eat the food she provided, he drew on his overcoat and was gone.

"Four minutes behind time," said a severe voice, as the eye glanced up to the hard face of the relentless looking clock on the wall. "Punctuality is my motto, Mr. Graham, and if you cannot conform to it, you had better seek employment elsewhere.

"I am very sorry, sir, but my child is extremely ill, and I have been up all night watching with him."

"Of course it easy to make excuses," said the other coldly, as he bowed his iron gray head stiffly. "But let no more time be lost; we have busy work for all day."

And there was busy work for twice the force which Mr. Flint employed. His principle was to keep all hands at work on high pressure principles. No rest, no relaxation, no encouraging words from the least to the greatest. Continual rebuke was the watchword in his establishment. The youngest was the hardest worked. He was a poor orphan, "bound out" to Mr. Flint, and fed in his kitchen from such scraps as his master allowed him. Many a time had Harry Graham slipped a couple of biscuits into his hands on the sly, and an apple or cake which kind-hearted Mary had sent him, and the boy's famished way of devouring them showed very plainly how he fared. The poor orphan's heart was bound to him by gratitude and affection, and there was no service in his power he would not render him. The weary day dragged on. To the anxious father the hours seemed days in length, and the old clock seemed for once to have forgotten its duty altogether. Noonday had passed, and the long, lingering finger of the time-keeper pointed to one o'clock. A little messenger came up the broad stone stairs and asked for Mr. Graham.

"There he is," said the errand boy; and he listened anxiously to hear the message, for had not Harry said to him that very morning 'My little Ruby is very sick, Hugh, and may not live till I get back."

It was worth a great deal to have the warm sympathy of that poor oppressed child so near him all day.

So he toiled with a bursting heart until the wretched day was done, and then sought, with dark forebodings, his lowly home. His wife met him at the door, and her tear-stained face forbade all questionings. They sat down by the little crib, and each took a clay-cold hand and held it for a long time. They could not speak; they could only weep together. At length when she was calm enough to speak the mother told him of the last sad hours, when she sat with only a neighbor by his side and watched the light go out. She was weeping by his side, and he looked up with baby sympathy into her dewy eyes, and raising one thin hand, said with great effort:

"Ruby's sorry, mamma."

Poor lamb, he could not know the cause of her sorrow. It grew dark to him at last, and he mistook the shadow of death's wings for the happy twilight which brought his father home.

"Papa, take Ruby," was his last request. By-and-by his lips moved faintly, and her listening ear caught the familiar words of his little evening prayer: "Now I lay me down to sleep," and in a little while he was asleep.

Ah, how heart-rending to the absent one was this recital, and even in that hour of sorrow a burst of indignant passion rose in his heart against the iron-hearted wretch that had kept him away from that bed-side.

"I will repay, saith the Lord, We will leave our wrongs in God's hands," said Mary.

Such is Fame.

When Daniel Webster had reached the very topmost of his fame, after his great speech in reply to Colonel Hayne, of South Carolina—the speech commonly known as his "Constitutional Speech"—he paid a visit to his old home in New Hampshire, the neighborhood of boyish years and his first manly aspirations and strugglings. A well-known citizen was his companion.

After going up the rough mountain for a long while, Webster pointed out the nearness of the old parental roof-trees.

"There," said he, "is neighbor"—Jones, we call him—"there's our old neighbor Jones. I'll stop and talk with him, and see if he knows me."

So Mr. Webster got out of the wagon and walked on ahead. Soon he met the old man Jones, and "passed the time of day," as they say in good rural New England. Webster walked lazily, loitering along the road, and, finally turning, said to the seamed, gnarled, rugged old farmer, "Wasn't there a family named Webster once living near you? I knew something of a family of that name, said to live in these parts."

"Why, yes," said Jones. "Webster? Yea, our old neighbor. He had two likely boys. Lessee, Zeke; and then there was—what's his name—O, Dan'l; Dan'l Webster."

And then Daniel, leaning over the fence, engaged in a long talk with the farmer about the Webster family.

The farmer was very enthusiastic about Ezekiel. Ezekiel Webster, it should be remembered, was a young man of rare promise—of even greater promise than his famous brother, as we believe the latter admitted in riper years. He died when but a young man. The farmer could not say too much in praise of Ezekiel—to all of which Daniel Webster listened with boundless satisfaction.

But finally the latter said, "What became of the other brother—Daniel?"

"O, I don't know," said farmer Jones.

"He went away, and I believe is a lawyer down in Boston."

A Little Advice to Farmers.—Help your wives in every way you can, trivial though it may seem to you. For instance, keep an extra pair of shoes or slippers in the hall or entry, and always remember to change your dirty boots before entering her clean rooms. Then you may be sure of a smile of welcome, as no dirt will be left after you for her to clean up. In the evening comb your hair as carefully as ever you did in your courting days, put on a clean coat or dressing-gown, and when you take your paper to read do not read to yourself and leave her to lonesome thoughts while sewing or mending, but remember that she, too, has been working hard all day, and is still working. Read to her whatever interests you, so that her interests and opinions may grow with yours, and that she may comprehend something besides love stories, of which too many have read more than they should. You will both be happier, and being a farmer's or a mechanic's wife will not be such a dreadful tiresome and lonely life as many girls have every reason to think it is.

Yankee Courtship.—One evening as I was sitting by Hetty and had worked myself up to the point of popping the question, sez I: "Hetty, if a fellow was to ask you to marry him, what would you say?" Then she laughed, and says she: "That would depend upon who asked me." Then sez I, "suppose it was Ned Willis?" Sez she: "I'd tell Ned Willis, but not you." That kinder staggered me, but I was too cute to lose the opportunity, and so sez I agen: "Suppose it was me?" And then you ought to see her pout up her lips, says she: "I don't take no supposes." Well, now, you see, there was nothing for me to do but to touch the trigger and let the gun off. So bang it went. Sez I: "Lor, Hetty, it's me. Won't you say yes?" And there was such a hallabaloo in my head I don't know zactly what tuk place, but I heard a "yes" whispered somewhere out of the skrimmage.

The Road of Life is not a turnpike road. It is a path which every one must find out for himself by the help of such directions as God has given us; and there are so many other paths crossing the true one in all quarters, and the wrong paths are so well beaten, and the true path in places is so faintly marked, so many persons, too, are always going the wrong way, that between the number of paths to puzzle him, and the number of wrong examples to lead him astray, a man, if he does not take continual heed, is in great danger of turning into a wrong path, almost without perceiving it. Were it not that God's word is a lantern to our feet and a light to our path—were it not for the Spirit of God crying to us, "This is the right way," when we turn aside to the right hand or to the left—we should all of us go wrong always.—*Augustus Hare.*

Said Lord John Russell to Hume at a social dinner, "What do do you consider the object of legislation?" "The greatest good to the greatest number." "What do you consider the greatest number?" continued his lordship. "Number one, my lord," was the commoner's reply.

Mistaust the man who finds everything good, and the man who finds everything evil, and still more the man who is indifferent to everything.—*Lavater.*

Hospitality.

The home education is incomplete unless it include the idea of hospitality and charity. Hospitality is a biblical and apostolic virtue, and not so often recommended in Holy Writ without reason. Hospitality is much neglected in America, for the very reasons touched upon above. We have received our ideas of propriety and elegance of living from old countries, where labor is cheap, where domestic service is well understood, permanent occupation adopted cheerfully for life, and where of course there is such a subdivision of labor as ensures great thoroughness in all its branches. We are ashamed or afraid to conform honestly to a state of things purely American. We have not yet accomplished what our friend the doctor calls "our weaning," and learning that dinners with circuitous courses and divers others continental and English refinements, well enough in their way, can not be accomplished in families with two or three untrained servants, without an expense of care and anxiety which makes them heart-withering to the delicate wife, and too severe a trial to occur often. America is a land of subdivided fortunes, of a general average of wealth and comfort, and there ought to be therefore, an understanding in the social basis far more simple than of the Old World.

Many families of small fortunes know this—they are quietly living so—but they have not the steadiness to share their daily average living with a friend, a traveler, or a guest, just as the Arab shares his tent, and the Indian his bowl of succotash. They can not have company, they say. Why? Because it is such a fuss to get out the best things, and then put them back again. But why get out the best things? Why not give your friend what he would like a thousand times better, a bit of your average home life, a seat at any time at your board, a seat at your fire? If he sees that there is a handle off your tea-cup, and that there is a crack across one of your plates, he he only thinks, with a sigh of relief, "Well, mine aint the only things that meet with accident," and he feels nearer to you ever after; he will let you come to his table and see the cracks in his tea-cups, and you will condole with each other on the transient nature of earthly possessions. If it becomes apparent in these entirely undressed rehearsals that your children are sometimes disorderly, and that your cook sometimes overdoes the meat, and that your second girl is sometimes awkward in waiting, or has forgotten a table propriety, your friend only feels, "Ah, well, other people have trials as well as I," and he thinks, if you come to see him he shall feel easy with you.—*Atlantic Monthly.*

A Happy Woman.—What spectacle more pleasing does the world afford than a happy woman, contented in her sphere, ready at all times to benefit her little world by her exertions, and transforming the briars and thorns of life into roses of Paradise by the magic of her touch! There are those who are thus happy because they cannot help it—no misfortunes dampen their sweet smiles, and they diffuse a cheerful glow around them as they pursue the even tenor of their way. They have the secret of contentment, whose value is above the philosopher's stone; for without seeking the baser exchange of gold, which may buy some sorts of pleasure, they convert everything they touch into joy. What their condition is makes no difference. They may be rich or poor, high or low, admired or forsaken by the fickle world; but the sparkling fountain of happiness bubbles up in their hearts and makes them radiantly beautiful. Though they live in a log cabin, they make it shine with a luster that kings and queens may covet, and they make wealth a fountain of blessing to the children of poverty.

The highest heroism—is it not that which is free from approbation of fellow men, even from the approbation of the best and wisest? The heroism which is known only to our Father who seeth the secret, the god-like deeds done in the chamber, the god-like lives lived in obscurity? A heroism rare among us men who live perforce in the glare and noise of the outer world; more common among women—women of whom the world never hears, who, if the world discovered them, would only draw the veil more closely over their faces and hearts, and entreat it to be left alone with God.

In a little town in Missouri a lady teacher was exercising a class of juveniles in mental arithmetic. She commenced the question: If you buy a cow for ten dollars——" when up came a little hand. "What is it, Johnny?" "Why you can't buy any kind of a cow for ten dollars. Father sold one for sixty dollars, the other day, and she was a regular old scrub at that."

Art-marking of Linen.—Since the process of photograping upon silk and linen has been perfected in France, many persons have their portraits upon their linen instead of their names or initials. Washing does not injure the portraits.

If you wish success in life, make perseverance your bosom friend, experience your wise counsellor, caution your elder brother and hope your guardian genius.

What are the most unsociable things in the world?—Milo-stones. You never see two of them together.

Imperceptible Presence.

The moment we cross the threshold of a dwelling, we find the housewife represented by her mode of housekeeping. While we sit in the parlor, waiting the presence of the mistress, we study the outlines of her character even in this limited portion of her dominion. Not alone in the parlor can we estimate justly her inferior, or superior, talent for home thriftness. Kitchen and pantry, closet and cupboard, alike manifest her aptness or incapacity as mistress. Above all, we quickly note the individuality of a person by an independence in the arrangement of a room. Chairs and sofas are never placed by rule, if a lady has an original mind.

If all the arrangements about her home are complete; if they exhibit order, taste and elegance; if thought has wrought out the aspirations of the heart in the pictures that suggest refinement; if the vines trailing from dainty vases tempt the imagination to perpetual summer; if gleams of sunshine falling here and there on the softly tinted carpet, intimate warmth of feeling—we drop into an easy arm chair and a restfulness creeps over us.

The plain cottage with its low ceilings and diminutive windows, may be a very ideal of poetic fancy. Indeed, the rich have all the appurtenances of wealth to make a creation with, while the humble housewife in a little cottage must create and carry out her designs unaided. Rugged exteriors must be turned down to beautiful conceptions, and then poets will sing of love in a cottage, and tired votaries of style will sigh for the love, not for the cottage.—*Rural Home.*

Growing Up.—We unite heartily with a writer in the *Hearth and Home* in urging the following upon the attention of all young men: One great difficulty with all young men is that they are impatient, and want somebody to lift them into a high position at once; for they are not aware that this, in nine cases out of ten, would prove to be a serious calamity. It is only those who climb the ladder that know the strength of every round. A rapid ascent is often followed by a similar descent, and as knowledge can only be obtained in small quantities at a time, it is better to be content with things as they are than fret at circumstances. We would call the attention of every young man to one significant fact, and that is, ninety-nine in every hundred of our successful men began at the very bottom of the ladder. No matter where you look in science, politics, literature, or agriculture, the great men of this nation have gained their present position by their own personal industry. Poverty, therefore, to a young man, is one of the chief elements of success; for in his strife to supply the immediate demands of nature, he gains strength of both body and mind, until his own power is a marvel even to himself.

Charity Defined.—It is not charity to give a penny to the street mendicant of whom nothing is known, while we haggle with a poor man out of employment for a miserable shilling. It is not charity to beat down a poor seamstress to starvation—to let her sit in her clothes sewing all day, to deduct from her pitiful remuneration if the storm delays her prompt arrival. It is not charity to take a poor relative into your family and make her the slave of all your whims, and taunt her continually with her dependent situation. It is not charity to give with a supercilious air and patronage, as if God had made you, the rich man, of different blood from the shivering recipient, whose only crime is that he is poor. It is not charity to be an extortioner—not though you bestow your alms by thousands.

Innocence Abroad.—A railroad conductor in Pennsylvania received on board a fine-looking specimen of an old country gentleman. When he passed through the cars the old gentleman handed up his ticket, which was duly punched and returned to him. After passing the next call station the conductor again called for the old gentlemen's ticket. He looked up in surprise, and informed the puncher of tickets that he had thrown it out of the window. "Why did you do that?" asked the conductor. The old man replied, "Why, I thought if you didn't want it I didn't." The face of the old man was so honest, and his knowledge of railroad traveling so limited that the conductor accepted his word and carried him to his destination.

It was mentioned one day to President Lincoln that two young ladies of his acquaintance had quarreled and loaded each other with abuse. "Have they called each other ugly?" asked the President. "No, sir." "Very good; then I will undertake to reconcile them."

"What brought you to prison, my colored friend?" said a Yankee to a negro. "Two constables, sah." "Yes, but I mean had intemperance anything to do with it? "Yes, sah, dey was bof of 'em drunk."

Circumstances alter cases. For instance, when a Virginian arose in church and said: "Here's a hundred dollar bill for the old boss behind the pulpit," no one thought of putting him out.

"Boy, is that a license dog?" asked a Detroit policeman. "No," replied the urchin; "he's a rat tarrier dog, and I'm a takin' him down to have his teeth filed."

A lady asked a veteran what rifle carried the maximum distance, and he answered, "The Minnie, mum."

The Chained Fox.

A fox that had been caught young was kept chained in a yard, and became so tame that fowls and geese approached it without fear.

"Pretty thing," said the mistress. "It does no harm. It is cruel to keep it chained."

So she unbuckled its collar and let it run about. Scarcely, however, had she turned her back than she heard a great clucking from her poultry. Looking around, she saw from her scampering off with her plump petthe fox thrown over his shoulder.

"You treacherous, ungrateful little villian cried the woman, "and I thought you were so good."

"So I was, mistress," said the fox, "so long as I was chained."

There are many little foxes that need chaining. There is the put-off-studying-your-lesson-till-the last-minute fox that runs off with your good marks at school; Master Reynard "speak-without-thinking," which is always getting its owner into trouble; and Sly-boots "nobody-will-see-you-do-it." Chain them up! Chain them up with strong yet tender chords of loving discipline. That's the only way to manage them.

DIMPLES.—Whoever is responsible for the following, should be immediately placed under restraint by his friends—if he has any—he is unsafe to be at large this warm weather: Dimples are perpetual smiles of nature—the very cunningest devices and lurking-place of love. When the earth is dimpled by dell and valleys, it always seems to laugh; when the ocean is dimpled by the light breeze, it sparkles with joy beneath the sunshine of heaven. We cannot look for frowns upon a dimpled face—frowns and dimples will not associate together. How soft, how roguish, how beautiful are the dimples in the elbows and the shoulders, the pretty hands and feet of the rosy babe. Mothers dote upon these darling dimples, and delight to kiss them. But perfectly enchanting dimples, at least to the eyes of an enthusiastic young man, are those which come peeping out of the cheeks around the mouth of "sweet seventeen," when sweet seventeen essays some arch, provokingly, peeping out and flying away the moment after, coming and going with the most bewing coquetry.

LESSON OF THE HOUR.—"There is surely no greater wisdom," says Bacon, "than well to time beginnings and onsets of things. And surely it is good to commit the beginnings of great actions to Argus with his hundred eyes, and the ends to Briareus with his hundred hands first to watch and then to speed." It would have been far better for us had our rulers adopted this truth of the great philosopher, and set Argus as sentinel on the national ramparts, to espy the evening from afar; but Argus was permitted to be off duty or to sleep; and now, when the enemy's grasp is almost upon the nation's throat, they call in alarm upon Briareus with his hundred hands to save them who should have been warned while danger was yet afar. In plain words, is not our nation strong enough, and can it not be sufficiently alert to prevent these destructive rebel raids? or, if this cannot be done, to be on hand to give the invader such a reception as will allay the fears of the more timid and strike terror to the heart of the foe? Why must we every year be thrown into his terror of suspense?

A TEACHER wishing to improve the occasion, said to the boys at the conclusion of a strawberry festival, "Have you enjoyed these berries to-day?" "Yes, sir," came from all sides, with unmistakable heartiness. "Well, children, if you had seen these berries growing in my garden, and had slipped in through the gate without my leave, and picked them from the vines, would they have tasted as good as now?" "No, sir," was the prompt reply. "Why not?" "Because," said a wide-awake boy, "then ye shouldn't have had sugar and cream with 'em."

THE most remarkable instance of misplaced confidence is that of a New England farmer who hung an old coat upon a stake with two projecting arms, capping the affair with an old hat, and all for the purpose of frightening the birds from his fruit trees. When the "scare-crow" came to be examined, however, there was one bird's nest found in the hat and another in one of the pockets of the coat.

As so many articles in every-day use are manufactured from paper, it is now asked if paper beefsteaks cannot be invented to take the place of leather ones common at boarding-houses.

A KANSAS gentleman has thoughtfully put his front gate in the parlor, so that his daughter and her young man can swing on it without taking cold.

It is a curious fact that it is the fashion at summer resorts, this season, for ladies to promenade in the open air bareheaded, and to sit at the dining table with their hats on.

AN obstinate countryman was scalped lately by an enraged chiropodist, just for insisting upon having his "corns extracted without payin'."

THE training of children is a profession, where we must know how to lose time in order to gain it.—*Rosseau.*

WHY are the Marys the most amiable of the sex?—Because they can always be Molly-fied.

Young Folks' Column.

A Visit to San Francisco.

[Written for the RURAL PRESS by MRS. M. I. H.]

EDITORS PRESS:—It would have done you good to have seen the happy faces that morning we started from Buckeye, to make your city our first visit. I say "we," for all the little ones were going to get some spice and variety into their farm life. Children seem to enjoy sight-seeing even more than ourselves; especially those who pass month after month in the quiet routine of country life.

At Davisville we got aboard the cars. This is a place that would be quite lonely but for the noise and bustle of train arrivals. With a shrill whistle and a ringing bell we bade Yolo farewell, and were soon whirling through Solano county; and before many minutes we dashed into a tunnel, dark as night. A clear trill, as if from a bird, rang out in the darkness and passed to the farthest ends of the train, high above the dull roll of wheels and puffing engine, and almost as quick as thought we were in daylight again. Many heads were turned, and inquiring looks given; but there sat *pater familias*, looking as unknowingly as possible; yet the childrens' eyes shone like stars; for, ever since they could distinguish sounds, they have known that bird-like trill.

It was quite late when we reached Vallejo landing, and very late when we entered San Francisco, tired almost to death, and oh! so glad to find a pleasant room and neat, clean beds. Next morning we took the street cars for Woodward's Gardens, and, to our delight, it was quite a distance out there, so that much could be seen in going. At the entrance of Woodward's Gardens, our eyes took in the beauty of rare trees and flowers, and our faces felt the refreshing breeze coming from many shady nooks. We enter the museum through a portal of two enormous bones, fifteen or twenty feet high. As we passed between those large bones we could realize how easily a fish could find room for Jonah in its stomach, if it had but half such a structure. The museum is full of collections from every land, preserved and stuffed animals, of which the birds seem the most natural, rocks and relics; a small part, we might say, of every noted mountain or place. On all things the children saw, they have passed judgment; and the live fish come out first best; and truly it is a beautiful sight in that under-ground room, to see so many strange things from the briny deep, living in those little homes with such perfect content.

We paid the Cliff House a visit, and viewed the ocean in all its vast expanse. On the rocks out in the waters, the seals were uttering their loud, dismal cries, and climbing higher, one above another, to the top of the rocks; while on the very tip sat a white sea bird as if keeping watch over the noisy creatures of the sea.

Out on the waters again, and bound for home! We turned to get a last sight of the great noisy city that had entertained us so pleasantly; but it seemed asleep, as the gray mists crept over it, and down to the waters' edge. The stately ships at anchor, were stripped of sails, flags and pennants, and looked like a forest in winter time. The little sail boats, darting hither and thither, kept up some show of life; a far off sign of the life in the heart of that great city.

How the waters changed from blue to green, and from green to blue, as the sun threw a long line of sparkling gold across the restless waves. Some of the waves would move along as grand and stately as an aged queen; not frisking or flirting, but straight on, to be dashed into a hundred little waves against the boat. Then they would scurry away with white foamy crowns, and merry rippling voices, just like the only queens we Americans know—our childrens' *May Day Queens.*

The sun went down into a dreary looking fog that hovered low in the west; and by and by darkness, weird like, settled upon the waters. How some of the sail boats would hurry by to get out of the way of the steamer! The children remarked that the red and blue lights looked like great eyes peeping out of the water.

With a loud salute from the engine, we bade Benecia good evening, and were under way again, and were soon asleep with such a shifting panorama of dreams that it was pleasant to know that soon we would be at home.

PURE GIRLS AND IMPURE BOYS.— Girls, in treating dissipated young men as equals, do a wrong that they can scarcely realize. Such men should be made to feel that until they redeem themselves, until they walk with correctness and honor in the path of right, good people will stand aloof from them. Girls who respect themselves will not be seen with such young men and will decline to receive them on the familiar footing of friendship. It is a mistaken kindness to poultice when caustic is needed, and I am inclined to think that a little sharp decision on the part of the young girls of to day would go far to correct the general looseness of morality among young men.—*Woman's Journal.*

ONE of "our young girls," at an examinaton in grammar the other day, when asked why the noun "bachelor" was singular, blushingly answered: "Because it is very singular they don't get married." She went up to the head.

Powder Making in California.

The purely mechanical part of the manufacture of powder is essentially the same in principle and only differs in extent of details in the various mills. Our readers will probably like to understand something about how it is made, so we will tell them how they do it in our California mills, belonging to the California Powder Works, on the banks of the San Lorenzo creek, Santa Cruz county. The mills are described as follows: The motive power in most powder mills is water, although both steam and water is used at the California Powder Works, The supply of water used here is taken from the river about one mile above the works, by means of a flume and ditch; but to secure sufficient fall the company were obliged to cut a tunnel 1,160 feet in length through the mountain in the rear of the works.

On entering the different buildings—of which there are 15—located on a circular railway track, at a distance of from 30 to 175 feet apart, you are required to brush and dampen your boots, so as to remove all sand and dirt adhering to them. The different ingredients are conveyed from one building to the other upon small platform cars covered with canvas. The first you enter is the refining room for the nitre or saltpetre. Here you find two large copper tanks for dissolving, and four large vats for crystalizing. Adjoining this is the drying and grinding room. The next is the charcoal house, located about a quarter of a mile from the works, on the opposite side of the river. Here they char or roast the wood in cast iron cylinders, so arranged in mason work as to permit the flames from the furnace underneath to circle around them. There are 20 cylinders, with a capacity of 120 pounds of charcoal each. After being submitted to this roasting process for 9 hours, it is then conveyed in large iron tanks on platform cars to the cooling room, where it is allowed to remain 24 hours. Number four is the pulverizing room. Here you find 20 large wooden cylinders containing iron balls; they revolve at the velocity of ten revolutions per minute, and contain the sulphur and charcoal to be pulverized. The pulverization occupies about 24 hours time. Next in order are the wheel houses—five in number—there the danger of powder making commences. In a large iron basin, to be ground, is placed what is termed a charge consisting of about 200 pounds of the different ingredients which compose powder. The following are the proportions in which they are mixed: saltpetre, 75 per cent.; charcoal, 15 per cent.; sulphur 10 per cent.—in a moist state. The charge is allowed to remain from three to eight hours, subjected to the pressure of 15 tons, produced by a pair of iron wheels revolving on an upright shaft. As the grinding process draws to a close, the utmost care is necessary in watching the charge, so as to prevent it from becoming too dry, in which case an explosion is the inevitable result.

We now pass to the press house, where in a hydraulic press between two copper plates the pulverized powder is subjected to a pressnre of 4,000 pounds to the square inch, after which it is known as press-cake, and apparently resembles slate, being half an inch in thickness. The powder has now to be granulated, which is done in the grain house, by passing the press cake between a pair of metal cylinders. As it passes from the cylinders or rollers, it is submitted successively to the action of sieves of graduated fineness, when the portions too coarse to pass through are subjected to a second and third set of rollers.

The granulated powder is next freed from dust by running it through reels, similar to the bolter employed in dressing flour. It is now ready for the drying house, where it is placed on canvas shelves, and dried by means of steam heat. The powder is now glazed, by subjecting it to rotary motion in barrels or drums, in the glazing house. The rotation must be just sufficient to cause the grains to roll over each other slowly. It thus becomes polished by attrition. It is then taken to the packing house where it is weighed, and placed in cans and kegs ready for shipment.

There is an extensive cooper shop connected with the works, where 640 wood and iron kegs are manufactured daily. The cottages occupied by the employes and their families, which number about one hundred, can be seen a short distance above the works, and resembles a country village in many respects. A more desirable spot could not have been chosen for the location of the company's works, which are very extensive, extending up and down the river for about two miles.

ANOTHER lot of 750,000 salmon from the Government fishery on the McCloud river, has been started for these destinations: R. G. Pike, Middletown, Connecticut, 150,000; James Duffy, Manetta, Pennsylvania, 150,000; Alex. Kent, Baltimore, Maryland, 150,000; James B. Thompson, New Hope, Bucks county, Pennsylvania, 150,000; Alfred A. Reed, Jr., Providence, Rhode Island, 100,000; Samuel Wilmot, Newcastle, Ontario county, Canada, 25,000; H. H. Thomas, Randolph, Cattaraugus county, New York, 25,000. At the fishery there is now being prosecuted the work of hatching 1,000,000 young Salmon for the Sacramento river. After being hatched they will be placed in the McCloud river near the fishery.

Wages in Europe and the United States.

So far, during the present year, the statistics show that the emigration to this country has fallen off nearly 40 per cent. as compared with previous years, and, indeed, a large number of emigrants have actually returned home, being unable to find employment. This being the case, and as reduction in the price of labor is now being discussed, the following tables, collected by the National Bureau of Statistics, and by the Massachusetts Labor Bureau, have an important bearing on the question. These figures were made for the year 1872, and are reduced to our currency.

If we take the ordinary farm laborer in Massachusetts, we find that his weekly wages are $5 with board—which is undoubtedly equivalent to $10. The highest wages in England, paid in Lincolnshire, are $8.17, without board; in Kent, $6.81; in Devonshire and Cornwall, $4.08; in Ireland, $4.91, without board; in France, the highest weekly wages are $2.96, with board; in Denmark, $1.43; in Italy, $3.89; in Prussia, $2.85—all with board.

If we now take the trades, the difference is even more remarkable. We find that a blacksmith in Massachusetts receives $18.50 per week; in England, $7.90; in Scotland, $7.62; in Germany, $6.75; in Prussia, $7.29; in France, $6.01. In the book-binding business the wages are equally remarkable in Massachusetts as compared with England. A first-class finisher gets $26 in Massachusetts, and $10 89 in England; a forwarder earns $18 here, against $9.80 in the old country; a female folder is paid $9 in Massachusetts and $3.81 in England. Again, in the great trade of Massachusetts in boots and shoes, the first-class upper cutter will earn $18; while the European is paid $7.08; the female machine hand is paid $10, and $2.70 in Scotland; a mender of shoes earns $15 here, against $9.53 in England, $6.75 in Germany, $4.38 in Prussia, and $3.38 in Italy.

Our most expensive trades are the building trades, and in them we see the enormous difference of wages between the two continents. A first-class moulder of bricks earns $20.77, with board in Massachusetts, and $5.94 with board, in England. A mason is worth $24 here, against $10.17 in England; $9.53 in Scotland, $4.50 in Prussia, and $3.21 in Italy. A bricklayer is paid $24 here, against $10.17 in England, and $5.97 in Germany. A plasterer commands $24 in America, while his wages in Europe vary from $6.08 in Italy to $17.10 in Prussia. A carpenter earns $17 in Massachusetts, while in England he would earn $18.17, in Scotland $7.62, in Germany $9.25, and in Switzerland $8.10. Plumbers earn the comparatively low wages in Massachusetts of $10; in England they are paid $9.78, in Germany $4.86. In the business of slating houses, the wages here are $18, to about $8 in Europe. In painting they are $17 to about $10 in England, and about $12 in Germany.

Considering the unexampled good harvests both at home and abroad, and the consequent decrease in the price of food of all kinds, it would seem from the above figures that wages in this country are disproportionately high, and that the tendency will be to lower figures.

MEASURING THE STARS.—A method of determining the apparent diameter of the stars, devised by M. Stephan of Marseilles, appears to be very ingenious, to say the least. If, through an excellent telescope, a star, whose angular diameter is really nothing, be viewed with a sufficient high magnifying power, the image is seen to be a bright spot surrounded by the concentric rings of light and shade which are called diffraction rings. Now, it has been shown by M. Fizeau that these rings, if, of extreme faintness and distance from the central spot, can only be formed when the angular diameter of the source of light is nearly insensible; and, following out this very unique suggestion, M. Fizeau has applied to the Marseilles telescope a diaphragm having two apertures for the observation of the fringes produced by the interference. If the star has a certain diameter, the fringes will disappear altogether; and if its diameter is zero, the distance of the fringes will vary with the distances of the two apertures in the diaphragm. Among the results of M. Stephan's investigation in this direction, is the interesting fact that Sirius appears to have a measureable diameter.

NEW RIG FOR THREE-MASTED SCHOONERS.—Captain Robert B. Forbes, of Boston, has recently invented a new rig for three-masted schooners, which it is claimed, can also be used for propellers requiring considerable sail, but which is particularly designed for the first-named class of vessels. With respect to the economy of the rig, Captain Forbes estimates a saving of several hundred dollars in the size of the masts, the absence of large hoops and blocks, heavy gaffs, and in the canvas, inasmuch as only the two lower stay sails and the jib need be of the heaviest. The booms being unincumbered by the sails when furled, can be used as cargo derricks. The sails all furling to the masts are more out of the way in port; more easily dried and kept clean and more durable.

AMONG the list of Vice-Presidents elected by the American Social Science Association, appears the name of President Gilman of the University of California and Professor George Davidson, of the United States Coast Survey, President of the California Academy of Science. Professor Davidson is now absent from this city in charge of one of the expeditions for observing the transit of Venus. His station is in Japan.

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SAN FRANCISCO:

Saturday, October 24, 1874.

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MORE FRUIT OFFERINGS.—Mr. O. B. Shaw of Sonoma, sends to the RURAL PRESS a box of grapes of the White Malaga and Chili Rose varieties, for which he will please accept our thanks.

PRINTING BUSINESS FOR SALE. — A half-interest in the Visalia *Delta* is offered by E. M. Dewey. It is one of the best pieces of newspaper property we know of in the State, and will, no doubt, readily find a purchaser.—*San Rafael Journal.*

INCREASE OF POPULATION.—There have come into California by sea and land in the nine months ending Sept. 30th, 60,500 persons. The departures in the same time were 27,700, showing a gain of 32,800.

A JUMP FOR LIBERTY.—A prisoner on his way from Napa, a few days since, jumped through a window while the cars were going 25 miles an hour.

About Fruit Drying Processes.

(Communicated.)

Preserving perishable food is a branch of industry of considerable importance to those suffering from inability to handle their bountiful harvest of fruits and vegetables. Many are endeavoring to solve the question of market and profit, for a dried article, and before canvassing any process of preservation, we offer some items from the Custom House reports. Into the port of San Francisco, for the year ending August 31st, 1874, $100,000 dollars worth of foreign fruit was brought. Just think of it ye fruit producers who ought to have reaped this harvest. In the United States, during the year 1873, over $9,000,000 worth of the same import was consumed.

These figures prove the demand. Why should this amount of money be paid for foreign produce and labor, when it would more than compensate the producers of this and other states, for the care and expense, involved in giving a well manipulated article to the commercial world. There is no reason why we should not use our surplus product to supply this demand; and to meet the necessity of rapid and easy work, comes the inventive power of our American mind. Already we have a number of processes in the field for preserving fruit and the root crops. Foremost in success in this industry is the method known as the Alden, but from its expense it fails to reach the mass of individual farmers, who are the ones to handle this question and reap the benefits. In many sections where co-operative establishments could be formed this is not excelled in its productions. Rider's American drier, however, comes nearer to the wants of individuals. It is cheap, easy to handle and yields a fine article, but not in very large quantities. Later in the field comes Lloyd's process, which promises to do more work than either of the others, for the amount of money invested, reaching the farmer, who wishes a small machine for utilizing his own crop, or the capitalist who wishes a good and safe investment. A small farm drier, having a capacity equal to Rider's American will be put in the market at $60, and one carrying about two tons per day of 24 hours, will cost about $500. Fruits average from four to six hours in drying, with the exception of grapes and prunes, which take from 18 to 24 according to temperature. It is claimed that this is the only machine capable of handling hides, fish and meat on a large scale. The latter product, which we have seen, looks very fine, coming back to its original raw state after soaking in water.

A few words of knowledge gained abroad, and of experience here, and we close this article hoping it may benefit its readers with an idea of the demand for preserved food, and furnish some general knowldge of the modus-operandi employed to give the present article of food to the market.

Raisins

Have the lead in price and consumption, the best being made from the Malaga, Muscatel or "sun raisin;" *these are dried on the vines*, the stem of each bush when ripe being partially severed and the leaves that shade it picked off. Thus exposed, the grapes soon shrivel by the evaporation of the water they contain, and become sweeter by the consequent concentration of the pulp. These, more than any other sort, retain the freshness and bloom of the fruit, and acquire less of the saccharine deposit which is found on most of the other varieties. Other raisins are prepared by drying the ripe grapes after they are picked, either in the sun or in heated rooms. Those known as the "Lexias," are so called from the lye employed in curing them. Included among these are the the varieties known as the Valencia and Denia. The best of these are hung on lines to dry in the sun, and as they begin to shrivel, they are dipped into weak lye, once or twice, then hung up again to complete the drying. The effect of the lye is to cause a saccharine exudation to take place, which forms concretions upon the raisins, and coats them with a thin varnish. Of Turkish raisins, two varieties, the Sultans and black Smyrnas are the best known. The former are from a small, delicious grape without seeds, and come packed in drums. The latter are also small, but have very large seeds. As a rule, they are free from the sugary concretions which are common to other sorts.

A very important variety of raisins, and one rarely understood to be the fruit of the vine, is the dried currant of commerce. This is a very small sized grape, largely cultivated at Patras, in Zante, Ithaca and Cephalonia. Its name is a corruption of Corinth or Corinthian grapes. They are no larger than peas, and the bunches are three inches long. The importation of raisins averages over $1,000,000 yearly; that of Zante currants about $300,000 yearly.

Prunes.

The best varieties of prunes are made from the Saint Catharine plum and the prune d'Aglue. After being exposed in the air for several days, until they become soft, they are shut up close in a spent oven and left 24 hours. They are then taken out, and replaced after the oven has been slightly reheated on the next day; they are turned by slightly shaking the sieves on which they have been laid. The ovens are heated again, and they are put in a third time. After remaining 24 hours they are taken out and left to get quite cold. This same process of heating the ovens is gone through with twice more; after which they are packed in boxes ready for sale. Can not this process be expedited by some of our American mechanics?

Apples

Our home production of apples comes next on the consumer's list. And in a fine article of machine dried fruit, a very palatable food reaches the public. But we deprecate the mode of bleaching by use of diluted sulphuric acid which though rendering them snowy in appearance robs them of all flavor. In the rapid evaporations which is natural in a drying machine, a fine color of a very pale yellow tint is left, but beware of too white an article, it has no taste.

Peaches

Are prepared in the best manner by putting them into boiling water for a moment, and then into cold, to prevent cooking. After which they will peel with perfect ease and can be dried to look very bright in any machine where artificial heat is applied. Nectarines and plums may be served in the same manner.

Onions and Potatoes

having been recommended as Army and Navy rations, on account of their preventive and curative properties in diseases occasioned by use of too much salt food, will always be staple articles and bring good prices. Onions are 40 cents and Potatoes 14 cents per pound.

Meat

preserved by evaporation without salt or cooking, brings 40 cents also. The method of cooking, by dipping into hot water and then salting to excess, afterward drying in the sun, is too old fashioned to suit the modern palate, which craves a more eatable food, when unable to obtain fresh.

How Purchasers are "Sold."

We are pleased to note indications that purchasers are disposed to look somewhat closer into the tricks of trade. Increased watchfulness in this direction is particularly needed in California, not that dealers here are supposed to be more trickish in their sales, but because buyers are known to be more careless in their purchases. The chivalrous liberality in money transactions characteristic of California in her early and flush period was very naturally accompanied with a contempt for anything "picayunish." We are ready to commend this generous spirit but it is evident that the time of its practicability is past.

Without considering the gradually increasing incentives to economy, and supposing money to be as easily obtained as in the days when this generosity was engendered, there would still remain at the present time ample reasons for introducing a more careful system of buying. The somewhat excessive liberality has been taken advantage of by shrewd, close calculating dealers, and the chivalrous free spirit that dispensed an abundance of money has been imposed upon by the receivers of the same. This is particularly noticeable in mining districts, where merchants who have not failed to keep pace with the slackening rate of trade, and have adapted themselves to its varying forms have found easy victims in the eccentric, liberal miner, who persists in adherring to the habits of flush times.

Our attention has been called to this matter at the present time by an article in a recent issue of the *Bulletin*. The tricks exposed by the article in question are practiced near at home, and is instanced in connection with one of our most necessary articles. We quote as follows:

"To bring the matter home in a practical way, we give place to the following note from a well known dealer in this city:

ED. BULLETIN:—On the 14th instant I had occasion to sell 86 empty sugar barrels, being the product of our sugar refineries. On comparing the marked tares of the same with their actual weight, I found this difference:

46 barrels marked California Refinery, tared 789, actual weight, 875 pounds; loss 86 pounds.

33 barrels marked Bay Refinery, tared 534, actual weight 604 pounds; loss 70 pounds.

7 barrels marked San Francisco and Pacific Refinery, tared 117 pounds, actual weight 124 pounds; loss seven pounds—making a difference to the refineries of nearly one barrel in every one hundred they sell.

I have also two empty syrup barrels at my store which I have had gauged by the official gauger of the city, that fall short two gallons to the barrel. Yours,

WHEELER MARTIN, Grocer,
1169 Market street.

The largest of these refineries turns out, we are told, about 800 barrels of sugar a day. The gain of 2 pounds in a barrel, at say, 11½ cents, the average selling price, would amount in one year, counting 312 working days, to $49,920. Premising that the aggregate product of the two other refineries is not less than that given above, we have here a gain in round numbers, of $100,000 per annum on the part of the refineries by a trick of trade which no amount of plausible reasoning can ever make an honest business. The managers of these companies know that the packages put up do not contain the weight represented, but that they regularly fall short. The loss comes out of the consumer, and it does not help the moral aspect of the case to say that sugar, under a keen competition, has been sold very cheap in this market. What the consumer wants is exact weight, and he is entitled to have it."

It seems to be expected that legislation may possibly do something for us in this difficulty; but we look for more benefit from increased vigilance on the part of buyers than any legislative aid. The peculiar characteristic of California trade which gives so much for a dollar, is one which is quite liable to lead the dealer into temptation as regards short weights, and seems ill adapted to times that require close economical buying.

The Apple-worm in California.

One of the peculiar pleasures connected with the eating of California fruit is the confidence that the posession of each well developed globe has not been pre-empted by a disgusting worm. Our apples especially have been acknowledged to be free from this pest; though predictions have continually been made that our time would surely come. According to reliable reports these predictions are now being fulfilled.

Unfavorable but indefinite accounts in this connection have been afloat during the last year or two; but we derive the most convincing evidence of this fact from statements made at the San Joaquin Valley fair, by D. A. Learned of Stockton. Apples were exhibited at the Pavilion by Mr. Learned, showing the operations of these fruit maggots. In the opinion of the exhibiter, who had observed their habits closely, they are the same as the insect which is so destructive to the apple crop of the East. He is of the opinion that they have been brought across the continent to California in Eastern apples. This is possible; but it seems to us more probable that they were brought here in the clothes, baggage or "traps" of immigrants. This however is a matter of conjecture and of minor importance; the fact that they are here is what concerns us most and this fact seems indisputable.

But we are not seriously alarmed at the present outlook for our fruit. In the first place we do not believe that the climate of California is favorable to the existence of insects of this class. If it were congenial to them they would probably have been more numerous at the present time. In other countries they have seemed to be "the accompanying evil" to the apple. We have been in other new fruit-growing countries—none of them, it is true, being quite so isolated as California—and have never known the apple-worm to be a tardy visitor at the feast. This is not among those pests that make periodic excursions in country, such as the locust, weavil, chinch bug, grasshopper, etc. It is a permanent settler, like the ant, the house-fly, the mosquito etc. never failing to make their appearance though more plentiful in some seasons than others.

Our escape thus far from this pest in our opinion, not attributable to our isolation or to a lack of enterprise on the part of insect; but to the peculiarities of our climate. And may we not reasonably expect that cause which has been sufficiently potent to keep these insects out of the country up to the present time, will exterminate them after they have strayed to these ungenial regions. The apple-worm is only at home in a humid atmosphere, and where the nights are sultry.

And even though this should become a permanent evil in our orchards, we would not be justified in making a very serious matter of it. Our Eastern friends do not sink ride it, and why should we? They enjoy their apples perhaps even more heartily than we do our's. The additional care in assorting, which the supposed presence of the apple-worm necessitates, is really an advantage in defining the grades of apples. The presence of this destroyer is also an effectual check to over production, as the fruit most affected will fall to the ground during the early stages of its growth. If the owners of fruit trees would attend properly to the thinning process—a duty which they owe to their trees and to themselves also in reality—then we might dispense with the labors of the apple-worm; but this they will not do; consequently the over-burdened trees are only relieved by these insects or by the visitations of frosts and blighting winds. But in countries like California, where these agents do not exist, and where nearly every blossom is liable to mature, a premature death may be expected for our fruit trees.

Now brother fruit growers and fruit eaters of California, don't allow yourselves to be "worked up" in regard to the appearance of the apple-moth. Do not be over-sensitive about this thing getting noised abroad, and the reputation of California apples suffering thereby. Probably the contrast between California and Eastern fruit, in regard to cleanliness, has been somewhat overdrawn; and it is extremely doubtful whether the characteristic of California fruit which has given us so much satisfaction—possibly to the neglect of some more essential points—would really enhance its value in markets outside of the State.

WAKELEE'S SQUIRREL EXTERMINATOR.—We are pleased to learn that this article, which has been noticed in the columns of the RURAL PRESS, is giving entire satisfaction. An effective and cheap squirrel exterminator is a great desideratum in this State; and according to reliable reports, the article here alluded to supplies this want. We are careful about advising our patrons and friends to adopt an article until we are assured of its merits; but after perusing a number of letters from farmers and others who have thoroughly tested this exterminator, we feel safe in recommending it as an article that will do what is claimed for it. We find that it has been extensively used, is steadily growing into favor and promises to become a staple article. According to the reports alluded to, the extent to which this pest has already been destroyed by this article, has, even at the present time, saved a large amount of money and labor to the farmers.

[Continued from Page 261.]

Proposed New Constitution of the National Grange.

[As far as ratified by the State Grange of California, October II, 1874.]

Preamble.—State Grange.

SECTION 1. Fifth degree. Pomona—(Faith.) Composed of the Masters of Subordinate Granges and their wives, who are Matrons, provided that when the number of Snbordinate Granges in any State becomes so great as to render it necessary, the State Grange may, in such manner as it may determine, reduce its representatives by providing for the election of a certain proportion of those entitled to membership in the State Grange from each county; and the members so chosen shall constitute the State Grange.

SEC. 2. There may be established District or County Granges in the fifth degree, not to exceed one in each county, composed of Masters and Past-Masters of Subordinate Granges, and their wives, who are Matrons, and such fourth degree members (not to exceed three) as may be elected thereto by the Subordinate Granges, under such regulations as may be established by State Granges. Such District or County Granges shall have charge of the educational and business interests of the Order in their respective districts, and shall encourage, strengthen and aid the Subordinate Granges represented therein. Dispensations for such District or County Granges shall issue from the State Grange, and under such regulations as the State Grange may adopt.

National Grange.

Sixth degree. Flora.—(Hope.) Composed of:

1. Rejected.
2. The Past-Masters of the National Grange and their wives, who have taken the degree of Flora.
3. The officers and members of the Executive Committee of the National Grange.
4. Masters of State Granges and their wives, who have taken the fifth degree.
5. One additional representative from each State for each fifty thousand members, or fractional part thereof, in excess of thirty thousand, said representatives to be alternately a brother and sister, for every alternate fifty thousand, must be fifth degree members, and will be entitled to the sixth degree.

SEC. 2. How Chosen.—In the Subordinate Granges they shall be chosen annually at the regular meeting in December, and installed at the regular meeting in January, or as soon thereafter as practicable; in the State Granges once in two years, and in the National Grange once in three years. All elections to be by ballot.

Vacancies by death or resignation to be filled at a special election at the next regular meeting thereof—officers so chosen to serve until the annual meeting.

SEC. 4. There shall be an Executive Committee of the National Grange, consisting of five members, whose term of office shall be three years.

ARTICLE II.—MEETINGS.

SECTION 1. Subordinate Granges shall meet at least once each month, and may hold intermediate meetings.

SEC. 3. The National Grange shall meet annually on the third Wednesday in November, at such place as the Grange may from year to year determine. Should the National Grange adjourn without selecting the place of meeting, the Executive Committee shall appoint the place and notify the Secretary of the National Grange and the Masters of the State Granges at least thirty days before the day appointed.

ARTICLE III.—LAWS.

The National Grange, at its annual session, may frame, amend, or appeal such laws as the good of the Order may require. All laws of State and Subordinate Granges must conform to this Constitution, and the laws adopted by the National Grange.

ARTICLE V.—MEMBERSHIP.

Any person engaged in agricultural pursuits and having no interest in conflict with our purposes, of the age of sixteen years, duly proposed, elected, and complying with the rules and regulations of the Order, is entitled to membership and the benefit of the degrees taken. Every application must be accompanied by the fee of membership. If rejected the money will be refunded. Applications must be certified by members, and balloted for at a subsequent meeting. It shall require three negative votes to reject an applicant.

ARTICLE VI.—FEES FOR MEMBERSHIP.

The minimum fee for membership in a Subordinate Grange shall be—for men five dollars, and for women two dollars for the four degrees.

ARTICLE VII.—DUES.

SECTION I. The minimum of regular monthly dues shall be ten cents from each member, and each Grange may otherwise regulate its own dues.

SEC. 2. The Secretary of each Subordinate Grange shall report quarterly to the Secretary of the State Grange the names of all persons initiated during the quarter, and pay to the Secretary of the State Grange one dollar for each man, and fifty cents for each woman initiated during the quarter. Also a quarterly due of six cents for each member, said report to be approved and forwarded at the first session of the Grange in each quarter.

SEC. 3. The Secretary of the State Grange shall pay to the Treasurer of the State Grange all moneys coming into his hands, at least once every ten days, taking his receipt therefor; and shall report quarterly to the Secretary of the National Grange the membership in the State.

SEC. 4. The Treasurer of each State Grange shall deposit to the credit of the National Grange of Patrons of Husbandry, with some Banking or Trust company, to be selected by the Executive Committee, in quarterly instalments, the annual due of five cents for each member in his State, and forward the receipts of the same to the Treasurer of the National Grange.

SEC. 5. All moneys deposited with said company shall be paid out only upon the drafts of the Treasurer approved by the Master and countersigned by the Secretary.

SEC. 6. No State Grange shall be entitled to representation in the National Grange whose dues are unpaid for more than one quarter.

ARTICLE IX.—CHARTERS AND DISPENSATIONS.

SECTION. I. All charters and dispensations issue directly from the National Grange.

SEC. 2. Nine men and four women having received the four Subordinate degrees, may receive a dispensation to organize a Subordinate Grange.

SEC. 3. Applications for dispensations or charters shall be made to the Secretary of the National Grange, and be signed by the persons applying for the same, and be accompanied by a fee of fifteen dollars.

SEC. 4. Charter members are those persons only whose names are upon the application, and whose fees were paid at the time of organization. Their number shall not be less than nine men and four women, nor more than twenty men and twenty women.

SEC. 5. Fifteen Subordinate Granges working in a State can apply for authority to organize a State Grange.

SEC. 6. Where State Granges are organized, dispensations for the organization of the Subordinate Granges heretofore issued shall be replaced by Charter from the National Grange without further fee; and thereafter all applications for Charters for Subordinate Granges shall pass through the office of the Master of the State Grange, and must be approved by him before they are issued by the National Grange. When so issued, the Charter shall pass through the office of the Secretary of the State Grange and receive the signature and official seal of that office.

SEC. 7. No Grange shall confer more than one degree on the same person at the same meeting.

ARTICLE XIII.

The Master of the National Grange and the members of the Executive Committee shall be empowered to suspend from office any officer of the National Grange who may prove inefficient or derelict in the discharge of his duty, subject to appeal to the next session thereafter of the National Grange.

[The above are the sections containing the amendments proposed to the Constitution of the National Grange. It is necessary that they receive the sanction of three-fourths of the State Granges, which is 27 in nnmber, there now being 35 State and Territorial Granges organized. About 20 have taken partial action upon them.—EDS PRESS.]

Green County Fair Down Upon Horse Racing.

The first fair to pronounce against horse-racing is the Greene county fair. This is not at all strange when we remember that there is not a more moral community in the State than that. The citizens of Greene county are proverbial for their good morals. They have thus taken the initiative in a reform which must become co-extensive with fairs throughout the State; and therefore we hasten to indorse their course, to call public attention to it, and to give them what aid and comfort we can. We are neither afraid nor ashamed to denounce the evil, and to use our pen to get rid of it.

It is a reform that cannot be brought about in a day. It has become a chronic sore upon the body politic, and hence it will require more than a few bottles of Hostetter's Bitters to remove it. It must have severe purging and constant purging, at that, to master it.

The Patrons of Husbandry in the Northwest condemn the practice in unmeasured terms, and refuse to conntenance it, as they will do here, sooner or later. The ball was first put in motion in Illinois, by them, and it was proclaimed everywhere in the State that the institntion would be a failure. The failure, however did not occur; but, on the contrary, a brilliant success.

Fairs are not intended to encourage horse-racing. Their mission is a higher and a more honorable one. Their purpose is to stimulate production in all its forms, by exhibiting the products of the farm and of the household.

Farmers are not horse racers. That damaging and damning pastime they prefer to leave in the hands of idlers, gamblers and lovers of immoral pleasures and pursuits. What they propose to do is to raise fat bullocks, fine sheep, well developed hogs and merchantable grain for the markets of the world. When they come down to the low and dishonoring practice of horse-racing at our fairs, something worse will overtake them; their sons will catch the vile contagion, and become in all probability professional horse-racers.

Let our fairs, then, betake themselves to their legitimate work—that of increasing our productions by a robust spirit of emulation, such as always is aroused on snch occasions. Cut out of them this moral gangrene, so that they may perform their functions vigorously and healthfully.—*Grange Outlook, Tenn.*

SENATOR BOOTH, of California, in a late speech, said: "The word of a member of the Grange should be sterling in every transaction, and pass current as the coin of the realm. Not only his field but his life should be made fruitful by his association. His presence at home should be an atmosphere of peace, and his influence among his neighbors as fragrant as an orchard in bloom.

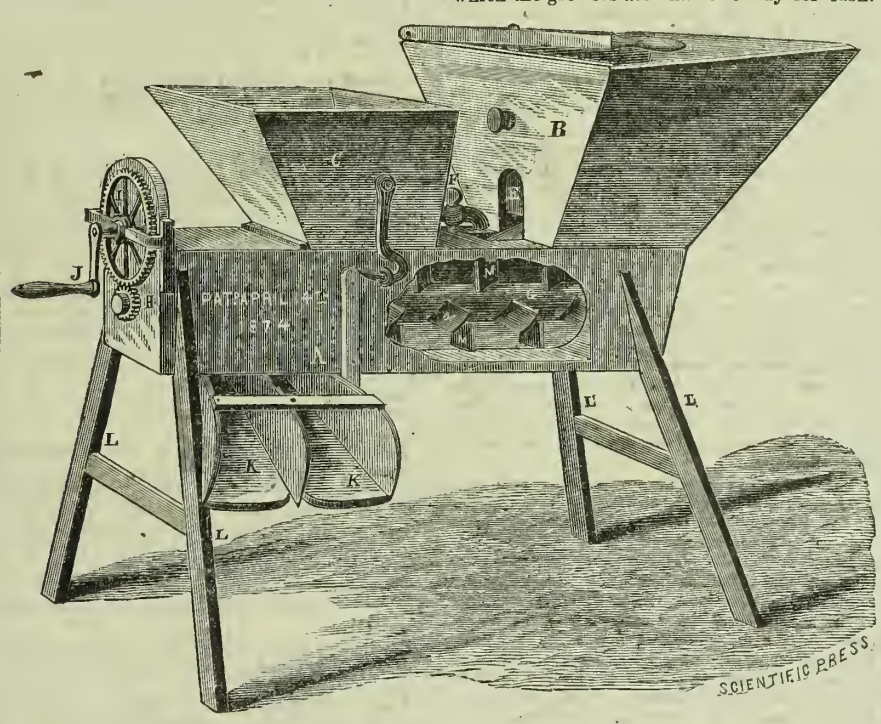
CRESCENT GRANGE, San Mateo county, on the 3d inst., conferred the fourth degree to a class of seven, including two ladies.

The Potato Growers.

The meeting of the potato growers convened at the rooms of the State Grange Agency, Oct. 14th, Bro. Hubbell, of Tomales, chosen Chairman, and Bro. Hegler, Secretary. Delegates from nearly all the potato growing districts were present.

Bro. Meyer, of Humboldt Co., spoke at some length of the necessity of centralizing the trade in this line. Thought arrangements should be made through the executive committee to appoint some one to take charge of crops for the Patrons. Bro. Hegler presented a table, showing that the potato crop would probably be about nine per cent. less than the crop of last year. It was generally conceded that, though the crop would be short, most persons were placing the estimate too low. The following resolutions were unanimously adopted: That the executive committee of State Grange of California recommend that the handling of the potato crop be centered in one head. That this be done with a view of placing the crop in the hands of some person who does not speculate in potatoes. And further resolved that we ask the executive committee to try to devise measures, whereby Patrons may be furnished with sacks for the present crop. Several speeches were made, showing the difficulties under which potato growers labor, and the schemes whereby commission houses get the upper hand of them, and place them in their power. One of these is by furnishing sacks which the growers are unable to buy for cash. Statements were made showing that one house alone had sold 30,000 sacks, thus securing one-seventh of the later crop of Humboldt Co.

JOHN H. HEGLER, Sec'y.



WILKIE'S APPARATUS FOR BLUE-STONING GRAIN.

WHITE SULPHER SPRINGS, ELKO, CO., NEV.—These Springs are becoming utilized for various purposes other than medicinal. Hot houses are kept constantly at a forcing temperature, and plants and vegetables are always looking green and fresh. Chickens are hatched in great numbers in a sort of hot house, the necessary heat being furnished by the pipes which convey the hot water from the springs to the bathing house. The bathing facilities have been improved of late. A large swimming pond has been constructed, 20 feet wide by 43 feet long, and 5 feet in depth. In this a person can swim to his heart's content. A convenient bathing house has also been erected with rooms suitably furnished, These wonderful springs are fast becoming a favorite resort for invalids and pleasure seekers, and the proprietor, Mr. Van Allstine, is highly spoken of by our friends and correspondents. The springs are situated adjacent to Elko and a four horse coach is daily in attendance to convey passengers back and forth.

A FROG IN A TURNIP.—An extraordinary large turnip is said to have been dug in a garden of Salt Lake last week, which, on being cut open, disclosed a good sized frog, well and hearty, which tumbled out and hopped off just as if he was not the creature of a wonderful phenomenon. Doubtful.

THE LEADING WHEAT STATE.—California is now acknowledged to be the greatest wheat growing State in the Union—of its own production. England looks to this State to supply a considerable potiorn of her wants.

SISKIYOU COUNTY FAIR. — The awards of premiums at the Siskiyou county fair have been received, but at too late a date to admit of their publication in our present issue. They will appear in our next.

Machine for Blue-stoning Seed Grain.

John Wilkie, Yuba City, Sutter Co., Cal., has recently patented through the agency connected with this office an apparatus for bluestoning or saturating seed grain with a solution of sulphate of copper, and by this means destroying any germs of disease, and thus preparing it for sowing. In the illustration of the machine herewith shown, *A* is a horizontal box, of sufficient length, and having the seed-hopper, *B*, upon one end, and the solution-tank, *C*, to it. The bottom of the seed-hopper is made slightly inclined toward the discharge-spout, *D*, and is provided with a regulating-gate, *E*. An opening is made in the box, *A*, in a line with the spout, *D*, and through this the seed passes into the box. The solution tank has a cock, *F*, which discharges into the same opening along with the seed. Within the box, *A*, is a longitudinal shaft, *G*. Gear wheels, *H I*, at the end of the box, serve to give motion to the shaft, either by means of the crank, *J*, or by other power.

Upon the shaft, *G*, a combined stirrer and carrier is constructed, which is in the form of a screw. The inventor prefers to construct the screw in the form of short projecting arms, *M*, which are set into the shaft at an angle, as shown. These arms serve as stirrers, and each one thoroughly mixes the seed and solution, and, at the same time, forces the mass forward, so that it will be taken up by the next stirrers. The discharge-spout, *K*, is made as shown, and is placed at the end of the box, *A*, farthest from the feed-hopper, *B*. The whole machine is set upon legs, *L*, of suitable hight, and is easily made, and effective in its operation. Further information concerning this machine can be obtained by addressing the inventor, as above.

Imitating Marble by Slate.

Slate is rapidly taking place of marble for interior decoration. For ornamental purposes, after being properly cut and trimmed, it is scoured with pumice-stone, then rubbed with powdered pumice stone, and polished with felt. It is now ready to be transformed into marble. The slabs having been prepared, and painted with the groundwork color, they are ready to dip. A vat is at hand, containing water mixed with ox gall, on which the colors are floated, and which is in part prepared in the same way as for making marbled paper, or marbling the edges of books. A workman dips a small brush in the colors and sprinkles it on the surface; then he fans the water with a palm-leaf, and draws the brush through it several times. The mixed paint spreads on the surface of the water, like the veining in marble, and then the slab is let down till it touches the surface of the liquid, when the marbled colors floating on it will adhere to the slab of slate, when it is put to dry. A mere change of groundwork and colors gives the varieties of marble, Egyptian, Spanish, Galway, Pyronese, etc. The most elaborate work, as for altar pieces, chessboards, and border, is done by hand. After the application of colors, successive bakings and polishings finish the work. This marbleized slate is quite elegant, possessing sixteen times the strength of marble, and scarcely distinguishable from it. The imitation of marble in slate is employed for coffins, caskets, tabletops, mantels, billiard-beds, lamp-stands, and innumerable domestic and ornamental uses.

YELLOW JACKETS.—Every country has its plagues. Ancient Eygpt had its locusts; our Western territories have their grass hoppers; and it seems to be reserved for California, or at least this part of it, to have its plague or pest—the yellow jackets. They seem to be rapidly increasing in nnmbers year by year, and their ravages especially among the grapes, are becoming alarmingly destructive. They eat tons of the fruit on the vines, and in some insiances make nearly a clean sweep of that part of the crop spread out to be dried for raisins. A friend suggests that about the best way to abate the nuisance, would be for the State to offer a premium with a view to encouraging the destruction of their nests. The nests he thinks could be found quite readily, by watching the little marauders when laden with their pellets, as they then fly in a "bee line" straight to them. This suggestion looks plausible, but to be effective the plan would have to be generally adopted and perseveringly carried out. —*Folsom Telegraph.*

BRITISH PATENT SPECIFICATIONS.—Governor Booth is apprised by letters from the Department of State at Washington that the Mechanics' Institute at San Francisco has been given a complete set of the drawings and specifications of the British Patent Office. The volumes are very rare. The complete set at the present time consists of more than 3,000 volumes, and includes upwards of 84,000 specifications of patents. The donation includes publications to be made hereafter, and as they increase at the rate of about 150 annually, their value is necessarily great.

ARTESIAN WELL. —On the 2d inst., says the *Semi-Tropical Press*, 2,000 feet of piping for the artesian well of the C. P. R. R. company, at West Oakland, was shipped from Philadelphia. It is expected to arrive here in about 15 days. Upon its being received here, the present well now sunk to a depth of 400 feet, will be put down 1,000 feet, or a few more.

Hop Department.

Why Hop Growers Should Associate.

I noticed several items in the *Herald* in relation to the organization of a hop growers' association, and requesting the views of hop growers in relation thereto. I see no objection to such an organization. Properly managed, important results to hop growers might grow out of it. There is a large amount of capital invested in the business, especially in the counties of Madison, Oneida and Otsego. Taking the State at large, this branch of productive industry has assumed large proportions; and yet, there is no organization of hop growers in the State, to protect and advance their interests. All branches of industry naturally seek organization, because there is strength and power in an organization, which is not in individuals, when separate and acting independently of each other.

Among the objects to be aimed at by such an organization, might be mentioned the following:

1. The discussion of the best soils and the best locations for the successful growth of the hop.
2. The best and cheapest way of training the vines.
3. The diseases to which the hop is liable.
4. The insects which prey upon it.
5. The procuring of statistics in relation to the extent of the acreage and probable yield in any given year, not only in our own, but in foreign countries as well.
6. The subject of the tariff.

Hop growers are now compelled to compete with the pauper labor of Europe in our own home markets. The duty upon the importation of foreign hops is but 5 cents per pound. It is to low to offer any adequate protection to hop growers, and ought to be increased to 15 cents.

These are a few, and but a few, of the subjects that might profitably engage the attention of such an organization. Discussion and inquiry dispel ignorance, and lead to facts and knowledge. These are what every intelligent hop grower is in search of, and what such an organization might, properly managed, supply him with. Hop growers in this county, so far as I have conversed with them, express themselves in favor of such an organization. I hope to see a general expression of the views of those interested through the columns of the *Herald*.—Hop Grower, Utica, New York.

Hops in England.

We are sorry to state that the worst fears of the hop growers are now realized. From Kent, Surrey, Sussex, Worcester, Hereford, York and Nottingham the general report is that blight, mildew and insects have so spoiled the crop that the yield will be considerably below the average. Gardens that were expected a short time ago to produce 15 cwt. to the acre, have dwindled down to 4 or 5 cwt.; and even highly cultivated gardens are yielding not more than 12 cwt. to the acre. In many places they will not pay for gathering. The failure will be much felt by the hop picker, who at this season of the year is usually seen migrating with his wife and family from the back slums of London and other large towns, carrying the kitchen utensils, etc., for camping out. Although many thousands have already found employment, we fear numbers will be disappointed who only get this opportunity during the year of seeing the green fields and breathing a little fresh air. A man and his wife can earn from 7s. to 8s. a day, working from six o'clock in the morning until five in the evening, and this wages must be considerably in excess of what they are able to obtain by working at their ordinary occupation in city life. We cannot speak of the failure without regret, for besides causing fluctuations in the hop market, it prevents many a poor man, making a little extra money to go towards his rent, or to lay by for winter necessities.—*London Farmer, Sept.* 21.

Hops at Home and Abroad.

The annual consumption of hops in the United States has been estimated as ranging from 100,000 to 120,000 bales. A writer in the Chicago *Tribune* estimates the crop in the United States this year as follows: Wisconsin, 19,000 bales; Pacific Coast, 7,000 bales; New York, 50,000 bales; rest of United States, 13,000 bales. Total number of bales, 89,000.

The same writer states that the hop crop in England is not more than half of an average one, while there is a deficiency of not less than 30 per cent. in Germany. The hop crop in New York is turning out badly, a black mould or blight having set in near the time of picking. It is anticipated that a strong export demand will set in, which, taken in connection with the fact that the home production is from twelve to fifteen thousand bales short of the amount required for consumption, will be likely to advance the price of hops materially within the next three or four months.

Hop production appears to be increasing in this State at the rate of about 1,500 bales a year. Seven thousand bales this year is not a bad showing for beginners. The hop crop in this State is destined to figure at no distant day as an important item.

Baling Hops.—Emmet Wells in his September circular, thus addresses Western hop-growers: Once more we advise Wisconsin growers not to dry their hops so much, and in bailing, use new, clean sacking; not old sacks that have been used before. Western growers also injure the sale of their hops by early picking; they seem to be afraid of rust, which sometimes appears on hops which are allowed to remain on the poles until ripe. Brewers, as a general rule, don't mind the rust, but rather prefer it to immature hops. Growers, when bailing, should never get into the press and stamp the hops downs with their feet; the proper way is to run the "follower" down until the pressing is finished; then the hops, when sampled, will open whole, stead of being all powdered and broken up.

The Apiary.

The Bee Disease.

In the Apiary Department of *Our Home Journal* for August 8, No. 6, page 83, there is an article on the "bee disease," in which the writer endeavors to prove that the (so called) "cholera or bee dysentery," has been introduced into this country by the importation of Ligurian or Italian bees. I do not wish to provoke a discussion, but only desire to set the writer straight.

The author of said article puts the question: "Did any bees suffer by the disease prior to the importation of the Italians into this country?" Then he answered, "no." His answer to his question is not based on facts, but is only an assumption.

The disease to which he refers, is confined to wintering bees in climates where the cold is so protracted and intense as to prevent bees from flying for long periods at a time. In many portions of the North bees go into quarters in November, and remain confined till April or May, before they can take any flight. During this long period of indoor life, they are often subject to a disease which has been called dysentery or cholera. The cause no doubt, is a bad article of honey, combined with cold without an intermission for months. This disease instead of only existing since the importation of the Italians, into this country, in 1859, has been prevailing more or less, every winter in cold climates, as far back as the oldest inhabitant can recollect. Mr. Quinby, one of the oldest and most scientific beekeepers of this country, says the "disease existed ever since he can remember, but the three last winters it was more general."

The writer of the article in question also puts the query: "Do the native bees suffer by the disease down South, where the Italians are not yet introduced?" He answers: "It is unknown among bee-keepers." Very true; it is comparatively unknown, but not because there are no Italians. It is owing to the fact of the mildness of our winter, which admits of our bees taking a fly every few days or weeks, when they can discharge their fæces. Whereas in cold climates, that will not allow them to take these frequent "airings" their fœcal matter is retained in their intestines to inflame and bring on disease.

Even down South, when we happen to have a protracted cold spell in winter, bees sometimes get a mild form of the disease. Such was the case in 1866 and 1867, in a portion of South Carolina and Georgia.

I regard the importation of Ligurian or Italian bees into this country in the same light that I do the importation of any fine stock of cattle. They infuse new blood into the native bees, thereby improving the prolificacy of the queens, and the honey-gathering capacity of the workers. At least, such is the experience of all those who have given the Italians a fair test.—*J. P. H. Brown, in Rural Southland.*

Mr. R. S. Pardee, of the Sweetwater, realizing the stupendous proportions which the honey production of San Diego must soon assume, has "put his wits together" and invented what he terms a moth-proof extension hive. Among the advantages claimed for this new hive is that it is moth proof; the main frames can be taken out, one at a time, without disturbing the others; it is so constructed that as many more frames can be set in a hive as is necessary. Each main frame will hold 12 or 14 pounds of honey, and when one frame is filled, it can be taken from the hive without the slightest trouble, and replaced by another, if you please. These hives can be manufactured for about half the figures now paid for the hives in use. The San Diego Mill company, we understand, have an order for the construction of a number of them, and the small figure for which they can be placed upon the market is a subject of general remark among bee men.

Crippled Bees.—Crippled or disabled workers are not tolerated in the bee commonwealth. They are at once condemned and ejected by the community, as not only useless but injurious members for whom no compassion is felt, and no mercy is in store. Crippled queens are preserved and cherished, though when they become superannuated and unproductive they, too, are discarded.

Dzierzon watched a queen bee when laying, and noticed that she layed eighteen worker eggs in three minutes. She appeared to dispatch business still more expeditiously when laying drone eggs.

The Trades in San Francisco.

From an article in the *Call* on the state of labor, etc., in this city, we extract as follows:

The general situation of the mechanics is better in San Francisco at the present time than for some years past; and yet from careful inquiry, there are few if any mechanical branches in which the number of workmen is not equal to the demand. The new comer will find superior qualities and meritorious habits an important reliance, and needs to fortify himself with a good stock of patience and perseverance, and withal the means to maintain himself while awaiting his opportunity. Among the most flourishing trades at present are those pertaining to building enterprise.

The bricklayers in the city are all employed who choose to be. Several very extensive building enterprises, chief of which is the Palace Hotel, have caused the engagement of about two hundred workmen from the East. This trade, on the average is employed about two-thirds of the time. In the winter they are frequently out of engagements. The standard rate of wages is $5 a day, some portion working eight hours, according to the rules adopted by the union leagues, but a larger number ten hours.

The carpenters are also generally employed, to the number of about six thousand, which fact gives some indication of the great magnitude of building operations at present progressing in the city. The trade work ten hours a day, and the standard wages for good workmen is $4 a day. A large proportion of the number mentioned, however, receive less.

Of the painters, nine-tenths are employed, but the work is irregular, and does not cover more than two-thirds of the time, on the average. The wages range from $2.50 to $3.50 a day, while skillful grainers receive as high as $4.00.

The plasterers all find steady employment at present, working eight hours at $5 a day. There are about four hundred in the city.

The lathers receive from $2.50 to $4 a day. There are about 200 in the city, and they are generally employed.

Stone masons are largely dependent upon Government contracts, and the popular style of buildings in the city does not offer an extensive field for the trade. There are about 200 here, mostly employed at present, at wages of $4 and $5 a day.

Stone-cutters receive the same rates. The number in the city is estimated at 300, generally employed.

Mill workmen, engaged in manufacturing building material by machinery, receive from $3.50 to $4 a day. There are between 600 and 700 employed in the different mills in the city.

Machinists are employed at wages ranging from $3 to $6, the average being $4 a day Few of the trade are idle.

Boiler-makers are generally employed at from $2.50 to $3 a day. There are about 200 in the city.

Of the moulders, many are unemployed at present. Their wages range from $2.50 to $4 a day.

The blacksmiths are flourishing. They receive $5 a day wages, and strikers $3.

The ship-carpenters generally find employment here and there; but their time is irregular. They receive from $4 to $5 a day, and number about 250 in the city.

The caulkers have experienced a reign of hard times for many months; but their prospects have lately improved in a measure. Of about 200 in the city, two-thirds are now employed in the city at $2.50 and $3 a day wages.

Of ship joiners, there are between 200 and 300 in the city, generally employed. They receive the same wages as house-carpenters, and a small portion of skillful workmen as high as $5 a day.

Tanners and curriers number about 100. They are all employed, at an average of $4 a day.

Saddlers and harness-makers are generally employed, at from $3 to $5 a day.

Tailors usually work by the piece, making on the average from $4 to $5 a day.

In the printing trade there is the usual surplus of compositors common in all large cities and vacancies are not of every day occurrence The average wages range at $20 to $30 a week in the job and newspaper offices.

Shoemaking business is becoming one of the lost arts in California, so far as white mechanics are concerned, the Chinamen encroaching fearfully upon the trade. The wages average about $2 a day, and very few receive above $3.

Cigar-making is another trade that has about the same advantage in San Francisco, that a trade in linen domestics would secure in Alaska. The business is almost exclusively in the hands of the Mongol.

Cabinet making is one of the growing trades, and gives employment to a goodly number. The men generally work by the piece, and make from $3 to $5 a day.

These observations of a few of the leading trades afford a fair idea of the general situation and opportunities of mechanics in San Francisco.

The Day Laborers

Are doing better at present than for some years past, and it is estimated that between ten and twelve thousand are now employed in grading, paving and building contracts in the city, receiving from $2 to $3 a day. There are many thousands employed as porters, car-drivers, and similar pursuits, who are paid on an average from $50 to $60 a month, and, taking this rate of remuneration as a basis of calculation, are compelled to practice very economical habits of life, particularly those who have families dependent upon them.

The Unemployed

In the city will aggregate ten thousand at any season of the year. This army is composed of adventurers, young men of fastidious tastes in pursuit of genteel occupations, principally in the line of clerkships, and the great Micawber family generally. A few weeks of waiting and watching suffices to convince them of the great surplus of persons in the country possessing the same order of talent, and a large proportion of them return in disgust, or seek other fields, making room for the steady stream following in their tracks, who are anxious to obtain the same valuable experience. When the disappointed gentlemen of this class are unable to effect a retreat, if good fortune attend them, they ultimately drift into an engagement which affords them the means of a bare sustenance. There is a vast amount of excellent talent and education wasting itself in conveying dishes in restaurants, mixing cocktails, and like pursuits in San Francisco, that might be employed to some purpose in aiding the progress of civilization in more congenial fields. This circumstance and other facts above given should be pondered by intending immigrants. California is only the land of promise for such as are possessed of the abilities or means for developing its resources or otherwise advancing its progress.

The Chemistry of Building Stone.

As in the construction of furnaces for their various uses, the metallurgist and the glass makers consider the refractory power of the material to be subjected to intense heats, so the architect of this period of great conflagrations should consider, among the other requisites of building stone, its behavior when subjected to fire; it is not well enough to know that the chemical character of a rock is an index to its fusibility. The manufacturer of fire brick carefully selects quartz as pure as may be, and fire-clay as free from lime and iron as possible, knowing, without being able to give a reason, in most cases, that these elements vitiate the product. They unite chemically to produce fusible compounds, with as much certainty as potash or soda unite with grease to produce soap, which is widely different from either of these substances. The fate of limestones in our great fires is well remembered, and we have but to consider the composition to readily explain their crumbling tendency at that time. They consist mainly of carbonate of lime and magnesia; when much magnesia is present they are known as "dolomites"—it is of this that the large cathedral in New York is being constructed. It is as white as any marble, and made up of shining tabular crystals; when this or ordinary limestone is highly heated, its carbonic acid, amounting to about forty-four per cent. of the mass, is expelled; thus, ordinary quick lime is produced, and the operation of a common lime kiln is repeated. As the carbonate of magnesia is decomposed at a much lower temperature (600 deg. F.) than the carbonate of lime, stones containing it are less refractory than those of pure lime—it is present in all our Illinois limestone. Sandstone is certainly among our best building material; it contains about ninety per cent. of silica or quartz, among the most infusible of substances, and small quantities of iron and alumina which gives it coherence. The experience in Chicago with the Cleveland variety seems to confirm this; one house in particular on the south side, was mentioned by Mr. Wright, of the American Institute of Architecture, as a striking example.

Granite, like all primary rocks, is almost indestructible to ordinary atmospheric influences, and yet explosions of blocks of it were common in the Boston fire; this may be referred to inclosed water and the generation of steam, for, when freshly quarried, a cubic yard contains about three and a half gallons of water, which, it is safe to assume, is never all evaporated at the ordinary temperature. Brick, a product of fire itself, absorb and retain much moisture, which, when evaporated, produces a certain amount of porosity, and increases the tendency to vitrification in great fires; yet, like artificial stone, all the water they contain after being baked, is chemically and not mechanically combined, and like the latter material has certainly a good record, and its value could no doubt be improved for structures by applying a coat of paint to exclude water.

Removing Trees by Steam.—A method of removing trees by dragging them out by the roots by a steam-engine, has been successfully introduced on the Duke of Sutherland's estate in Scotland. The engine, (a twelve-horse power, being one generally used for plowing,) was placed in a field about 150 yards distant from the trees; a chain was passed round each at some distance from the ground, and the engine being then set on, the tree was tumbled over and dragged out with a large ball of earth adhering to the roots. In this way 300 trees, of from six to 12 inches diameter were removed in a few hours; but trees of three feet diameter have been dragged out by the same means.

The total number of mail letters collected by the carriers in this city, during the year 1873, was 2,460,427; and the postal cards collected numbered 158,485; while during the first three quarters of the present year 2,522,309 mail letters, and 271,957 postal cards were collected.

Aboriginal Botany of California.

At a recent meeting of the California Academy of Sciences, the Secretary read the following interesting paper on "Aboriginal Botany" by Stephen Powers, of Sheridan, Placer county, California:

As employed in this paper the word "botany" is somewhat loosely comprehensive, and is used for lack of a better. Under it are included all the forms of the vegetable world which the aborigines use for medicine, food, textile fabrics, ornaments, etc. Among savages, of course, there is no systematic classification of botanical knowledge. Every oak, pine, grass has its separate name; the Indian never groups individuals together, except occasionally, by adding one of the words *cha, doo, popo, com, wi, back*, (tree, bush, grass, seed, root, leaf), or something of that sort. But it is not for a moment to be supposed that the Indian is a superficial observer; he takes careful note of the forms and qualities of everything that grows on the face of the earth. True, he ascribes marvellous and impossible qualities to some plants—frequently those which do not grow in his neighborhood—but that does not blind him to their real properties. And as his perceptions of individual differentiations is nice and minute, so his nomenclature is remarkably full. I assert without hesitation that an average intelligent Indian, even if not a medicine-man, knows a much greater catalogue of names than nine-tenths of Americans. Nothing escapes him, he has a name for everything. And, indeed, there is reason. In times of great scarcity they are driven by the sore pangs of hunger to test everything that the soil produces, if perchance they may find something that will appease the gnawings of appetite. They therefore know the properties of all herbs, shrubs, roots, leaves, whether they are poisonous or nntritive, whether purgative, astringent, sedative, or what not, or without any active principle. And they have often found out these things by bitter experience in their own persons. It is surprising what a number of roots, leaves, berries and nuts the squaw will discover. She will go out in the spring with nothing but a fire-hardened stick, and in an hour she will pick a breakfast of green stuff, into which there may enter 15 or 20 ingredients, though, of course, they are seldom reduced to this extremity nowadays. Her eye will be arrested by a minute plant that will yield her only a bulbous root as large as a large pea, but which the American would have passed unnoticed. The women are generally best acquainted with the edible matters; while the old men are the authority as to the medicines.

There are seventy-three vegetable substances mentioned in this paper. I am indebted to the kindness of Prof. H. N. Bolander, who identified for me many plants that I was unable to determine. There are a few specimens which are so scarce, nowadays, owing to the ravages of stock, or so difficnlt to find in flower, that it was impossible to give their scientific names.

I will take this occasion to say that there are many substances popularly called "Indian medicines" which are humbugs, and which have been fathered upon the aborigines by patent-medicine men. Whatever is set down in this paper has been learned from the Indians themselves

In regard to medicinal herbs and plants, their usages are peculiar and sometimes amusing. As the practice of medicine among them is a source of great profit and prestige, it is sought to be invested with mystery. The medicines always are crafty men, keen observers, reticent. An old doctor always clothes his art with a great deal of superstition, secrecy, and pompous solemnity. In answer to impertinent young questioners, he says his simples do not grow anywhere in that neighborhood; he is obliged to purchase them from tribes living at a great distance. I have known an old doctor and his wife, both as full of guile and subtlety as an egg is of meat, who always arose at the dead of night, crept stealthily out of camp and gathered their potent herbs, roots, etc., then returned before any one was stirring and concealed them.

The Indians referred to in this paper are the Neeshenams, of Bear River: and the flora is that of the extreme lower foothills of Placer County. Their general name for "medicine" is *wenneh*, which denotes "good;" but they frequently use the word "medicine," even among themselves.

To begin with the oaks, the species which produces their favorite acorns is the *Quercus Gambelii*, Indian name, *chacow*. They generally select those trees which have a free, coarse bark and large acorns. About the middle of October the harvest begins, when the Indian, armed with a long, slender pole, ascends the tree and beats off the nuts. A tree which has been well stripped looks as if had been scourged in a mighty hail storm. The old men generally assist in carrying them home in their deep, conical baskets, and there the squaw's duties commence. Holding an acorn on a stone, she gives it a slight tap with a stone pestle called *soonah*, to crack the shell, which she strips off rapidly. They are then dried and beaten to powder in small hollows on top of some great rock. The flour is soaked a few hours in a large hollow scooped in the sand, the water draining off and carrying away the bitterness; after which it is cooked into a kind of mush in baskets by means of hot stones, or baked as bread undergronnd. The acorn which stands second in favor is that of the burr-oak(*Q. lobata*—Indian, *lowh*). In Placer County this oak seems to be more properly *Q. Douglasii*; as its branchlets are erect and rigid. There is an oak which they call *shuheh*, which seems to be somethiug like a cross between the white and burr-oaks, having very white and coarsely rimose bark, and glabrous, shining, deeply sinnate leaves. But Professor Bolander pronounces this also *Quercus Gambelii*. The live-oak is *haha; Q. Wislizenia, hammut*; the black oak (*Q. Sonomensis*), *hamchu*. The acorns of these last are eaten only when they can procure no others. There is one other very small species called *cheepis*, fonnd growing in the mountains; but I cannot determine from their descriptions whether it is the chinquapin or the whortleberry oak.

The nut-pine or silver pine is *toan, toanem cha*. It is a great favorite with them, the most useful tree they have, and they always regret to see an American cutting one down. The nuts are a choice article of food; and, burned and beaten to powder, or crushed up raw and spread on in a plaster, they form their specific for a burn or a scald. The pitch and the mistletoe which grows on this pine are very valuble, in their estimation, for coughs, colds and rheumatism. They set them afire, making a dense smndge, and then the patient, wrapped in a blanket, squats over it or stands on all-fours over it, and works and shuffles his blanket, so as to make the smoke circulate all through it, and come in contact with every portion of' his body. When an Indian has an arrow-wound, or wound or sore of any kind, he smears it with the pitch of this tree, and renews it when it wears off. In the spring, if food is scarce, they eat the buds on the ends of the limbs, the inner bark, and the core of the cone (*taeh*), which is something like a cabbage-stalk when green. The cone-core and bunch-grass are boiled together for a hair dye. They are as proud of their black hair as the Chinese; and when an old chief who is somewhat vain of his personal appearance, or one of the dandies of the tribe, finds his hair growing gray, he has his squaw boil np a decoction of this kind, and he sops his bleaching locks in it. The tar *shindac*, which is worn by widows in mourning, is made of hot pitch and burned acorns, powdered; it is removed by meaus of soap-root and hot water.

(In adding the word for "tree" or "bush," they generally suffix the syllable *ém*, thus *toan, toanem cha; paddil, padditem doo*).

Chippa is the willow, the long twigs of which are nsed both for arrows and basket making. In making an arrow, the hunter employs a rude kind of turning-lathe, a couple of sticks held in the hand, between which the twig intended for the arrow is tigbtly clamped and twisted around, which rubs off the bark and the alburnum, and makes it round. The long straight shoots of the buckeye, *poaloh, poalem doo* are used for the same purpose. For the woof in basket making, they employ the wood of the redbud (*Cercis occidentalis-paddit*), which is split up with flints or the finger-nails into five strings, used substantially as thread. The willow twig is passed round and round the basket, the butt of one lapping the tip of the other, while the redbud strings are sewn over the upper and under the lower.

Cotoh is the manzanita. Its berries are a favorite article of food, and are eaten raw, or pounded into flour in a basket, the seeds separated out, and the flour made into mush, or sacked and laid away for winter. They also make quite an agreeable article of cider from them, by soaking the flour in water several hours, and then draining it off.

Alder is *Shootoom*; poison oaks is *cheetoc*. They are less easily poisoned by the latter than Americans; their children handle it a great deal while little. They eat the leaves botn as a preventive, and as a cure for its affects; though it sometimes poisons them internally. The women use the leaves freely in cooking; they lay them over a pile of roots or a batch of acorn bread, then lay on hot stones and earth. The bright red berries of the California holly(*Photinea arbutifolia—yoaus*)are eaten with relish; also the berries of the elder, *nock*, and wild grapes—*peemen*. They call a grapevine a bush, *Speemenem doo*.

Soaproot, *howh*, is used for poisoning fish. They pound up the root fine, and mix it into pools where the fish and minnows have no way of escape, and at the same time stir up the bottom until the water becomes muddy. The minnows thrust their heads out of the water stupefied,and are easily scooped up. Buckeyes are used in the same manner. Soaproot is also used to heal and cleanse old sores, being heated and laid on hot. Both soaproot and buckeyes are eaten in times of great scarcity; they are roasted underground thirty-six hours or more, to extract the poison.

For toothache the remedy is the root of the California buckthorn, (*Frangula Californica—luhum doo*). It is heated as hot as can be borne, placed in the mouth against the offending member, and tightly gripped between the teeth. Several sorts of mints, *heesuh*, are used in a tea or decoction for colds or coughs. Ague is believed to be cured by a decoction of the little mullin, (*Eremocarpus seligerus—badah*) which grows on black adobe land in autumn. Colic is treated with a tea made from a greenish-gray lichen, (*Parmelia soxicola—wahattac*), found growing on stones. For rhenmatism they take the leaves and stems of a parasite vine (*Galium—sheshem*), which grows up in the middle of the chapparel bush, heat or burn them, and clap them hot on the place.

Yellow dock, *heel*, is a valnable specifie in their pharmacopœia. In case of acute pain of any description the root is heated hot and pressed upon the spot. In the spring the leaf is eaten boiled, for greens, together with clover and many other things.

Buuch-grass, *boopuh*, is the subject of superstition. They believe that the long, slender stalks of it, discharged as arrows from a little bow against a pregnant woman, will produce a miscarriage; also, that they will hasten the time of maturity in a maiden. There is another thing which they call *wocoamah*, probably wild parsnip, which they believe to be a deadly poison. It will produce nose-bleed, and the people who keep it in their houses will surely die. I will here state that I can not discover that the Indians ever used poisons to any considerable extent to rid themselves of enemies; if they did, it was the old medicine-men, and they keep the matter a secret. The Indians profess to stand in great and perpetual dread of being poisoned by one another; and no one will taste anything handed to him by one who is not a member of his family, unless the other tastes it first; but they imagine a hundred cases of poisoniug where one actually occurs.

Of grasses, they eat the seed of the wild oat, (*tootootem com*), but very sparingly. Wild clover, *cheewee*; alfilerilla, *battis*; and a kind of grass growing in wet places (*Melica—holl*) are all eaten raw when young and tender, or boiled for greens.

There are two kinds of mushrooms which they consider edible. The one of which they are fondest is called *poolcut*, and is a little round ball, from the size of a marble to that of a black walnut, found under-ground in chapparel and pine thickets. They eat it raw with great relish, or roast it on the ashes. Another kind is the *wachuh*, which grows in the ordinary form, brown on the upper side, chocolate-colored and deeply ribbed underneath, and easily peeled. It is eaten boiled.

Higher up in the mountains they find a root looking somewhat like cork, a piece of which they sometimes wear suspended to their clothing as a charm. It is called *chook* or *champoo*. Indians of other tribes in the State invest different species of *Angelica* with talismanic attributes.

Under the popular name of grass-nut there is included a large number of plants with a small, ronnd, bulbous root, all of which, with one exception, the Indians eat with much satisfaction. They are generally pried out of the ground with a sharp stick and eaten raw on the spot; but sometimes the women collect a quantity in a basket and make a roast in the ashes, or boil them. Most of them are by no means disagreeable to the civilized taste. There is the beaver-tail grass-nut (*Cyclobothra-wallic*), the turkey-pea (*Sanicula tuberosa—tuen*). the purple-flowered grass-nut (*Brodiœa congesta—oakow*); the tule grass-nut (*coah*), a small bulb, with a single, wiry, cylindrical stalk, growing in wet places, which I could not identify; the climbing grass-nut (*Brodiœa volubilis—oampoom wi*), sometimes planted by Americans for ornaments; the little soaproot (*Chlorogalum divoricalum—poyum*); the wild garlic (*Allium—cooeeh*); the eight-leafed garlic (*shal*), the five-leafed garlic (*inshal*), and the three-leafed garlic (*woolowe*); the yellow-blossom grass-nut (*Calliproa lutea—ustuh*); the long-leafed grass-nut (*Brodiœa congesta*, although the Indians have a different name for it from that mentioned just above, namely, *yoang wi*); the white-flowered grass-nut (*Hesperoscordium lacteum—yowak wi*); and the wild onion (*Allium cepa—chan*). There is one other grass-nut, with a black bulb (*Antictea—haccul*), which the Indians consider poison, although it probably contains no more poison than other members of the liliaceous family.

The list of greens which they eat in the spring is also quite extensive. Besides the grasses and the yellow dock above mentioned, there is the mask-flower (*Mimulus luteus—poosham*); two species of the *Angelica* (*hen* and *oamshu*), which are difficult to determine; the California poppy (*Eschelholtzia Californica—tapoo*), either boiled or roasted with hot stones, and then laid in water; the rock-lettuce (*Echeveris lanceolata—pettitac*), eaten raw; the wild lettuce (*Claytonia perfoliati—yau*), and a species of *Sanicula* (*mancoo*), the root of which, long and slightly tuberose, is also eaten. Of the wild lettuce a curious fact is to be noted. The Indians living in the mountains, about at the elevation of Auburn, gather it and lay it in quantities near the nests of certain large red ants, which have the habit of building conical heaps over their holes. After the ants have circulated all through it, they take it up, shake them off, and eat it with relish. They say the ants, in running over it, impart a sour taste to it, and make it as good as if it had vinegar on it. I never witnessed this done, but I have been told of it, at different times, by different Indians whom I have never known to deceive me.

Of seeds, they eat the following: A kind of coarse, wild grass (*Bromus virens—dodoh*) a species of yellow-bloomiug, tarry-smelling weed (*Madaria—coamduc*), the seods of which are as rich as butter; the yellow-blossom or crow-foot (*Ranunculus Californicus—tiss*) of which the seed is gathered by sweeping through it a long-handled basket or a gourd; a little weed which grows thick in ravines (*Blennosperma Californicum—poll,*) gathered the same way; also a weed (*sheeoo*) with little white blossoms distributed all along the stalks, which are thickly covered with minuto prickles —I know not what it is. All these seeds are generally parched a little, and then beaten to flour, and eaten without further cooking, or made into bread or mush. The dry, parched flour of the crowfoot seed has that peculiar, rich taste of parched corn.

There is an umbelliferous plant (*shokum*), the root of which the Indians esteem very highly for food; more highly than any other, it being their nearest equivalent to potatoes. I know not if it is the true cammas; I think it is at least a species of it. It grows on rocky hillsides, blossoms in June and July, has an extremely delicate, fringe-like leaf, and a root about an inch long and a quarter as thick, sweetish-pungent and agreeable to the taste. In Penn valley, Nevada county, they gather large quantities of it.

They are acquainted with the *Yerba anta*, but attach no particular value to it.

Around old camps and corrals there is found a wild tobacco (*Nicotiana plumbaginifolia—pan*), which they smoke with great satisfaction. They gather the leaves and dry them in the sun in a rude fashion, then cut them np fine. It has a pungent, peppery taste in the pipe, but is better than nine-tenths of the Chinese-made cigars. It is smoked in a wooden or stone pipe, which is constructed of a single straight piece, the bowl being simply a continuation of the stem, enlarged. I saw one made of soapstone, about six inches long, five inches of it being the bowl, which was nearly an inch wide at the extremity, so that it would hold enough to last half an hour. It was quite a handsome piece of workmanship, perfectly round and smooth, tapering evenly down to a bulb, which was inserted in the mouth. The tobacco pipe is called *panemcoolah*.

There are two plants used for textile purposes. One is a kind of tule-grass or small bulrush (*ouncas doccun*), which they hetcheled with flints or with their finger nails, bleached and wove into breechcloths. For strings, cords and nets they used the inner bark of the lowland milkweed (*Asclipias—poo*). When it is dry the Indian takes both ends of a stalk in his mouth and crushes it with his teeth, or else passes it over a stone while he gently taps it with another; then strips off the bark and twists it into strands, then into cords. The rock milkweed (*oampoo*) has a medicinal value; they use the root for the toothache, the same way the root of the buckthorn is used.

It is necessary to state that most of the medicines above mentioned are of the class which the women are allowed to become acquainted with and to employ it. There are several other substances which are more rare and valuable, or at least they deem them more valuable, and which the medicine men alone know anything about. They are found far up in the mountains or in other localities, and may be called the medicines of commerce, having a tolerably well-settled value in shell-money. I regret that I was generally unable to secure sufficiently complete specimens to determine them. For instance, there is a root, (*luhno,*) which I should call Seneca Snakeroot, but of which I could procure only a little piece. A root about as large as a pipe-stem and about four inches long and is worth about $1. A decoction of it is used for diarrhea, that scourge of aboriginal life, also for venereal diseases. There is a bush (*chapum,*) found in the mountains, with a very pale tea-green bark, and minute golden specks on the small limbs, which is probably California sassafras, and which is very highly esteemed for coughs and colds, a tea of the bark being given. Another root, (*pallic,*) spignet from its appearance, is made into a tea and drank for diarrhea; this also is very valuable. There is still another root, (*litway,*) found on the Truckee, which is good for the dropsy.

Although it is not strictly germain to the topic, I may be permitted to state that the Indians have names for all the internal organs of the human body; and their ideas of their functions and of the operations of medicine are at least as respectable as the Chinese.

Machine Wanted.—A correspondent of the New York *Tribune* says: Farmers generally require a machine, I think, such as I have never seen or heard of, but of which I have especially felt the need, as it will save labor and utilize forage. It is this: Say a machine that will pulverize, or crush, or grind, with once handling, our corn crop; that will reduce the entire growth, cob, shuck and stalk, as fine as ordinary meal. After the corn is cut and put in stooks(twelve hills square is the habit generally prevailing in the west); then as soon as the stooks are dry enough, feed them entire into the machine, which might be similar to a grain thresher, and propelled by steam or horse power. My object is to place the corn stalks, as well as the corn, in condition for the cattle to properly masticate, digest and assimilate.

A Railway Lamp Wanted.—The London Society of Arts offers its gold medal or $105 to the inventor of an improved lamp or means of illumination suitable for railway passenger carriages that shall produce a good, clear, steady, durable and safe light. It must be simple in construction, and capable of being readily cleaned and repaired. In judging the merits, cost will be taken into consideration.

Cat Tail Paper.—To the list of waste products that are now are now becoming utilized is to be added the common "cat tail," a plant that abounds in many marshy districts to a very great extent. M. Dupont prepares the fibre by boiling the cut and dried leaves for several hours in an alkaline solution, and then pressing between rollers and washing. Thus prepared it is valued at from $7 to $8 per hundred weight.

Agricultural Notes.

ALAMEDA.

Hay.—Livermore *Enterprise*, Oct. 17: Nearly 400 tons of hay has been shipped from here within the past week. The Grangers have finished their grain shipment from here for the present.

There is a movement among the farmers of Livermore valley to diversify their crops with tobacco.

The Livermore flour mills have been compelled to run until midnight for the past week to keep the custom work out of the way.

AMADOR.

Apples.—*Dispatch*, Oct. 17: Mr. Pernolet has left us several large apples, raised on his ranch, about two miles from town, the largest of which measured 16 inches in circumference and weighed a fraction over two pounds. They are what is called the Gloria Mundi variety, and Mr. Pernolet says he has plenty more of the same kind on his ranch. How is that for the foot-hills.

BUTTE.

Two tons of almonds were shipped from Bidwell's ranch, Chico, last week. The crop is estimated at five tons.

EL DORADO.

Raisins.—*Republican*, Oct. 14: Large quantities of raisins will be put up in this vicinity this season. It has been practically demonstrated that there is much more profit in the raisin than in the wine business.

The hay crop in Lake valley, at the head of Lake Tahoe, in this county, is reported larger this year than ever before; but vegetables have been seriously injured by frost. The potato crop has been almost entirely ruined.

The Saxe Brothers have sold to J. D. Minor and W. T. Clark, of Pleasant valley, five thoroughbred heifers. The price paid was $2.500.

Farming in the Foot Hills.—The Placer *Herald* of Oct. 7th, advises farmers to devote their attention to fruit growing rather than to the production of cereals. That journal says: "The soil here will not produce any heavier crops of these products than the soil in the valley; and if farmers there can only make a living profit on their hay and grain, where the land lies in large level bodies, and they can use to advantage all the labor-saving machinery known to modern science, how can farmers in the foothills where the tillable land lies in small bodies, and those so uneven as to exclude the use or machinery, expect to even do well?"

HUMBOLDT.

Wonderful Yield.—The Humboldt *Times* relates that three years ago, the brothers Foss, residing in that county, received a small package through the mail containing about a spoonful of oats which they planted on their farm, near the Table Bluff. Last year the produce of that spoonful was again planted, and the process repeated this year, there being seed enough to sow an acre and a half of ground. This has just been harvested and threshed, the acre and a half producing 200 bushels of oats, that weigh 40 pounds to the bushel, or at the rate of nearly 134 bushels to the acre. Such instances are by no means rare in this State. One of our most popular varieties of wheat had a beginning from not more than a dozen grains. It is now grown in most of the grain-producing counties.

KLAMATH.

Flax.—Bedrock *Democrat*, Oct. 14: Mr. S. B. McCord brought into our office on Thursday, a sample of flax raised in his garden in this city. He sowed the seed on new ground this last spring, and it has had but little attention, and was not regularly irrigated. It is three feet high and of strong fiber and fine texture, the seed is thoroughly ripe and very full and plump. The sample before us convinces us that flax can be made a profitable crop in our valley, and that the yield per acre will be very large.

The Union County Fair.—The second annual fair given by this society has been a grand success and has reflected great credit on the officers and members of the society.

KERN.

Fruit Raising.—*Southern Californian*, Oct. 15: Fruit raising in our valley is no longer an experiment. The fine samples of apples being brought to town every day demonstrate that we can raise as fine fruit here as any where in the State, and we hope our owners of farms, who have made up their minds to stay here, will at an early day put out orchards and vineyards. We believe limes, lemons and oranges can be successfully grown in many parts of our valley, if fairly tried.

Wool.—Wool continues to come into town in great prairie schooner loads, from the more remote ranches in the valley. Many of our sheep men have found it difficult to get shearers. Those we have talked with represent the clip this fall as unusually large; feed having been abundant, thus enabling stock to live without much driving.

Lumber.—Our local sawmills are running up to their fullest capacity at this time, so great is the demand becoming for lumber.

Sheep Raising on Alfalfa.—The Kern county *Courier* says: We hear constantly of purchases of land, in tracts generally averaging 160 acres, by men engaged in sheep-raising, who invariably expresses the intention of seeding their purchases with alfalfa, by way of providing a resource against dry seasons, and with the intention, in most cases, of ultimately withdrawing from the hill ranges altogether.

MARIN.

Shipping Facilities.—The matter of shipping facilities, which has been under discussion between the producers at Tomales and the railroad company, has been satisfactorily arranged. The company through Mr. Dutton, has agreed to run its track so as to leave a wagon road on the water line thirty-five feet wide for convenience of wharfage, etc.

The warehouse building at Tomales, by Warren Dutton is nearly completed. It is 300 ft. long by 60 ft. wide, and has 14,000 tons capacity. It contains 300,000 ft. of lumber and has an asphaltum roof.

L. Pedronzini, who has a dairy ranch of nearly 1,000 acres in Hick's valley, Marin county, states that the crops were unusually good in his section this season. The hay cut was much heavier than usual, the potato crop is abundant and the feed is richer and more plentiful than for five years past.

MERCED COUNTY.

Cotton Picking.—Merced *Tribune*, October 17th. Cotton picking commenced last week in this county. We are informed that the yield is greater this season than ever before. Eighteen cents per pound is the price paid at this point.

The Weather.—The weather the past week has been changeable. Last Thursday we were visited by a slight sprinkling of rain, not sufficient, however, to lay the dust.

MONTEREY.

Blooded Stock.—Monterey *Democrat*, Oct. 17: J. D. Carr has another addition of blooded sheep to his stock—50 in number. To his herd of short-horns he adds three head, purchased since the fairs. Dr. McDougall of Los Angeles buys from him a bull and cow, which will doubtless cut a figure at the Los Angeles cattle shows.

The Castroville *Argus* has been shown a radish which weighed 32 pounds. It was raised on the place of E. Mann, who says he has plenty more of the same kind left.

The First Ship.—George Pomeroy is loading the first wheat ship at Monterey.

SANTA BARBARA.

Almonds.—Ventura *Signal*, Oct. 17: L. D. Chillson will this year gather from his almond orchard of four acres two tons of almonds. His orchard is only six years old, and this year had no irrigation. His crop will bring him $800. Mr. C. has invented a hulling machine, which will greatly lessen the expense, and has filed a caveat for letters patent. The expense on his two tons will not this year probably exceed $200, leaving $600 clear profit—a very good income for so small a tract a land, on which there has been so little outlay.

Messrs. Bristol, Evans and Pierpont, this side of Saticoy, and a dozen farmers between Saticoy and Santa Paula, have proven that for peaches, nectarines, apples, apricots, almonds, walnuts, etc., the soil is not excelled.

A Big Grape.—Santa Barbara *Press*, Oct. 10: We saw, last week, at the fruit stand of Mr. Charles Leisure, next door to the library, a monstrosity of Carpenteria growth, in the shape of a mammoth grape, measuring five inches in circumference. The form and surface strongly resembled those of tomatos.

SANTA CRUZ.

Scarcity of Feed.—Santa Cruz *Sentinel*, Oct. 17:—Complaint is made that grass is very short and feed for stock scarce. Dairymen are now giving their milch cows green corn or alfalfa clover. Mr. H. Gushee, on the Laguna ranch has some fine Chili clover growing on his irrigated land, and it is now very valuable for his dairy stock. In Santa Cruz the milkmen have to feed chopped hay and bran to their dairy cows.

Sugar Beets.—The sugar beets on the west side of Soquel road, near Nathan Hart's place, do not look well. The land is too clayey. Beets do better in rich, sandy loam, or alluvial deposits.

SAN LUIS OBISPO.

Big Apples.—The San Luis Obispo *Times*, of Oct. 17, says:—We often hear of large fruit but it is seldom we are recipients of it. This time, however, it comes to us in the shape of a very large apple, from Rev. Mr. Stevens, of the M. E. Church of this place. It is of the twenty ounce variety, but this one goes over that. It weighs 26⅝ ounces, being 16 inches in circumference. It was raised on Mr. Andrews' place of this city.

[We would refer Bro. Stevens to the claim for preferrence put in by Mr. Pernolet of Amador in another portion of this page—Eds. Press.]

Lightning.—About seventy sacks of grain and a number of panels of feuce were destroyed by lightning in the Gaudalupe valley during the thunder storm last week also on the Laguna, near the Gaudalupe, a horse valued at $300, and a cow, and on the Suey, twenty-five head of sheep, were killed at the same time.

SIERRA.

Butter.—Mountain *Messenger*, Oct. 17: It is said that the butter crop of Sierra valley will be larger this year than ever before. From carefully prepared estimates it is believed that the yield will reach 100,000 pounds.

Harvesting is mostly over with, and the question of good and poor crops is settled. The hay crop is rather more than the average, while the grain, owing partly to the lateness of the spring, and heavy frosts in August, is far below. The latter was probably more fatal than the former, it being the time when the grain was more susceptible to injury. All counties and climes though have objectionable features. Taken all in all the farmer is well satisfied, and fast preparing for the approach of winter.

SOLANO.

Cherry Blossoms in October. — Vallejo *Chronicle*, Oct. 17: In the garden of Mr. Geo. A Poor, on Sacramento street, is a cherry tree, which on this 12th day of October is in full bloom. It is a young tree, too, and has never borne fruit. If anybody in this State happens to have a cherry tree lying around their premises which can beat this, let them trot her forth.

Three tons of apples and tomatoes are dried daily at Vacaville.

SUTTER.

Drainage.—The Sutter *Banner*, of Oct. 15th gives the following advice: Farmers, attend to the drainage of your lands—those spots in your farms where the grain was drowned out last winter. Much can be done with the plow alone by turning the furrow outward from one low place to another. The larger basins should be ditched by a union of all interested, following the natural course of the water, and where a contrary land owner objects, force an outlet in accordance to law. All farmers have a right to drain where drainage is practicable. If provisions are not made in our State laws for this important matter, it should be, for the farmers of other States, have no trouble in this respect.

Plows and Blue-stoning Machines.—The Empire foundry is about to commence work on a contract to turn out two hundred gang-plows of the Myers' patent. Also, twenty-five blue-stoning machines, for John Wilkie, of Sutter county. This machine was awarded a diploma at the State Fair, and is said to operate very successfully in its work of blue-stoning seed.

Ducks.—Wm. Van Fleet, of the Buttes, raised from the eggs of twelve ducks last spring, over one thousand ducks.

SONOMA.

Pure Blood Angoras.—Russian River *Flag*, Oct. 15: Chas. Alexander took two pure blood Angora bucks through town this week, on the way to his ranch. They were recently imported from Asia, and Mr Alexander bought them, at an expense of $100, to put with his flock of graded goats. He has one pure blood doe and about 150 does ranging from one half to thirty-one thirty-seconds Angora blood.

The recent rainfall was very injurious to pasturage, taking the substance out of the old grass and being insufficient to start the new.

Over five tons of dried fruit were shipped from Healdsburg to San Francisco to-day.

The grape crop finds a ready market at Healdsburg at $20 per ton.

E. Catlin came in last week with an armful of clippings from his vines, on which there were three sets of grapes—some bunches dead ripe, others not yet full grown and others not half grown.

Cotton.—Petalnma *Argus*, Oct. 16: W. H. Sinclair of Guerneville, yesterday left at this office a stalk of cotton grown on the ranch of Mr. Rutland, in Butte county, six miles from Colusa. It was taken from a field of twenty acres, a portion of which will yield 1,000 pounds of seed cotton to the acre. The seeds constitute about one-third of the weight of ordinary cotton. The culture of this product is fast becoming an important industry in California. In localities best suited to its growth the yield is fully as large and the quality as good as in the most favored districts in the Southern States. The time for planting in this State is from April 15th to May 1st. The crop ripens from the 1st to the 15th of August. The production of cotton is considered less exhausting to the soil than most other crops, which is a good point in favor of its cultivation. Mr. Sinclair, who was raised in the great cotton producing State of Mississipi, and is familiar with the characteristics of the plant, is of the opinion that it will not thrive in Sonoma county. We should like to see the experiment tried in various localities.

Potato growers in Sonoma and Marin counties have commenced gathering their crops. The yield is good.

The profits of the Petaluma fair were seven hundred dollars.

STANISLAUS.

Vegetation Starting.—Calaveras *News*, Oct. 16: We notice that in several fields in the vicinity of town, vegetation is already springing up, caused from the moisture of the ground, produced by the late rains.

YOLO.

Pop Corn.—Yolo *Mail*, Oct. 12: John Fowler, living on the tules near the sink of Cache creek, raised this season, from ten acres of tule land, five tons of shelled pop-corn from four acres, and from 80 to 100 bushels per acre on the other six. We saw some of the ears, and they are very large—the kernels being round and full. The question of the utilization of the tule land is being rapidly solved; but of course some of it will never be brought under cultivation.

Fine Blooded Stock.—Geo. W. Scott, of Cottonwood, purchased at the late State Fair, the Bridgeford heifer which took the first premiums at the San Francisco and State fairs. The heifer was sold at auction, and he paid $415 for her. He had before purchasing this heifer a male full-blood of the same stock, and they are considered the finest in the State. Mr. Scott is one of our largest and most enterprising farmers, and just smart enough to understand that it pays to buy the best.

Wheat in Storage.—A large quantity of wheat, some 15,000 tons, is in store at Knight's Landing. Wheat at that point is quoted at $1.30.

YUBA.

A Lemon Tree in Marysville.—C. G. Bockius has a lemon tree at his residence in Marysville, which contains fruit of full size, as well as blossoms for the coming crop.

YREKA.

Large Increase.—Yreka *Union*, Oct. 17: A Scott valley correspondent stated in a recent communication that Mr. L. Wilson, of Crystal creek, had planted one pound of seed potato from which he had obtained 214 pounds of potatoes. Mr. Jas. A. Davidson, of Fort Jones, observing this statement, "rises to explain." He says that from a single pound of seed—the same variety as that planted by Mr. Wilson—he obtained 390 pounds of potatoes. Besides these yields, the examples cited by our Savior, when "interviewed," of increases 40, 60 and 100 fold, seem tame and insipid. But then it must be recollected that at that time the "Irish potato" and California were still in the "womb of the future."

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Oct. 20th, 1874.

For Week Ending Oct. 6th, 1874.

Billiard Cushion. — Richard Kind, S. F., Cal.

Quartz Mill Feeder.—Thomas J. Wood, Sonora, Cal.

Billiard Table Leveler.—Geo. C. Brotherton, San Quentin, Cal.

Vehicle Spring.—Miltou Newell, S. F., Cal.

Machine for Transmitting Power.—Albert Reed, Oroville, Cal.

Grain Separator.—Nathan M. Brown, Pescadero, Cal.

Transplanter. —Timothy Carroll, Anaheim Cal.

——The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

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S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

San Francisco, Wednesday, Oct. 21st, 1874.

The most notable event of the week has been the failure of the agent of the Grangers in this city, A. F. Walcott, representing the firm of E. E. Morgan's Sons. The amount of the liabilities is not at the present writing accurately known. It has been estimated all the way from $164,000 to $500,000. The former is the sum for which an attachment has been issued by the London and San Francisco Bank. The causes of the failure appear to be unsuccessful operations last year, and the charter this year of 70 vessels at £3 10s@£4 2s 6d per ton, the spot rate having fallen here at present to £3 @£3.5, and they being obliged to furnish vessels to the Grangers at the reduced rates. Of those vessels 38 are now on the way, 15 are in port, the balance having been dispatched with Wheat. Under ordinary circumstances such a failure would have caused wide-spread dismay, and it will doubtless shake faith in the Granger movement to a certain extent. The bills of lading have been made out in the name of the organizations or individuals that shipped them, and they are responsible only for the amount advanced; but on arrival at Liverpool, and on sale of cargo the owners of the vessels can recover the full amount of the charter rate made with the agents here. The difference between this and the rate at which the vessels were rechartered to the Grangers will be the only loss sustained by the shippers of Wheat, and it is to be hoped that it will be light. There are many things in the agreement by which this firm and the Grangers were connected that are justly open to criticism, but it requires mistakes and errors to show the strength or weakness of every cause; and when it recovers from a blow of this kind it is always the stronger from the experience gained thereby.

RECEIPTS OF BAY PRODUCE

This week have been in most instances larger than those of last week—those of Hops, however, have declined nearly two-thirds compared with the previous week. The aggregates are:—Flour, 3,486 qr-sks; Wheat, 224,511 ctls; Barley, 16,400 do; Oats, 3,337 do; Corn, 15 do; Bran, 1,120 sks; Middlings, 398 do; Beans, 3,070 do; Mustard Seed, 381 do; Flaxseed, 256 do; Hay, 15,301 bbls; Straw, 1,471 do; Hops, 187 do; Wool, 4,006 do; Ootton, 5 do; Potatoes, 4,125 sks; Onions, 1,747 do; Wine, 15,298 gallons; Brandy, 40 do; Hides, 1,958; Pelts, 142 bdls; Skins, 4 hdls; Leather, 133 rolls; Salt, 160 tons; Lime, 1,000 bbls; Paper, 810 reams; Quicksilver, 545 flasks; Sugar Pine Lumber, 254 M ft; Tan Bark, 100 cords; Butter, 804 ctls; Cheese, 700 do; Tallow, 548 do; Crude Soda, 423 ctls; Granite, 83 tons; Base Bullion, 1,016 ctls; Marble, 29 tons; Ice, 50 do; Borax, 848 ctls; Copper Ore, 886 ctls; Ochre, 278 tons; Antimony, 218 lbs; Chicory, 85 bbls; Raisins, 1,259 bxs; Doors and Blinds, 1 car; Eureka Hair, 32 hls; Almonds, 6 bxs and 16 sks; Broomcorn, 34 bdls; Peanuts, 5 sks.

Broomcorn—Steady at 5 to 8c ₱ lb.

Beeswax—Steady at 25 to 27c ₱ lb.

Barley—Feed has advanced 5c. Receipts last week 16,460 ctls of Bay, and 7,655 bags of Coast. Sales of 3,000 sks Coast at $1.07½, 2,000 do at $1 to 1.02½, 1,000 do Choice heavy Bay Brewing at $1.30, 3,200 do Coast Feed at $1.10, 5,800 do Bay Brewing at $1.25, 250 do Coast at $1.12½, 820 do Bay at $1.20, 500 do Brewing at $1.50 17 car loads for Cincinati at $1.17½, and 10 car loads at $1.12½.

Buckwheat—Nothing to report—no transactions.

Beans—Receipts last week 3,070 sks of Bay and 825 do of Coast; no change in quotations.

Cotton—Steady at 18c, at which rates three sales of 3,000 lbs, 8,000 lbs, and 11,000 lbs respective, in all 22,000 lbs, were made last week.

Corn—Steady at $1.35, although we note a sale of 300 sks of Yellow at $1.25.

Cornmeal—For both Feed and Table is fair at last week's quotations.

Feed—Firm at last quotations. Bran $17, Middlings $27, Oil Cake Meal $30.

Fresh Meats—There has been a further decline in Pork—in Dressed of ½c, on loot of ½c ₱ lb.

Fruit—The market is well supplied with Apples, Peaches, Plums, and Grapes, but Pears and Oranges are wanted.

Flour—No change in prices. Exports for the week, 18,069 bbls. Sales of 500 bbls Extra at $4.62½, and 300 do Superfine at $4.30 by the Golden Age Mill per "Malay," to Hongkong, and 2,000 bbls Extra to Central America, 1,400 bbls El Dorado Superfine and 700 bbls Extra for China per "Vasco de Gama," by the Golden Gate Mills.

Game—The market is pretty well supplied. Hare is cheaper than last week, and Rabbits rather dearer. Venison is cheaper.

Hops—Weaker by 2½c. Quotable from 32½ to 37½c. Consigments still continue to be sent to New York. Receipts last week small.

Hay—Steady within the range of $9 to $15. Sales of 20 tons common at $9, 10 do Choice at $14, and 20 do Medium at $10.50.

Hides—Both Dry and Wet Salted in good demand at current rates.

Honey—Three car loads went East last week. Prices weak. Sales of 8,000 lbs at current rates.

Nuts—California Walnuts and Peanuts in small quantities have begun to arrive. A small lot of California Chestnuts raised from Italian seed, were sold last week, bringing 50c. The grower O. G. Briggs, of Davisville, has also grown a lot of Soft Shell Almonds (10,000 lbs), for which he expects to get 17c. Cocoanuts have advanced to $70 ₱ 1,000.

Oats—Receipts last week 3,337 ctls of Bay, and 8,400 sks of Coast. Steady for the past few weeks. Sales of 1,000 sks of Good Feed at $1.45, 300 do Light at $1.37½, 250 do do at $1.40, and 800 do Surprise at $1.60.

Onions—We quote Yellow at 70e, the same as last week. Sales of 195 sks of Yellow at 65c, and 88 do at 75c.

Potatoes—Receipts this week 12,593 sks. Sweet Potatoes have advanced 12½c to $1.50, others have decreased 2½ to 5c, range being from 90c to $1.07½. Sales of 1,500 sks of Pigeon Point at $1.05, 500 do at $1.10, 1,000 do Cuffey Cove at $1.05, 500 do Humboldt at $1,15, 100 do Half Moon Bay at $1, and 500 do Tomales at 90c to $1.05.

Pearl Barley—Weaker at 5¾ to 6¾c, at which rates 300 hxs have been sold for China.

Poultry—Is in good supply at currant rates.

Rye—Receipts of Coast for the week 200 ctls. The price has advanced to $1.12½, in consequence of concentration.

Seeds—Firm and unchanged at last week's quotations.

Straw—Is in fair demand at 50 to 60c per bl.

Tallow—Dull, the usual purchasers not being now in the market, and there being none but poor facilities for export.

Wool—No sale of any account this week. Market dull, and buyers complain that they have no orders. Holders are willing to make concessions on quoted prices, but cannot get any offer. Receipts last week, 4,606 bls for the interior and 865 do by coastwise steamers. The following is a telegraphic review of the Eastern markets.

"The general market is comparatively tame, and values as a whole are charactorized by less determined firmness and buoyancy than a few weeks since. Holders, of strictly fine stock, domestic and foreign, however, yet claim full prices in view of very meager offerings.

Large sales are difficult to effect of other than choice qualities, unless at concessions more or less important from late asking figures. Manufactures generally content themselves with moderate purchases of stocks, as their necessities arise. California new Fall clip continues to find eager purchasers upon arrival, and prices are in consequence fully sustained. Spring is rather quiet, as hut few choice lots remain unsold. Sales comprise 180,000 lbs Fall at 25 to 26c, part private; 40 hls Spring, 33½c; 100,000 lbs hurry and free, private; 3,500 lbs pulled, part 72c; 20,229 lbs scoured, part 90c. At Boston the market is quiet, although a better feeling prevails, from the fact that several mills have increased from three quarters to full time. Sales of California are 144,000 lbs at 20 to 39c for Spring, 27c for Fall and 26c for Lamba' pulled."

Wheat—Though the Liverpool market has remained stationary, the local has advanced 5c, quotations being now $1.45 to $1.50 for Shipping, and $1.50 to $1.55 for Milling. The quotations in Liverpool as telegraphed last evening were $2.41 to $2.49 for average California and $2.51 to $2 61 for Club. The quotation for average California in Liverpool for the last three years have been as follows.

Year.	Date.	Price.
1874	Oct. 20	$2.41 to $2.49
1873	Oct. 19	$3.02 to $3.04
1872	Oct. 18	$3.16 to $3.20

This shows a falling off in the Liverpool market of 58c, as compared with 1873, and of 73c as compared with 1874. This is not so great a falling off as shown by the figures given last week, and therefore considering that in 1872 and 1873 during the third week in October there was a decline, and that there was no decline this year, this is equivalent to an advance. Sales for the week:

13,300 sks at		$1.45
3,700	do	1.50
9,400 sks	Coast	1.42½
1,750 sks	Inferior	1.37½
2,500	do	1.47½
700	do	1.32½
300	do	1.32½ @$1.35
1,400 sks	Fair Coast	1.30
1,400 sks	Inferior	1.27½
1,500 sks	Medium	1.40
1,000	do	1.52½
120 sks	Poor	1.20
1,000 sks	Oregon Seed	2 10
2,000	do do	2 00

Receipts last week, 224,511 ctls Bay and 5,228 Coast. Exports 239,736 ctls, as follows:

Vessel	Destination	Cargo	Value.
Adriatic	Liverpool	46,507	$69,760
Waltikka	Queenstown	31,386	62,900
Helena Anna	Batavia	695	1,200
Star of Scotland	Liverpool	31,574	47,361
Eric the Red	"	52,107	78,161
Loch Awe	"	32,543	48,814
Lutterworth	"	27,078	40,700
Malay	Hongkong	500	1,485
Evelina	Cork	17,346	25,800
Total		239,736	$376,181

DOMESTIC PRODUCE.

Wednesday M., Oct. 21, 1874.

Not much change. Wheat dropped a little. Sweet potatoes plenty and falling; quality good. Irish potatoes low, notwithstanding reports of poor crop. Quality not so good as last year.

BEANS.

Beans, sm'l wh. ₱ lb	3¼	@	—
do. butter	4½	@	—
do, bayo	2¼	@	—
do, pink	2	@	—
do, pea	—	@	—

BROOM CORN.

Per lb	5	@	8

BUTTON.

Cal. 1874 ₱ lb	—	@	18

DAIRY PRODUCE

Butter, Cal. choice	lb 50	@	55
do, good	45	@	55
do, inferior	32½	@	45
do, firkin	30	@	35
do, pickled	35	@	42
Cheese, Cal. new	12½	@	17
do, Eastern	12	@	17

EGGS.

Eggs, Cal. fresh	—	@	42½
do, Oregon	20	@	25
do, Eastern	15	@	25
do, Ducks'	40	@	42½

FEED.

Bran, per ton	—	@	17 00
Middlings	—	@	27 00
Hay	9 00	@	14 00
Straw, ₱ bale	—	@	— 55
Oil cake meal	—	@	30 00
Corn Meal	—	@	32 00

FLOUR.

Extra	4 25	@	5 62½
Superfine	3 90	@	4 30

FRESH MEAT.

Beef, fr quality.. lb	7	@	8
uo, second do..	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed	8¾	@	6½
do, dressed	8½	@	9

GRAIN, ETC.

Wheat, coast	1 45	@	1 50
do shipping	1 40	@	1 45
do milling	1 50	@	1 55
Barley, coast	1 05	@	1 10
do brewing	1 15	@	1 25
Oats, ch ice	1 50	@	1 65
do common	1 35	@	1 55
Corn, White	—	@	1 35
do, Yellow	—	@	1 35
Buckwheat	2 75	@	3 00
Rye	—	@	1 02½

HOPS.

California, 1874	32½	@	37½
East'rn, 73&c ice	—	@	—

MISCELLANEOUS.

Beeswax, per lb	25	@	27½
Honey in comb	18	@	22½
do Strained	5	@	10
Pulu	9	@	10½
Onions	60	@	90

NUTS—JOBBING.

Cal. Walnuts	10½	@	12½
Peanuts per lb	7	@	9
Chile Walnuts	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds h'rd sbell	10	@	12½
do, soft	20	@	25
Filberts	17	@	18
Cocoanuts, 1000,60	00	@	—

POTATOES.

Sweet, per cwt	90	@	1 07
Cuffey Cove	—	@	1 05
H. M. Bay	1 00	@	—
Pigeon Pt	—	@	1 20
Humboldt	—	@	1 15
Petaluma	—	@	—
Mission	80	@	90
Salinas	50	@	70
Bodega	—	@	—
St Barbara	—	@	—
Sac. River	—	@	—

POULTRY & GAME.

Live Turkeys, hens per lb	16	@	17
do gobblers	16	@	17
Hens, per dz	5 00	@	6 00
Roosters, young, large	5 00	@	6 50
Broilers, small	2 00	@	3 00
do large	3 00	@	4 00
Ducks, tame, doz	5 00	@	6 00
Geese, per pair	2 00	@	2 50
Hare, per doz	3 00	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	1 75
Mallard Ducks	3 00	@	4 00
do small	—	@	2 00
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	50	@	75
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 25	@	1 50
do tame	5 00	@	6 00
Venison, per lb	6	@	8

PROVISIONS.

Cal. Bacon, Light	—	@	16½
do Medium	—	@	15½
do Heavy	—	@	13½
Eastern do	14	@	16
Hams, Cal	14	@	14½
do Whittakers	—	@	17
do Duffield, cb	—	@	15½
do Plankton & Arm ur	—	@	15
do Boyd's	15	@	16
do Stewart's	—	@	16½
Eastern Should'rs	9	@	9½
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	—	@	14½

SEEDS.

Alfalfa, Chili	—	@	11
oo Californ'a	—	@	14
Canary	4	@	4½
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	3	@	4
do. Brown	2	@	2½
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	—	@	11
Timothy	11	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Mesquit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Alsike	—	@	60

WOOL, ETC.

FALL—			
Good to ohoice	19	@	22
Fair grade	18	@	18
Heavy free	14	@	16
Defective	12	@	15
Hides, dry	19	@	20
do wet salted	8½	@	9
Tallow, Orude	5	@	6
do Refined	6½	@	7½

RETAIL GROCERIES, ETC.

Wednesday M., Oct. 21, 1874.

Cheese has advanced. Butter and syrup still up.

Butter, Cal. choice	—	@	65
do common	45	@	—
Obecse, Cal., lb	15	@	25
Lard. Cal., lb	18	@	20
Flour, ex. fam., bbl	5 00	@	5 50
Corn Meal, lb	3½	@	5
Sugar, wn. orsb'd	—	@	12
do lt. brown, lb	7	@	10
Coffee, Hawley & Co family gr'nd, lb	25	@	40
Coffee, green, lb	25	@	35
Tea, fine blk, 50, 65, 75	—	@	1 00
Tea, finst Jap, 55, 75, 90	—	@	1 00
Candles, Admant'e	15	@	30
Soap, Cal., lb	6	@	10
Rice, lb	—	@	12½
Yeast Powders, dz	1 50	@	2 00
Can'd Oysters, dz	200	@	4 00
Syrup, S F. Gol'n	—	@	75
Dried Apples	8	@	10
Dr'd Ger. Prunes	14	@	16
Dr'd Figs, Cal	9	@	10
Dr'd Peaches	10	@	12½
Oils. Kerosene	28	@	33
Wines, Old Port	3 50	@	5 00
do Fr. Claret	1 00	@	2 50
do Cal., dz. bot	3 00	@	4 50
Whisky, O.B, gal	3 50	@	5 00
Fr. Brandy	4 00	@	10 00

FRUITS AND VEGETABLES.

Wednesday M., Oct. 21, 1874.

There has been but little change in the Fruit market since last week. Oranges and limes scarce. Peaches are nearly out of market; also some varieties of grapes. Apples coming in freely, and selling low.

FRUIT MARKET.

Tahati, Or. ₱ M	—	@	35 00
Lorita, do	—	@	— —
Cal. do	—	@	— —
Limes, ₱ M	—	@	20 00
Cal. Lemons, ₱ M	—	@	45 00
Australian do	—	@	— —
do per box	—	@	— —
do Sicily ₱ b'x	—	@	— —
Bananas, ₱ bnch	3	@	4 —
Cocoanuts, ₱ 100	—	@	— —
Pineapples, ₱ dz	5 00	@	7 50
Apples, ₱ box	40	@	1 25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	-	@	—
Strawberries ₱ lb	15	@	20
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	—	@	6
Peaches, bskt	1 00	@	1 50
do, ₱ box	—	@	—
do ext Mountain lb	5	@	8
Pears, Bart't, bx	—	@	2 50
do Cooking	40	@	1 25
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel's ₱ 100	6 00	@	10 00
Muskm'l's ₱ 100	5 00	@	10 00
Pomegran's ₱ 100	6 00	@	7 00
Figs	—	@	3
Grapes, Bl'k H'g	75	@	1 00
do Muscat	1 00	@	1 50
do Malavo'e	—	@	—
do Sweetw'r	—	@	75
do Mission	1	@	2
do Rose of Peru	—	@	3
do Tokay	75	@	1 25
do Morocco	6	@	8
do St. Peter	—	@	—

DRIED FRUIT.

Apples, ₱ lb	7	@	8½
Pears, ₱ lb	10	@	11
Peaches, ₱ lb	8	@	10
Apricots, ₱ lb	10	@	12½
Plums, ₱ lb	8	@	10
Pitted, do ₱ lb	—	@	15
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	5	@	—
White, do	10	@	15
Prunes	6	@	8
do German	14	@	—
Citron	@27½		32½
Zante Currants	8	@	—
Dates	12½	@	—

VEGETABLES.

Asparagus	—	@	—
Beets	—	@	1
Cabbage, ₱ 100 lbs	50	@	75
Carrots, ₱ 100 lbs	60	@	87½
Cauliflower, doz	50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	8	@	10
Green Peas	3	@	3½
Green Corn ₱ doz	15	@	20
Sqn'rSquash, box	—	@	1 25
Marro'fat Sq'sh, tn	8	00@	10 00
Artichokes, ₱ doz	15	@	25
String Beans, ₱ lb	1½	@	2½
Lima Beans	4	@	5
Parsnips	12½	@	15
Shell Beans	—	@	4
Peppers, green ₱ lb	6	@	7
Okra ₱ lb	—	@	8
Okra, Green	6	@	8
Cucumbers, box	50	@	—
Tomatoes, box	62½	@	75
Egg Plant, box	1 00	@	—
Rhubarb	—	@	—
Lettuce	10	@	—

GENERAL MERCHANDISE.

Wednesday M., Oct. 21, 1874.

BAGS.

Eng. Stand Wbt	—	@	12
Detrick's Machine Sewed, 22x36 E	12	@	12¼
do 22x36, do E W	—	@	13¼
do 20x40, do A	—	@	13½
Flour Sacks ½s	9½	@	11½
" ¼s	6	@	7
Stand. Gunnies, double seam	15	@	15½
single seam	13¾	@	14
" Wool Sacks	60	@	67½
Barley Bags 24x36	—	@	14
do 23x40	—	@	14½
do 24x40	—	@	15
do 28x36	—	@	16
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 10-in. gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15

CANNED GOODS.

Aaat'd Pie Fruits in 2½ cans	2 75	@	—
do Table do	3 50	@	4 00
Jams & Jellies	3 75	@	4 00
Pickles ½ gl	—	@	3 50
Sardines, qr hoxl	85	@	—
do bf boxes	3 25	@	—

COAL—Jobbing.

Australian, ₱ ton	10 50	@	11 00
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11 —
Cumberl'd, cks	—	@	18 00
do bulk	16 00	@	17 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	17 00
Liverpool	16 50	@	11 —
West Hartley	9 ?	@	10 00
Scotch	10 00	@	11 00
Scranton	—	@	13 00
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60

COFFEE.

Sandwich Island	—	@	22
Central Americ'n	19	@	20
Costa Rica per lb	19	@	22½
Guatemala	19	@	20½
Java	—	@	27
Manilla	19	@	20
Ground in cs	9	@	27
Chicory	9	@	10

FISH.

Pac. Dry Cod, new	5	@	—
cases	—	@	—
do honeless	11	@	12
Eastern Cod	—	@	—
Salmon in bbls	9 00	@	9 25
do ½ bbls	4 50	@	4 75
do 2½ lb cans	—	@	3 00
do 2 lb cans	2 65	@	2 75
do 1 lb cans	1 75	@	—
Do Col. R. ½ lb	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bbls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	2 00	@	2 50
" Ex mess	3 00	@	3 50
" Ex mess. ½ bs	—	@	12 00
Sm'k Herr'g, bx	50	@	60

NAILS.

Assorted size, lb	4 37½	@	7 50

OILS.

Pacific Glue Co. Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No. 1	—	@	1 75
do do No. 2	—	@	1 60
Cocoanut	60	@	65
Olive Plagniol	5 00	@	—
do Possel	4 75	@	—
Palm lb	9	@	—
Linseed, raw	—	@	1 05
do boiled	—	@	1 10
China nut in oa	82½	@	88
Sperm, crude	—	@	1 40
do bleached	—	@	2 20
Coast Whales	60	@	—
Polar, refined	50	@	55
Lard	1 15	@	1 30
Coal, refined Pet	37½	@	—
Oleophine	20	@	23
Devoe's Bril't	25	@	28
Long Island	20	@	23
Enreka	—	@	—
Devoe's Petro'm	20	@	23
Barrel kerosene	20	@	23
Olive	4 00	@	9 50
Downer Kerose'e	—	@	37½
Gas Light Oil	—	@	26

PAINTS.

Atlan. W. Lead.	6	@	10¾
Whiting	—	@	2
Putty	4	@	5
Chalk	—	@	2½
Paris White	2¾	@	—
Ochre	2	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litbarge	10	@	11
Eng. Vermillion	2 00	@	2 10

RICE.

China No. 1, ₱ lb	6¾	@	6¾
do 2, do.	5½	@	5¾
Japan	—	@	6½
Siam Cleaned	5½	@	—
Patna	5½	@	5¾
Hawaiian	7¼	@	8
Carolina	10	@	10½

SALT.

Oal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	—	@	22 00
do coarse	16 00	@	—

SOAP.

Castile ₱ lb	10	@	11
Local brands	5	@	8

SPICES.

Cloves	45	@	50
Cassia	26	@	27
Citron	—	@	30
Nutmeg	1 20	@	25
Whole Pepper	18	@	19
Pimento	—	@	15½
Gr'nd Allsp'ce	—	@	12½
do Cassia	—	@	1 50
do Cloves	—	@	1 50
do Mustard	—	@	1 20
do Ginger	—	@	1 00
do Pepper	—	@	1 00
do Mace	—	@	2 00

SUGAR, ETC.

Cal. Cube per lb	11½	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12¼
Circle A crushed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	1
Golden C	—	@	—
do Reg'g grade	—	@	6 9½
Cal. Syrup in bls	—	@	70½
do in ½ bls	—	@	67½
do in kegs	—	@	75
Hawaiian Molasses	25	@	27½

TEA.

Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@1	00
Gunpo'der, Oant	30	@	42½
do Pingsney	50	@	90
do Moyune	65	@1	25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55

TOBACCO—Jobbing.

Bright Navys	50	@	55
Dark do	50	@	55
Dwarf Twist	65	@	70
12 inch do	60	@	70
Light Pressed	65	@	75
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Ohio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine cut che'g, gr	8 50	@9	25
Fine cut chewing, bu'ts	75	@	90
Banner fine cut	9 00	@9	25
Eureka Oala	—	@9	00

TURPENTINE.

Eastern	65	@	70

LUMBER.

Wednesday M., Oct. 21, 1874.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$18 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref. M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

PUGET SOUND PINE —Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal foot	1c
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾

REDWOOD—Retail.

Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	25 00
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 50

LEATHER.

Wednesday M., Oct. 21, 1874.

Trade is fair, and prices hold firm. Little change.

City

Stock Notices.



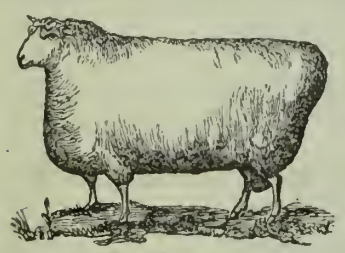
300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m



SULTAN SECOND.

Angora or Cashmere Goats of pure blood and all grades for sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address N. Gilmore, El Dorado, El Dorado County, Cal.



We respcetfuliy invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we gusrantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,

13v7-eow-tf Watsonville, Cal.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Puro-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,

SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

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GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

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7v8-3m

Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco,



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and 3x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

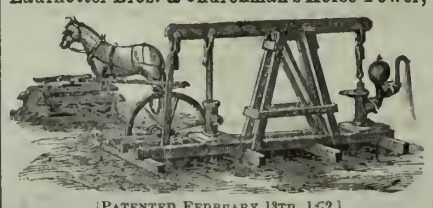
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

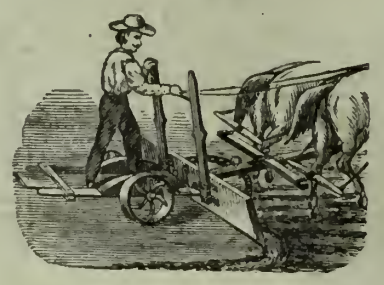
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THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

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The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

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The RURAL PRESS—established Jan., 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

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We refer with satisfaction to the independent, chaste and useful character of our reading matter and the absence from our columns of questionable and demoralizing advertisements.

We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfinities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

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The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
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Horned Stock,	Pasturage, etc.,
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Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast; that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

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Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation, might never be placed on record or reach the eye of the reading public. Of our many

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We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

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Representing Choice Stock, Farm Products, Scenery, Remarkable Productions, Improvements in Farming Implements and Machinery, Works of Art and the Beautiful in Nature, we shall from time to time present the modest

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Has a Set or Hair Trigger which can be used at will—set or not set, as preferred. All the arms have a sliding lid which covers the opening in which the Carrier Block moves up and down. This lid, by the action of the Carrier Lever, is always open when the gun is fired, and closed by hand when the firing ceases, thus protecting the lock and inner works of the gun from dust and rain.

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There is now a greater variety of the Sporting Rifle than heretofore. They can be had with a length of barrel (round or octagonal) ranging from 24 to 30 inches, fitted with Globe and Peep Sights, or any other kind in use.

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The Sporting Rifle and Carbine will also be made as Extra Arms, Gold, Silver or Nickel Plated, plain or beautifully engraved.

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Sole Agent for Pacific Coast,

NO. 108 BATTERY STREET, SAN FRANCISCO.

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C. J. CRESSEY, Vice-President.
415 California street
San Francisco, Sept. 8th, 1874. sep12-4t

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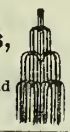
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sep12-tf

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Grain received on Dock, weighed and delivered to order, or stored without expense of wharfage or cartage.
Refer, by permission, to E. E. Morgan's Sons, S. F.
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3v6-1y

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11v7-6m

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Or C. J. CLAYTON,
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BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

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PACIFIC RURAL PRESS

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The Sweepstake Plow Company's Works.

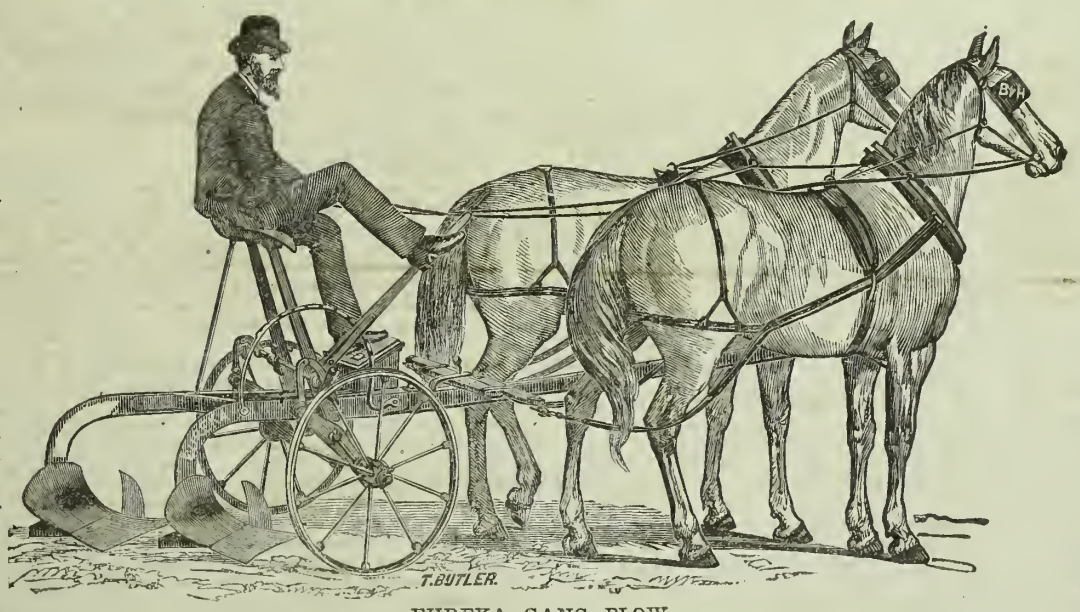
In visiting the beautiful little town of San Leandro, the most prominent object met with is the manufactnring establishment of the Sweepstake Plow Co. The works occupy two large buildings, and these are found very inadequate to the demand for room. This is the principal establishment on the coast devoted to the manufacture of agricultural implements, and the business has rapidly grown into one of the most important industries on the coast. The question is fast being demonstrated that it is better to manufaeture than to import. This company employs about ninety men, and find the demand for their wares, sold through the well known firm of Baker & Hamilton, constantly increasing. The main room of the largest building contains the machinery upon which the woodwork of the implements is prepared. All this machinery is of the latest and best, and everything possible is done by steam power—boring, mortising, sawing, planing, drilling, punching, polishing, etc. In a sideroom, running the whole length of the main room, are the blacksmith's forges, eight in number. The shop is supplied with two steam power hammers, and inventive genius is disp ayed everywhere. In the rear of the main building is the foundry, where all the castings used in the machinery are moulded. The filling of the moulds at night with the melted metal from the furnace is a sight worth seeing. The glowing. red, molten stream as it is poured from the iron kettles into the moulds lights up the whole room with a beautiful yellow light. Myriads of beautiful sparks go dancing and crackling in all directions. This is the poetry of blasting; the prose is the lifting, carrying and emptying of these heavy buckets, the heat from which is very intense. It requires powerful men to handle these kettles. The work turned out is of first quality. The grinding and polishing of the mould boards, which is done by machinery, is very interesting. The grinding is done upon a very large stone, with a very rounding surface. The plows are placed on a machine something like a long wheelbarrow, a man taking hold of the handles and holding the plows against the stone, moving them constantly backward and sideways. They are then placed upon another wheelbarrow and brought in contact with a wheel revolving with great velocity, the surface of the wheel being prepared with emery. This is done dry of course, and the contact of the steel with the rapidly revolving wheel produces a magnificent shower of glowing sparks, the metal becoming very hot by the friction. A very fine polish is put upon the plows. Perhaps no other plow, save the Garden City Clipper, receives so fine a finish as the Sweepstake plow, manufactured by this company.

After the implements are finished they are removed to another large building where they are painted and varnished. All the work is done in the most thorough and substantial manner, and the material used is of the best quality. The company are too proud of their reputation to allow any but first-class work to leave the factory. The principal implements made at these works are the Sweepstake and Eureka gang plows, an illustration of the latter being given in this issue. These plows have earned for themselves an enviable reputation, carrying off the first prize at the two last State fairs at Sacramento, and the last fair held at Stockton. At these fairs these plows were put to the severest test in competition with about one dozen others and gave entire satisfaction. The steel gangs with cast steel points have 5-16 inch moulds, extra hardened, warranted to scour in any soil, and are recommended as the best steel gangs in the world. The immense number of these plows which are being manufactured and sold is the best testimonial in their favor. There is but little difference between the Sweepstake and the Eureka—an illustration of one is sufficient for both.

The company are also manufacturing the "Sweepstake" single gear header. They have adopted this header after the most careful investigation and have made several important improvements upon it and believe that the machines they now offer to the public are as near perfection as it is possible to make them. The drive wheels are strengthened and made higher. The draper is extra strong and completely protected from wear by leather belting. The guide wheel and boxes are much improved, making the steering much easier for the driver. They are also making three styles of harrows, the patent flexible, the improved hinge and Sweepstake harrow. The patent flexible is made in four sections and adapts itself to the inequalities of the ground, thoroughly pulverizing the lumps, and leaves it in a smooth and mellow condition. The company believe this to be the best harrow in the State. Another useful agricultural implement made by this firm is the chisel cultivator. It is put together with bolts, in a very substantial manner, and each tooth is intended to stand the entire pull of the team. The firm are also turning out quite a number of very pretty and substantial express wagons, designed for the country. They are made with the Sarven patent wheel and are first-class in every particular. Another article made at these works is the Stockton gang plow. From five to eight plows are put upon a strong beam, this beam forming the hypothenuse of a triangular frame, the whole being carried upon three wheels, one at each angle. The plow is designed for light, sandy soil and will do immense execution. But the implement upon which the company pride themselves particularly, next to the Sweepstake plow, is the Gem seed sower. This sower has been in use on this coast for five years and is constantly growing in favor. It is placed in the hind end of a wagon and geared to the wheel, thus getting rid of the chain and small gears, which have always been a source of annoyance. The grain is thrown out horizontally, in this manner avoiding being carried about by the wind.

One hole can be closed, thus throwing the seed on one side only. Sows evenly, about 60 feet wide, and will sow 90 acres per day. The friction wheel runs the machine at a uniform rate of speed. There is no chain to run off on a hill side or consume power.

The works present an animated scene when in full blast. Their location is in one of the most lovely spots on the globe. Climate delightful, water excellent. The cars of the C.P.R.R., run by the finishing room, and with a new and commodious building the arrangements for manufacturing would certainly be first-class in every particular.



EUREKA GANG PLOW.

THE TRAINS FREE.—The gamblers have been driven from the trains passing through Nevada.

Our Dried Fruit at the East.

It is extremely gratifying, but not at all surprising under the circumstances, to know that the Eastern market for the dried fruit and vegetables of California is assuming a definite form. When the intrinsic merits of the raw material are considered, with the admirable condition in which it is prepared for the market, securing great economy in handling without any sacrifice of richness, flavor or attractiveness, it is not to be wondered at that this trade should already exhibit a clearly defined basis. There is one important point in this connection which has evidently failed to receive the consideration which it deserves. The satisfaction of having our fruit reach the Eastern consignees in admirable condition is so thorough that the important point has scarcely been realized that it still retains this condition in the hands of dealers, and thus becomes one of the staple articles which the large contractor or the small grocer can safely carry.

Our attention has been called to this subject at present by comments of the New York *Tribune* on the Alden fruit of California. These comments occur in the market reports column of the *Tribune* of Oct. 6th, and are as follows:

This trade promises quite a revolution in the fruit business of this coast, growing out of the general introduction of "Alden's" drying and curing machine. There are now quite a number of large factories in successful operation in different parts of the State. The result of this industry will not be only the supplying of the Pacific slope with dried fruits required, but give large and superior shipments East, and for export not only dried fruits but also canned in good variety, and they compare favorably with the choicest of England's "oilman's stores." There is considerable inquiry for dried fruits for shipment East and for export, all packed in boxes of 10 and 20 lb.; apples at 25c. ₱ lb.; apricots, pears, etc., 30c. do. Dried fruits by the "Alden's" evaporating process attract much attention; the saving is immonse, both on freight and in transporting the goods to distant points and is worth careful consideration; to illustrate: One case of "Alden's" onions weighing 58 lb. gross is equal for all culinary purposes to 550 lb. or 5 bags of fresh ones, and 1 case of peas weighing 43 lb., equal for family use to 7 cases of canned peas weighing 350 lb.; the same rule is applied to all fruits and vegetables prepared under this process; boxes of 40 lb. at 16c ₱ lb., each lb. is equal to 7; cherries, etc., 1 lb. at 55c. is equal to 7 lb. of fresh.

Gathering and Storing Winter Apples.

People in rigorous climates are in many cases compelled to do jnst what those in mild climates ought to do, but will not, because they are not compelled to. One of these timely but compulsory labors in the Eastern States is gathering and storing winter apples. Impelled by their dread of frosts, which may be expected in the latter part of September to be sufficiently severe to spoil the unharvested apples, they attend promptly to this important product, and gather it in about the time when it should be gathered without considering the frost.

If the growers of California winter fruit would give more attention to gathering and storing it—apples especially—it would be much better for both producer and consumer. Apples should be harvested—being carefully picked—as soon as they are ripe, before they show an inclination to fall from the tree. They should be assorted and graded, being carefully handled in every instance. All except the perfect ones should be fed out or converted into cider. The reserved fruit should be placed in a dark room, having a moderately dry atmosphere of equable temperature. Avoid pressure from weight as much as possible. Place them in shallow bins or racks, tier above tier, and during the storage season devote a spare hour occasionally to examining their condition, and turn the fruit.

Now, the labor and expense that this calls for is trifling; but it is all that is needed in this country. It is as nothing compared with the treatment which winter fruit demands in the Eastern States. There the apples must be picked abont the middle of September, and housed above ground until winter fairly sets in. Then a wall about three feet high, and of about the same thickness, composed of fresh stable manure, tan-bark, or common earth, must be constructed about the cellar on all sides; and in this steaming, unventilated pit, the apples are to be placed. The apples of the East, under any system of storage, are more liable to rot than those of California; and being more juicy the rot is soft and wet, and more contaminating. A rotten apple will not only spoil all with which it comes in direct contact, but will infuse a bad odor into apples a yard distant. This rot spreads rapidly, and necessitates picking over; and this, it will readily be seen, is an irksome, unpleasant task. Still, by attending strictly to it, the people of the East are enabled to enjoy apples the year round, and at as low rates as we get them here. They have their early winter, late winter and spring apples; with golden and Roxbury russets, which last until apples come again.

If a system half as expensive and laborious were practiced in California, we also could have apples all the year round, and the market would retain an equable, healthy tone, the producer being able to regulate the supply by the demand.

The importance of using all available means for furnishing a succession of fruits through the winter, spring and early summer season, is, in our opinion, only second to that of drying our surplus of fall fruit. The welfare of both producer and consumer demands attention at this point. The time of year for which this system provides is just when fruit is most needed; and there is no adequate reason why we should not have it in abundance. It is not enough that it is obtainable as a luxury; it should be placed within the reach of the poor at all seasons. We believe that providence designs that the poor of this country shall have fruit as well as bread to eat; and failing to get either, it will be a difficult matter to make them believe that the fault all lies with the middlemen.

THE Farmers' Bank of Wheatland has filed articles of incorporation. The capital stock is $125,000, divided into 1,250 shares of $100 each.

CORRESPONDENCE.

Theophilus Ranch, San Benito County.

EDITORS PRESS:—I visited Theophilus ranch last week, and as a description of that celebrated vineyard may be of interest to your readers, I send you a few notes of the same.

Twenty years ago, Theophilus Vaché, a son of La Belle France, penetrated into the wilderness on the eastern slope of the Gabilan range of mountains, about eight miles from the present town of Hollister, and there finding a beautiful little valley of about 300 acres, commenced his present vineyard of 40,000 vines, which are now from 17 to 20 years old. And as they stand stalked from eight to ten feet high, looking like dwarf fruit trees in an orchard—many of the vines having reached a diameter of ten inches and more—and as they hang full of luscious grapes, they are a sight worth going miles to see. Like most of the mountain valleys in California, this one is remarkably well supplied with water; for the proprietor can send it anywhere over the ranch he desires.

The vineyard is laid out in square blocks of ten acres each, with roadways at right angles running through them. In connection with the vineyard are suitable rooms, cellars and houses for the storage and manufacture of wine, and the process of its manufacture is extremely simple. The first process is to crush the grapes in a mill which is worked by hand, and is very simple in construction, being nearly a V-shaped box of wood, with a square hopper covered with a wire netting above. The object of the netting is to free the grapes from the stems in the V-shaped box. Below the hopper revolves a cylinder, about a foot in diameter having here and there a number of dull pointed picks, like the cyliuder of a threshing machine. After the grapes are crushed in the mill they are put into large vats of 1,000 gallons each; and after fermenting for a certain time they are taken to the wine-press, where the juice of the grapes is expressed from the pomace and put into storing vats of 1,000 gallons each. Quite a number of varieties of wine are made at this establishment. I tasted very fine white wine, madeira, port and claret. In fact they profess to be able to make all varieties of wine. There is also a distillery of brandy here, and they manufacture each year a considerable quantity of first-class cognac brandy from grapes that are not suitable for wine-making; thus utilizing all the products of the vineyard. The ranch is well supplied with all the necessary buildings and machinery for doing a large and successful business.

There is an example to the men who mope round street corners of large cities complaining of nothing to do. Follow the example of Theophilus Vaché; penetrate into the mountains, and there build up homes and large establishments. In fact, Mr. Vaché not only planted a large vineyard with his own hand, but built a road 16 miles to San Juan to get its products to market. There are thousands of such mountain valleys in California as Mr. Vaché settled on, inviting the hardy pioneer to make them blossom as the rose. But the melancholy picture of this beautiful creation is that Mr. Vaché, having grown old in his good work of reclaiming the wilderness, is now obliged to sell out his noble vineyard at a sacrifice, owing to his age and infirmities, so that he can retire from the burdens of a business which has grown too large for him to attend to in his present state of health. This would be a rare opportunity for two or three families to procure a finely improved property to make into homes.

J. BOGG.

Gilroy, Oct. 26th, 1874.

Pimo Indian Rye.

EDITORS PRESS:—A special correspondent of the *Bulletin* from San Jose, during the late fair at that place, referring to a case of Pimo Indian rye, which Mr. Hamilton had on exhibition there, remarked that it was "the product of six kernels of this wonderful cereal which Mr. H. had two years ago received from one of the *Bulletin's* staff; that other men were growing it; that it is a fine, large grain; and that it would be found superior to the ordinary cereal." Lest some may be led to waste time experimenting with this Pimo rye, let me state that I have samples of it, procured from the Pimo Indians, in Arizona; and as a cereal it is entirely worthless, as it contains no qualities whatever characterizing the common rye. It is neither farinaceous nor feculent, and can not be made into flour. The Pimo Indians beat it into a sort of pulp and eat it; but it possesses not enough of the saccharine or starchy properties necessary for a "rise" in bread. Hence, as a cereal, to take the place of our common rye, Pimo is utterly worthless. I sent a few kernels East a few years ago, where it was grown, but could not be made available for flour, and was of no more use than the common rye grass. California farmers—don't waste time with Pimo rye.

A. J. BOYER.

San Francisco.

After the Flood.

EDS. PRESS:—At the time of the overflow of the tule lands early in June last on the old river branch of the San Joaquin, it was supposed by the public, and to some extent by the owners, that all the crops would be completely lost. In a majority of cases this was so; but there were some exceptions, and these exceptions present quite an interesting study as a guide for future operations. On the two farms of Messrs. Beaty and Phillips, on the "Webb tract," below Connection slough, the crop was put in by Mr. Victor. He has several large stacks of wheat and barley which he is now threshing, and tells me he expects to save about 4,000 sacks off from nearly 700 acres put in. All his land was more or less flooded, but where the grain was fully grown and matured before the flood came, and the water did not stand continuously at a considerable depth, but was subject to the swelling and subsiding of the tide, so that the constant water was only from two to six inches deep, there the grain was able to keep its head above water and survive. But where the grain had been put in late and was not fully ripened, and the water was constantly from one to two feet, and sometimes three feet deep, there the grain perished, or rusted so as to be worthless. Mr. Victor's grain was put in with a harrow only, on the ashes of the burnt land in February and March.

Mr. Victor at about the same time sowed several small patches, of a few acres each, of timothy, red clover and alfalfa, each sowed by itself, and without either wheat or barley. All three made a good stand, and during the flood were in flower. The water was on them from 10 to 12 inches at times, according to the tide, and for six weeks about two inches of water was on all the time. The alfalfa and clover at that time looked sickly, some of the leaves were turning yellow, and a loss of the crop seemed probable. But they were both mowed as soon as the water subsided, and started up rankly on a second growth. I have not seen two more promising fields of red clover and alfalfa anywhere.

The timothy stood bravely up during the whole flood, maturing its long, full heads, and was mowed and stacked at the proper time. It is not yet baled and weighed, but good judges think it will yield from three to four tons to the acre. It is to be pressed and sent to market, and I will try and follow it up and send you the precise yield per acre. There is left after the cropping a fine healthy mat of grass, which may perhaps furnish another cutting in November, and promises for next year as fine a meadow as there is in the State.

These three fields of clover, timothy and alfalfa tell us the true destiny of the tule lands. They are specially adapted for pasture and hay lands, for raising cattle, dairy stock, sheep and hogs, all within fences; and for raising, also on a part of the farm, grain and hoed crops enough to feed the stock through the winter floods, and while the pastures are backward. In the meantime the change from the wild to the "tame" grasses doubles or trebles the value of each acre on which the change is effected.

While I am on the subject of timothy, I may as well say that there are other small tracts on Bacon Island, where it has withstood the floods both of winter and summer, and formed a well-matted sod covering the ground. But there are much larger tracts on the same island, where the water stood constantly for six weeks or two months at much greater depth, where the roots of the grass were destroyed, as well as the wheat that was sown with it. There are also several localities on the same island, where scattered grains of timothy came with the wheat or barley, and were sown with it. The isolated stools from these seeds are very flourishing, having lived through all the summer floods, and are now in flower or maturing their seeds. On one of these tracts of four or five acres, the alfalfa, which was sown for a crop with the barley, has been nearly all drowned out, having been sown too late, but the barley and the separate stools of timothy have lived. On this tract, and some others of the same farm, the barley had matured just at the time of summer flood, but it kept its heads generally out of water. It was harvested by pulling and stacked, and is now being fed without threshing to hogs.

Indian corn, too, where it had attained a growth of some three feet before the flood, was merely irrigated and stimulated by it, and had a rank growth and matured its grain, or would have done it, but for the brisk demand for roasting ears. This occurred at Tilden's, Victor's, Phillips', Kimball's and Snodgrass's gardens. This is a fact worth pondering by stock-raisers.

At Mr. Tilden's garden on Old river (San Joaquin) there is a small patch of tobacco, which went through the flood and is now very thrifty, some four or five feet high, and is in flower.

The eucalyptus tree has not generally been injured where they had become well rooted, and I recall several thrifty groups. There were slight exceptions, but as a rule the flood has proved the eucalyptus to be well adapted for the tules.

Other kinds of trees took their chances. Some died and others lived. Young strawberry vines were drowned out by deep and constant water, and not by shallow water. Older ones lost their foliage, but sprouted again from the roots. As for blackberries and raspberries, they are no more to be drowned out by water than young ducks. Blackberries grow wild all over the tules.

D.

Webb's Landing, Sept. 24th, 1874.

A Visit to the State University.

We took occasion on Friday last to visit the State University, at Berkley, to listen to a special lecture by Prof. Hilgard, on agricultural education, and to note the progress that is being made for the general advancement of the institution. The lecture was delivered before the entire body of the students, the faculty, several of the regents, and others who had been invited to be present.

The Address.

The lecture was well received, and did justice to the important subject discussed. Professor Hilgard is a teacher and investigator rather than an orator; but all who listen to him quickly perceive that he is well acquainted with whatever subject he may have in hand. We regret that our limited space will not allow us to give the lecture in full.

Agricultural Education.

The Professor commenced by remarking that the subject of agricultural education, or rather of what it should consist, has been the subject of much discussion of late in all parts of the country. In many institutions it has been made a kind of "Botany Bay" into which have been shipped all who were desirous of shirking honest work at the university. Such views, however, are the result of a grievous misapprehension of the importance of agricultural education. A proper and successful prosecution of agricultural studies requires the closet application, and the supervision of such study the attention of scientific men of the highest culture. It is with the greatest difficulty that the advances made in agriculture are inculcated or acquired. Agricultural phenomena are of the most complex character, and involve a thorough knowledge of nearly all the sciences.

Agricultural Experiments, Etc.

Allusion was made to the difficulties attending agricultural experiments, and their great importance. One can scarcely imagine the care which has to be exercised, or the difficulties in the way of arriving at correct conclusions. Much is yet hidden from us, which, by continued experiment and laborious research, will eventually be placed before the world for future study and practical advantage.

It should be no part of the work of a university to teach students how to plow and dig; such work they should be taught at home. The university should simply explain what should be done on the farm; thoroughly instil into the mind of the student the principles upon which agriculture is founded, and awaken in him a taste and love for the calling. Labor should be dignified in the eye of the student, and a distinction made between educated and ignorant labor. Muscle cannot be made equal to mind. The educated agriculturist can and should occupy as prominent a place in the world as any other person of like culture.

The lecturer gave a lengthy review of what science has done for agriculture in preventing exhaustion of the soil, improving the modes of tillage whereby an increased yield was secured, and closed with some general and pertinent applications of the subject.

A Little Talk.

At the close of the lecture a portion of the faculty and the regents, and, per invitation, some others interested in the cause of practical education, repaired to the room occupied by the Faculty, where an hour or more was pleasantly and we trust profitably spent in a little social conversation and interchange of views with regard to the general interests of education and the special efforts now being made at the State University to carry out the cherished objects of the people in rendering the Agricultural and Mechanics' Arts Colleges a practical success. We apprehend that one great difficulty in the way of such a result, and the chief cause of the present antagonism of feeling between the people at large and the management of this institution comes from lack of a proper understanding between the two. Whatever may have been the disposition of the Regents in times past we feel well assured that an honest and earnest effort is now being made to render these important and primary departments of our State University what it was originally intended by the general government and the people they should be.

The College of Agriculture.

To satisfy ourselves and our readers more particularly in this direction—that the Regents are trying to improve the College of Agriculture as rapidly as an empty treasury will admit, we took a walk over the grounds, accompanied by Mr. R. E. C. Stearns, the Secretary of the Board of Regents, and Mr. J. W. A. Wright, Lecturer of the state Grange of Patrons of Husbandry. We found that active measures are being taken to improve the grounds and prepare them for the illustration of agricultural and horticultual work, and were assured that the relation of this work to the instruction in the University will be made as close as possible. Students enrolled in the College of Agriculture will be required to become familiar with their operations.

The grounds have been placed as required by the organic act, under charge of the Secretary of the Board of Regents, who is a practical agriculturist, and of all men in the State most eminently qualified to fill that position. He is most ably seconded by the gardener, Mr. John Ellis, who thoroughly understands his business. A convenient propagating and green house, with all necessary appurtenances, has already been constructed, and a tract of ground laid off and properly prepared for gardening and horticultural purposes. Other portions have been set apart for orchard and forestry and for general farming purposes. These are now being prepared for active work as soon as the season opens. A large barn has been constructed at a point convenient to the farm work. Every thing appears to have been done with good taste and judgment, and in a spirit of economy unaccompanied with niggardness. All who are interested in the progress of this work, or who have heretofore been inclined to utter complaints at the slowness with which it has been entered upon, should now go and observe for themselves.

Work in Other Directions

Is also being prosecuted with most commendable dispatch. Halls or cottages for the accommodation of the students have been erected; five in number, most substantial and convenient. Each cottage will accommodate ten students, at a rental of $30 per year, for each person. Two of these cottages have been set apart for the young ladies, and have been erected at opposite extremities of the ground from those designed for young gentlemen. Houses for professors have been erected in immediate contiguity to the cottages for students.

Mechanic Arts.

Instruction in mechanic arts is given by Professor Le Conte, and in engineering by Professor Soule. In the development of this department special attention is very properly given to industrial and mechanical drawing in distinction from artistic drawing. An acquaintance with this exact art is indispensable to high attainment in mechanic arts. The services of Mr. John D. Hoffman, educated at the Polytechnic School, at Carlsruhe, have been secured for this specialty.

Manual Labor.

The labor of the students is utilized so far as possible, in all the work about the institution and its grounds, for which a fair compensation is allowed. A printing office has also been set up in one of the buildings, in which over forty students are already employed more or less of their time. This office will soon be greatly enlarged, and put in condition to do all all kinds of book and most other work. Stereotyping will no doubt soon form one of its most useful features. Those who desire to learn the art of telegraphy have excellent opportunities for doing so. A machine shop with steam power are among the contemplations of the early future.

Notwithstanding the opinion of one of the Regents to the contrary, as expressed in our "little talk" in the Faculty room, we saw abundant evidence in the printing office, and in and about the grounds that the students were both inclined and able to unite manual labor with their studies, both as a means of aid to their support at the institution, and as a matter of practical study in mechanic and agricultural arts. Of course the power to do this while maintaining a good rank as scholars, varies much with the individual.

Conclusion.

We would like to say much more with regard to what we saw and heard during this interesting visit to the State University, but neither time nor space will admit. We would simply add in conclusion that the visit and inspection was a most satisfactory one, so far as we could make up our minds to let by-gones alone. Looking to the future we have hope and confidence in the university, and believe that the management is disposed to give the fullest efficiency to *all* the various colleges — those based upon the application of science to the useful arts as well as to those which look more directly to what are termed mere classical attainments. The present total number of students is 228, of whom 37 are young ladies. There is no preparatory class now connected with the University.

A SINGLE STAVED BARREL.—An Indiana firm have patented a process which they are employing, by which a barrel is made consisting of only one stave. This is accomplished by turning a steamed log, of the length of a barrel, against a sharp knife of the requisite length, and thus cutting it into a continuous sheet of wood of the thickness for a barrel stave. Enough of this ribbon of wood is then cut off for the circumference of a barrel, and crozed or chamfered by suitable machinery. To give the barrel the proper shape, slits are cut in the two ends by a gang of saws, and the heads are thus brought to the requisite size as compared with bilge. The usual number of hoops are put on, and the barrel thus made is said to be equally as strong as those manufactured in the ordinary way. The principal saving is in the amount of time and labor involved in the process, the cost of material being about the same as in the ordinary manufacture.

Good Health.

Importance of Wholesome Beds.

Sleep to the working man is emphatically Nature's restorer—reinvigorating the physical system, which through much toil has become weary, and keeping up the flow of life and spirits which are necessary to the performance of the arduous duty of farm-life. A comfortable bed, as we are all aware. conduces greatly to one's rest. On this subject a recent writer says:

Of the eight pounds which a man eats and drinks each day, it is thought that not less than five pounds leaves his body through the skin.

And of these five pounds considerable percentage escapes during the night while he is in bed. The largest portion of this is water, but in addition there is much *effete* and poisonous matter. This being in great part gaseous in form, permeates every part of tho bed, mattress, blankets, as well as sheets, which soon become foul and need purification.

The mattress needs the renovation quite as much as the sheets. To allow the sheets to be used, without washing or changing, three or six months would be regarded as bad house keeping; but I insist if a thin sheet can absorb enough of the excretion of the body to make it unfit for use in a few days, a thick mattress, which can absorb and retain a thousand times as much of these poisonous excretions, needs to be purified as often, certainly as once in three months.

A sheet can be washed. A mattress cannot be renovated in this way. Indeed, there is no way of cleansing a mattress bnt by steaming it or by picking it to pieces, and thus, in fragments, exposing it to the rays of the sun. As these processes are scarcely practicable, with any of the ordinary mattresses, I decidedly am of the opinion that the good old-fashioned straw bed, which can every three months be changed for fresh straw, and the tick be washed, is the sweetest and healthiest of beds.

If, in the winter season, the porousness of the straw beds makes it a little uncomfortable, spread over it a comforter or two woolen blankets, which should be washed as often as every two weeks. With this arrangement, if you wash all the bed coverings as often as once in two weeks, you will have a delightful, healthy bed.

Now, if you leave the bed to air, with open window during the day, and not make up for the night before evening, yon will have added greatly to the sweetness of your rest, and, in consequence, to the tone of your health.

I heartily wish the change could be everywhere introduced. Only those who have thus attended to this important matter can judge of the influence on the gentle health and spirits.—*Maine Farmer.*

Paralysis.—Paralysis is becoming a prime disease. It is not confined to the fleshy, the plethoric, nor to the aged. The fast life of our business young men tells on them. It is a very common thing to see men of 30 and 35, bald headed, feeble-gaited, and walking about with canes, their undermining knocked out, with other signs of premature age. These signs of early weakness develop in paralysis. Snddeu deaths from this cause are very common. Several have occurred in railroad trains, the vibration seeming to predispose persons to the disease. Not long since a gentleman died in one of our churches. He was interested in a case of discipline. He made a report to the church on the case, sat down, laid his head on the back of the seat, and instantly expired. In another case a man not accustomed to public speaking arose to relate his religious experience He was so excited that he could scarcely speak. In the midst of his remarks he was seized with paralysis, and carried to his home. Our young men will have to tone down their style of living if they want to amount to anything.

The Neck.—Perfect health demands that the clothing about the neck should be very moderate in quantity, and worn so loose as to prevent the slightest compression. The great error frequently committed in clothing this part of the body consists in wearing such an amount as to overheat and weaken the throat, and thus render it easily susceptible to cold, or in wearing it so tight as to retard the circulation of the blood to and from the head. Great care should be exercised upon this point, as the arteries and veins leading from the heart to the brain are situated so near the surface in the neck that a slight compression there serves to check the flow of the blood. Many cases of congestion of the brain and headache are caused by too tight collars and cravats.

No Appetite for Breakfast.—No judicious parent would let a child go to school without breakfast. If there is a habitual lack of appetite in the morning, there is surely some difficulty behind it, and it will inevitably lead to greater difficulties in the future. No breakfast means a lunch in the forenoon, a lunch means no appetite for dinner, a little dinner means a hearty supper and no appetite next morning. Insist on a light supper, early rest at night, and allow no studies and no excursion to proceed, unless some food can be taken. The habit will soon be formed, or there is some serious disorder, which needs the co-operation of some good physician.

Washing the Inside of the Body.

There is no cavity in the body which water is not fitted for if you get it in properly. Why, one of the best things you can do is to wash your blood, and the great folly we commit in going through our lives from childhood to the grave, is that we do not wash our blood as we ought. Infusions of coffee, tea, chocolate, or cocoa, or cider, or beer, do not wash the blood, because with the fluid so taken in, something is carried in also which befouls and defiles the blood. Just let a man say to himself, "It is Saturday night, I have worked hard all the week, and Sunday shall be a day of rest to me. I am now going to give my whole system between this and Monday morning a good thorough washing," So he begins to drink, and drink, and drinks but little at a time, yet between Saturday night and next Monday morning a healthy man can drink without producing any disturbance a gallon of water. Now let this come into and go through his circulation—through his lungs, and skin, and kidneys, and bowels, and waste materials are carried out—and when Monday morning comes, if he jumps out of bed and gives his external skin a good washing, the water that he washes in will be foul. Or if he prefers to test that question even more thoroughly, all he has to do is to take a clean sheet, and then wetting it in good, soft, pure water, be wrapped up in it for forty-eight or sixty minutes, and then have the sheet washed in a tub of water, and it will color that water so it will look dirty. The man has been washed inside—his blood has been washed. When you have washed his blood, tissues, bones, nerve, muscle, sinew, membrane and brain, and everything in him, he can defy all pestilence for that week. The washing of a person's ouside is twice as necessary as the washing of a person's clothes, and yet there are those who are very particular to have their clothes washed with great care, who are not at all particular to wash themselves.

Paragraphs Worth Remembering.—Benzine and common clay will clean marble.

Caster oil is an excellent thing to soften leather.

Lemon juice and glycerine will remove tan and freckles, and will cleanse and soften the hands.

A dose of caster oil will aid you in removing pimples.

Spirits of ammonia, diluted a little, will cleanse the hair very thoroughly.

Useful Information.

Protection of Wood Joists.

Mr. James John, architect, of Chicago, has given a public test of his newly invented method of protecting wood against fire by wire lathing and plaster. A paper of that city speaks as follows:

"Mr. James John gave a public and very thorough test of his new patent concrete filling for the protection of a wood joist and ceiling against fire. A brick building 12 1-2 feet square and 11 feet high, with two windows and a door, and two floors of wood joist, was erected in the vacant lot opposite the City Hall, the joist of both floors being filled with the fire-proof concrete. The entire space inside was then filled with combustible material and set on fire. The fire burned over an hour and a half, reaching a degree of intense heat; but neither of the floors were injured. It is claimed by Mr. John, and this severe test goes to demonstrate it, that brick buildings with ordinary wood joist in the floors, if protected in this manner, will resist the progress of fire even better than buildings erected with iron beams. The fire cannot, it is claimed, communicate from one floor to the other, and the joists remaining in their places, the walls will be left standing. Iron beams, when subjected to intense heat, expand or sag, often bringing the walls down with them; but the concrete filling is said to be absolutely impenetrable and immovable by fire or heat. The cost of such a structure is said to be about half that of iron beams, while the experts present gave their full approval to this style of structure."

Lime Deposits in Water Pipes.—It has been pointed out by M. M. Fabre and Roche, with reference to deposits of lime in lead water pipes, that wherever there is a joint in the pipes made to connect tin conductors or copper faucets, at such points carbonate of lime is most abundantly deposited. If a piece of silver be placed inside in contact with the lead pipe it will become covered with the carbonate in a very short time. The investigators find that all metals, electro-negative with relation to lead, are thus affected. A voltaic conple is in fact formed, and a veritable chemical precipitation caused.

Wet boots, says an authority on the subject, should not be dried by the fire, as this is a mistake. When the boots are taken off fill them quite full of dry oats. This grain has great fondness for damp, and will rapidly absorb every vestage of it from wet leather. As it takes up the moisture it swells and fills up the boot like a tightly fitting last, keeping its form good, and dries the leather without hardening it. In the morning shake out the oats and hang them in a bag near the fire to dry, ready for the next wet through.

Origin of the Circular Saw.

The origiu of the circular saw—an invention which might justly be compared to the locomotive and the telegraph in its importance to mankind—has been of late the subject of considerable discussion, in our own columns and elsewhere. We have an interesting communication on this topic from Mr. S. C. Barton, of Peterson, Minn., who writes: "In a recent issue, under the head 'The Invention of the Ciroular Saw,' you remark 'the credit of this invention has been given in some quarters to a citizen of Vermont, now deceased.' I think this refers to Wm. Kendall, late of Fairfield, Maine. He died, I think, within tho past year. As long ago as I can well remember—perhaps about the year 1825—he built a circular saw mill at Waterville, Maine. His first saw was seven feet in diameter, built of plates of iron, riveted together at right angles, being made thin at the outer edge, but about six inches thick in the middle, where it fitted the arbor. It was made plain on one side and conical on the other, so that the board had to be sprung from the saw as it was cut. It could therefore only be used in cutting thin stuff. The teeth were fitted to the outer edge of the saw, something as the saw-manufacturer, Emerson, now fits teeth. To steady the saw, he built a poworful force pump to throw a very small jet of water on the opposite sides of the saw. He afterwards either rebuilt or enlarged his saw to nine feet diameter. It was driven with a wheel of his own invention with a half cross belt from a drum on the upright shaft. It was not a success. He was a noted water wheel man as well. He took out a patent on his wheel and made considerable money from it; but I think he did not save much. If I am wrong regarding the date of his invention, some of the older citizens of Waterville can put me right."—*Liffel News.*

Adjusting the Harness to the Horse.—Every part of a harness should be buckled up shorter or let out until the harness fits the horse as nearly as a pair of boots that are of the proper size for one's feet. The collar should fit closely, with space enough at the bottom to admit a man's hand. If too large it has the bad effect of drawing the shoulders together. On no consideration should a team or any work horse be compelled to wear a martingale, as it draws the head down and prevents him from getting into an easy and natural position. The check rein may be usod, but only tight enough to keep the head in a natural position, and shonld never be wound around the hames. See that the hames are buckled tight enough at the top to bring the draft irons at the proper point on the side of the collar. If too low, it not only interferes with the action of the shoulders, but gives the collar an uneven bearing. Caution should be taken that the girth is not buckled too tight, particularly on string teams, for when the traces are straightened it has the tendency to draw the girth against the belly and distress the horse.

Cleaning Bottles.—Many persons clean bottles by putting in some small shot and shaking them around. Water dissolves lead to a certain extent, and a film of this lead attaches itself to the side of the bottle so closely that the shaking or rinsing with water does not detach it, and it remains to be dissolved by any liquid with the least sourness in it, and if drank lead poison may be the result; sometimes a shot becomes wedged in at the bottom of the bottle, to be dissolved by wine or cider. Therefore it is better to wash every bottle, as soon as emptied, with warm water and wood ashes, or saleratus, and put the bottles away, mouth open and downward; but be careful to wash again when used, as flies and other insects frequently get into bottles. Clippings of iron wire are a better means of rinsing. They are easily had and the cleaning is rapid and complete. The iron is attacked by the oxyen of the air, but the ferruginous compound does not attach to the sides of the bottle, and is easily removed in washing, besides a little oxidized iron is not injurious to health. It has been found that the slight traces of iron left have no apparent effect on the color of red wines; it has on white wines but very little, and it might be botter to use clippings of tin for the latter.

To Make Good Casting.—The carelessness that produces rough castings is most inexcusable. Well mixed facing and care in moulding is the whole of the secret of having clean castings with a fine bluish surface. The foreman who constantly produces casting that require pick hammering to free them of sand that has burned itself to the metal, does not understand a most important feature of his trade. The roughest of all work is rough castings; and yet the remedy is simple—care in moulding and good facing constitute the whole of it—large work as well as small can be made nice and smooth in green sand hy attention to these two things, and the amount of after labor that can be saved is no inconsiderable matter. No man is worthy to be a foreman who does not appreciate all that can he done in the way of good foundry work by attontion to care in moulding and well mixed facing.—*American Mauufacturer.*

Thickness of the Walls of Iron Clads.—The heaviest armor yet attached to the turret of any iron clad in European waters is 14 inches. The thickest American iron clad turret is 15 inches. The Steven's Battery now nearly finished in New Jersey, and belonging to that State is to have a turret with walls of iron from 16 to 18 inches in thickness.

Domestic Economy.

Cooking Eggs.

Eggs bear a relation to other animal food similar to that which seeds bear to other vegetable food. They are the depositories of vitality, stored up to form a new link in the continuation of the species. They are probably the purest form of animal food, though they compare unfavorably with seeds in many respects. They lose their vitality sooner, and they partake more or less of whatever impurities may have belonged to the animal that produced them. They are not so nutritious as some of the seeds, and they require more care in cooking.

Like seeds, one of their principal ingredients is albumen, which is nearly pure in the white; but, unlike vegetable albumen, it coagulates with heat; if the heat is great, becomes so hard as to be extremely difficult of digestion. Hence eggs are more easily digested raw than cooked, and hence also the objection to hard boiling. Dr. Beaumont found bits of hard-boiled egg-white, no larger than a pea, sometimes remained in the stomach after everything else had yielded to the action of the gastric juice. Such logic is unanswerable. He deduced from it the importance of careful mastication. We women can go a step further and find in it an intelligent reason for so cooking the eggs that they will not require this extra care. Fried eggs are still worse than those which are boiled, both because subjected to a greater degree of heat, and because of cooking fat into them.

Even in the common method of boiling them rapidly in "three and a half minutes" the albumen next the shell is quite too hard. It should be uniform and custard-like, and this is secured by the method, now becoming quite common, of merely letting the eggs stand from seven to ten minutes in hot water. This should be boiling hot at first, but the cool eggs reduces its temperature somewhat. The exact time required will vary with the relative proportions of eggs, and water with the size of the eggs, with the heat and thickness of the utensil used, with the warmth of the place where it stands, and with the weather also, a little more time being required in dull weather. The cook will soon learn what allowance to make for her utensils; and for the rest she must use her judgment every time. They are not so easily spoiled however, as in boiling. If left in a little too long they can be plunged in cold water for a minute or two. If kept hot until the yolks stiffen, the yolks will not be hard. The yolk should be cooked just enough not to break rapidly when turned out. These are properly speaking, not "boiled eggs," but "curdled eggs."

These curdled eggs make an admirable dressing for many breakfasts dishes—boiled samp, oatmeal mush, cracked wheat, and especially for small hominy. The gentle method of cooking egg may also be observed in making egg-toast. Have the milk almost boiling, in a flat dish, and break in the eggs one by one, cooking a few at a time, and being careful not to let them run together. Sprinkle in a little salt, and let them stand hot and covered until firm enough to take up without breaking. Then have ready some split batter biscuit (gems), softened in hot milk and laid on a platter, and when tho eggs are done dish them one on each half of a biscuit and serve warm. This is a handsome dish, and though not quite so digestable as hominy dressed with eggs curdled in the shell, it is still far better than fried potatoes and griddle cakes that form the staple of so many breakfasts.—*Science of Health.*

Bread Muffins.—Take four slices of baker's bread, and cut off all the crust. Lay them in a pan and pour boiling water over them, but barely enough to soak them well. Cover the bread, and after it has stood an hour, draw off the water, and stir the soaked bread till it is a smooth mass; then mix in two tablespoonsful of sifted flour, and a half-pint of milk. Having beaten two eggs very light, stir them gradually into the mixture. Grease some muffin-rings; set them on a hot griddle, and pour into each a portion of the mixture. Bake them brown; send them to the table hot; pull them open with your fingers, and spread on butter. They will be found an excellent sort of muffin, very light and nice.

Delaware Biscuit.—Take as much flour as will do and use judgment with regard to the amount of lard. Some folks like more some less. They are neither so light nor good when too greasy. But salt to the taste and rub it all together, then add cold water slowly and as little as will possibly answer. Make the dough so very stiff that you can neither knead nor beat it, with any comfort, until it is set away awhile—some twenty or thirty minutes, when it softens a little. Then beat it until it is very light, make out the biscuits and bake in a quick oven, which had better be too hot than too cold. Cover up the dough when set by to soften. They bake in fifteen or twenty minutes, if not too large, and when done they feel very light.

Spanish Puffs.—Put into a saucepan a teacupful of water, half a teaspoonful of salt, and two ounces of butter. While boiling add sufficient flour for it to leave the saucepan; stir in one by one the yolks of four eggs, drop a teaspoonful at a time into boiling lard, fry them a light brown, and pour white wine and melted butter over them.

Patrons of Husbandry.

Grange Clubs for the Rural.

The Secretary (or some other Patron) is invited to act as club agent for the Pacific Rural Press in every Grange. Circular and sample copies sent free. Five or more names will constitute a club, at the rate of $3 a year. No new subscriptions will be taken without payment in advance. We will pay the postage after Jan. 1st, 1875. All club subscriptions in Granges should end on the last day of June or December. Old subscribers may join the club by paying the Secretary up to club dates. No single subscriptions will be received at less than $4 a year. Every Patron farmer should read a reliable agricultural paper. We need the support of all on this coast. Help the Secretary (or club agent) to make up a large list in your neighborhood. Don't delay.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms; Fruit Growers' Associations, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, and Farmers' Mutual Life Insurance Company, 415 California street, S. F.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

Extra Copies of the Pacific Rural Press Containing Grange addresses, resolutions, obituaries, etc., will be furnished post-paid at ten cents per copy. Grangers wishing numerous copies should send the order for them with the MS.

Patrons who are subscribers to the Rural Press should pay their subscriptions promptly in order to secure club rates.

The Great Disaster.

Grange headquarters have presented quite an animated scene during the entire week. Patrons from all parts of the State have filled the rooms, and forming into groups have discussed "the failure" with anxious faces. On Saturday a majority of the Executive Committee got together, for the first time since the crash, although they all had been telegraphed to on the Monday previous, but owing to some failure in the dispatches their arrival was delayed until Saturday. Theirs is an onerous task, but they set about it with a will and were in session all day Saturday. In the evening the following card was sent to the daily papers for publication:

The Executive Committee of the State Grange have taken entire charge of the wheat and wool interest heretofore confided to E. E. Morgan's Sons, and intend to receive and sell or ship all consignments made to them by Patrons on terms to be made known to the members of the Order at as early a date as possible. Steps are being taken to prevent individual loss to the members of the Order by the failure of said house, and the Executive Committee ask a suspension of judgment in this matter until after completing the examination of affairs which is now being made. It is intended to have no interruption in the direct shipments of wheat. Freights £3, or less. W. H. Baxter,
Secretary State Grange.

San Francisco, October 24th, 1874.

Although the clouds have been collecting above us, already the sky is appearing in spots, and by the time the committee have completed their labors the glorious sun will have appeared, shining down upon us with his light and warmth. A line of action will have been adopted, steps will have been taken to distribute the burden of losses sustained by individual Grangers, hearts will have been bound in a closer bond of union than ever, and an unbroken front will be presented to the enemy. It is not to be supposed that those men who had from $1,000 to $15,000 worth of wheat afloat upon which they had not received the advance of $20 per ton would be otherwise than uneasy and anxious; still we feel like saying to them as the Savior did to Peter, "O, ye of little faith." If they supposed that there was no redress, and the value of the grain was lost, that they would be allowed to bear it alone and single handed, they have misjudged their brothers. They have not yet learned what Grangers are made of. If they suffer, they do so in assisting to carry out the plan adopted by the Order; and for the benefit of the entire Order on this Coast, and nothing but extreme injustice would allow them to suffer alone. But this will not be allowed. And when the wounded in this battle shall have been taken care of, the reserve brought forward, and the broken ranks closed up, then will the Patrons of California be a power that all the money and scheming in the country cannot move. If mistakes have been made, they are what might have been expected in solving this mighty problem of freedom to the farmer. It so happens that no one in these latter days can foresee events, and if our agents made a mistake it is what other and very shrewd business men have done, and there is nothing certain that some others will not go the same road that E. E. Morgan's Sons have gone. Should the pressure become much greater there will be no help for it. No one has anything to laugh over in this failure, for a similar combination of disastrous events are upon other shipping houses, and this failure instead of benefitting must injure them, as the result has been to depress freights still more. Already resolutions are arriving at headquarters from different Granges, expressing deep sympathy and pledging their support to the last. The Grangers are going through the fires of tribulation, but they will come out stronger, more united and better prepared than ever to do battle against a determined, insidious and relentless foe. Never before did the Patrons know to what base schemes the old wheat ring were capable of stooping, but revelations which have been made, during the investigation of the Executive Committee, show some of the most unscrupulous tricks and traps which have been laid for the overthrow of our agents.

While the failure is a disaster, it is a necessary consequence of adverse circumstances which it was impossible to foresee, and it would require a very strong firm indeed to withstand the pressure of the present season. But that we may take a proper view of the situation and not pass hasty judgment on the untiring efforts which have been put forth by the Executive Committee to free the farmers from the bondage and dictates of "one man power," let us ask first what have we lost by the failure, and what have we gained by the Grange movement?

From the best information we can get, $100,000 will cover the value of grain already shipped, upon which the advance has not been paid to the owners. The question as to whether this will finally be lost is not yet settled, and we cannot as yet venture an opinion on account of the many points involved. But admitting that the actual losses will reach $100,000, let us see how much the Grange movement has benefited the farmers of the State. From what we know of the wheat manipulators of the State, what we have had to pay for sacks, the freights that have ruled before the opposition was started, and the prices which have ruled here, considering the prices in Liverpool, the lowest estimate we can make of the gains we have made by the Grange movement is $3,000,000. Deducting the $100,000 leaves a balance in our favor of $2,900,000. In view of this cannot the Order afford to bear this burden if it be necessary, which when distributed would be but light, in view of the great gains which the movement has secured us?

Could we meet every Patron who reads the Rural Press, face to face, we should certainly assure them that all that is possible is being done to bring things out right yet, and that in the matter of purchases, sales and shipments for the future by our State Agent, they may place implicit and unlimited confidence.

Homestead Association.

Hundreds of letters, and loads and loads o people arriving constantly, indicate that thousands are hunting homes in Southern California and desire further information with regard to this beautiful valley. The shares in this Association have been taken rapidly, and already the secretary reports that many applications will have to be rejected after all the stock has been issued. When it was ascertained that nearly all had been paid for, that the demand was far greater than the supply, and that certificates would be issued in the order in which the deposits were made, persons viewing the rancho left in various directions, and are traveling as fasts as stage, steamer and railroad can carry them to get funds, make payment, and secure stock. Before the publication of this, no doubt, the last share will be disposed of and the indispensable payment made.

The remarkable fertility of the soil in this valley, and its capacity for producing in a dry season, is said to have saved 30,000 sheep for, and the fortune of Col. Hollister in the never to be forgotten dry year of 1864. The certainty of a crop in all seasons accounts for the rapidity with which $500,000 worth of stock has been absorbed.

The 9th of November has been appointed as the day on which the land sales are to commence, and stockholders will bid against each other for that and the following day only. On the 11th of November the public sales will commence and be continued from day to day as long as the land ready for the market holds out and the demand continues. Arrangements have been made with the San Francisco steamers to stop at Gaviota, twenty miles from the rancho, on the 3d and also on the 6th of November, so that people desiring to attend the land sales will have a convenient way of getting from this city to Lompoc.

Those who fail in getting stock and do not succeed in finding such lands as they desire at the second sale, can be accommodated by taking stock in the next company which is now forming and will be known as "Grangers' Homestead Association, No. 1."

Other fine ranchos near Lompoc, in the same valley, have been offered on still more favorable terms, and those who wish to join the new company can do so by sending their names to the undersigned, and depositing ten per cent. of the capital stock for which they wish to subscribe, in the Grangers' Bank of San Francisco.

The capital stock of this corporation will be two hundred thousand dollars ($200,000), gold coin, divided into 2,000 shares of the par value of one hundred dollars ($100) each, and will be paid so far as required, in ten annual installments.

Distribution.—The valley land will be surveyed into 5, 10, 20, 40 and 80-acre lots, the minimum price marked on each, and homesteads chosen, but if two or more select the same, the stockholder who bids the highest gets his choice. O. L. Abbott,
Corresponding Secretary for Committee on Immigration, P. of H.

Santa Barbara, Cal., Oct. 24th.

Not a Political Organization.

The following is a reply from Secretary Baxter to a communication from A. M. Winn, President Mechanics' State Council, inviting the Grangers to unite with the mechanics in political reform.

Office of Secretary State Grange,
P. of H., California,
San Francisco, October 15, 1874.

To A. M. Winn, President Mechanics' State Council—Dear Sir: Your communication was duly received by the State Grange, and met with a hearty approval, being received without a dissenting voice, for which accept our thanks.

Our platform teaches that we shall advance the cause of education among ourselves and for our children by all just means within our power. We especially advocate for our agricultural and industrial colleges that practical agriculture, domestic science, and all the arts which adorn the home, be taught in their courses of study.

We emphatically and sincerely assert the oft repeated truth taught us in our organic law, that the Grange, National, State or subordinate, is not a political party organization. No Grange, if true to its obligations, can discuss political or religious questions, nor call political conventions, nor nominate candidates, or even discuss their merits in their meetings. Yet the principles we teach underlie all true politics, all true statesmanship, and, if properly carried out, will tend to purify the whole political atmosphere of our country; for we seek the greatest good for the greatest number.

We must always bear in mind that no one on becoming a Patron of Husbandry gives up that inalienable right and duty which belongs to every American citizen to take proper interest in the politics of his country. On the contrary, it is right for every member to do all in his power, legitimately, to influence for good the action of any political party to which he belongs; it is his duty to do all he can in his own party to put down bribery, corruption and treachery; to see that none but competent, faithful and honest men, who will unflinchingly stand by our industrial interests, are nominated for all positions of trust, and have carried out the principles which should always characterize every member of the Order, that the office should seek the man and not the man the office.

We proclaim it among our purposes to inculcate a proper appreciation of the abilities and sphere of woman, as indicated by admitting her to membership and position in the Order. Such are our principles. They fully accord with those of the mechanics, as expressed by you. Our interests are identical, our objects the same—hence this unity of action must be mutually beneficial. Grateful for your good feeling and aid in all movements for reform, we will labor to cement the hand of harmony existing between us. To the Mechanics' State Council, and mechanics generally, we please to express our sentiments of regard and esteem. Very respectfully, your obedient servant,
W. H. Baxter.
Secretary California State Grange, P. of H.

About the Wheat Trade.

The wheat market is now in such a state that we think every farmer who has wheat on hand should give it his immediate and full attention. Freights are now £3 and less to Liverpool by first-class vessels. We have not for many years had so low rates, nor may expect soon to have again while our granaries are so well filled. Nearly all reports agree that wheat will not go lower this year in Europe. With almost a certainty that prices will not be less, we have all the chances that they will advance before our cargoes can reach European docks. It does seem to us that now is the time for all farmers to send forward their wheat, and continue to send it so long as low freights can be had.

We do not see where the chances are to lose, if the grain be shipped through the agency of the State Grange. The Executive Committee have taken the business under their own charge. They will be responsible from this on. Many of our readers know the individual members of this committee—three of whom have recently taken hold of its labors. We will say emphatically that they are men of honor and pecuniary responsibility.

Ship your grain now. Draw your advance of $20 or upwards per ton, and you will be sure of getting all that it is worth in final settlement. You will be sure besides that you are not supporting men who are figuring to get you in the corner.

Do not let the fleet of vessels now in our harbor go out to all parts of the world, grumbling that they were turned away empty when they offered low freights and our granaries were full. It seems to us as if now was the time to say to wheat holders, "live, let live, help live." To Patrons who have wheat they will sell or ship, we would say make known your intentions to the Executive Committee at once, and they can the better meet your interests. Let all farmers act for the good of one another.

Shippers will realize the benefit of any advance in prices which occurs before arrival. As our wheat is located so much further from the Liverpool market, it has to be shipped sooner than that from the Eastern States or other grain-growing sections of the world in order to be benefited as fully by a rise in Europe.

Insinuations.

In its issue of October 20th, the *Morning Call*, in an article headed "Thievery Everywhere," gives publicity to the following base and groundless insinuation:

"In Illinois the inquiry is being made by the Grangers: 'What has become of the $250,000 that has accumulated at the National Grange headquarters at Washington during the past two years?' This revenue was accumulated from the sale of dispensations at $15 each, for the establishment of subordinate branches of the Order, and was thought to be in good hands; but accusation is now made that Patron Kelley, the custodian of the fund, has diverted it to personal uses. The charge is not yet fully made out, but surrounding circumstances are said to be of a nature to beget apprehension."

We know not the source from which this information was derived, that the "Grangers of Illinois" were making these inquiries, neither do we care, but venture the assertion that its origin is outside the Order. To show the utter fallacy of the accusation we publish the following from the *Patron's Helper*, of Des Moines, Iowa. Now Iowa is not far from Illinois, and if such reports were afloat the Grangers at Des Moines would likely have heard of them. Here is what the *Helper* says, stating that the facts were furnished by a member of the Executive Committee of the National Grange:

"The National Grange has $70,000 invested in registered sixes. This investment was made through the Farmers' Loan and Trust company, in New York, which acts as financial agent for the Grange. This company is one of the strongest and safest in the country, having gone through all the panics and financial crises without suspension or question of its integrity or ability to meet every obligation. If, however, the company should fail, remember that the bonds are registered and so have the entire security of the nation's good faith. Besides this bond investment, there is a working fund, varying, of course, but averaging about $20,000. This fund is also on deposit with the financial agent in New York, and a monthly report is made by the agent to each member of the Executive Committee, setting forth the amount on deposit from day to day, with the receipts and disbursements.

"The Secretary of the National Grange also sends weekly to each member of the Executive Committee a full statement of the amount of money received and disbursed through his office. No money is paid out by the financial agent without the order of the Worthy Master, countersigned by the Secretary, the orders being made at the request of the Executive Committee. The Committee also directs all purchases, and audits all bills; so that not a dollar is expended without its knowledge. The Treasurer keeps an accurate account of all moneys, and countersigns orders before they are paid by the financial agent. Accounts are opened upon the books of the Secretary with the several State Granges, and each is duly credited with all moneys received from it, and charged with whatever is disbursed for its benefit. The balance, less its proportional share of the expenses of the National Grange, shows what we will call the deposit of that Grange with the National Grange. These balances or deposits are held as sacred trusts for the benefit of the State Granges, to be used, as during the past year, to the amount of more than $12,000, in the relief of suffering, or in such other manner as may be determined on hereafter."

Here is the most complete and satisfactory statement of the finances of the National Grange we have ever seen made concerning any organization. Not content with a statement of what has been done with the surplus funds, this member of the Executive Committee, Col. Shankland, goes on to say, "the Secretary of the National Grange, (O. H. Kelley) the man accused, also sends weekly to each member of the Executive Committee a full statement of all money received and disbursed through his office;" and more, "the Treasurer keeps an accurate account of all moneys, etc." Fine chance for the Secretary to appropriate $250,000 to "personal uses." All these abominable slanders show to what straights the enemy is driven.

In Memoriam.

Resolutions of Montezuma Grange, on the death of Sister Sarah C. Shedd:

Whereas, on the 23d of Sept., 1874, the Great Master of the Universe called from time to eternity our beloved Sister, Mrs. Sarah C. Shedd, and passed her we trust, to a higher degree of enjoyment,

Resolved, that while we deplore the loss of our Sister and shall miss her in our meetings and social gatherings, still we humbly bow in submission to the will of the Master above, feeling that our loss is her gain.

Resolved, that we mourn with profound regret the severance of the first link in our fraternal chain, and that we extend our sympathies to the bereaved husband and children and the many surviving friends.

Resolved, that we give a vote of thanks to our Brother and Sister Gifford, and others who labored so faithfully in administering to the wants of our beloved Sister during her sickness.

Resolved, that the Secretary be instructed to send a copy of these resolutions to the Rural Press for publication. T. T. Hooper.

Annual Elections.—In the new form of Constitution recommended to Subordinate Granges by the Executive Committee, the time for holding elections in Subordinate Granges is changed from the first meeting in October to the first regular meeting in December. This, however, will effect such Granges only as adopt that amendment to their Constitution.

Address.

The following is a short synopsis of the address of our State Lecturer at the San Lorenzo picnic, Oct. 1874. We had intended the same for publication last week, but press of other matter crowded it over in company with many other interesting articles. Bro. Wright said:

History tells us that in the olden time, the Druids of "Old England" were wont in their sacred ceremonies, to assemble in the groves of their native isle, and under the overhanging branches of their grand old oaks, at stated times, to perform their vows, and return their thanks to the Great Spirit they revered.

So, in our day, does the new Order of the Patrons of Husbandry, in whose interests we are assembled here, whose only religious creed is faith in a Supreme Being, whose only political principles, as an Order, are expressed by the words honesty, fidelity, love of country, and "the greatest good to the greatest number," find our native groves, surrounded by rural scenes like this, fit places in which, after an abundant harvest, such as the one just ended, to meet each other in fraternal sympathy, to unite our grateful thanks to the Givor of all good, and to renew our faithful pledges to labor while life shall last for mutual protection and assistance, and for the final consummation of the varied measures of genuine reform which the farmers of America and their friends, together with all our industrial classes, are now unit dly advocating for the safety and happiness of our entire country.

Yes, such a grove as this where we can breathe the pure air of heaven, is a suitable place to meet for social converse, and to enjoy in moderation with our friends, the good things which have been bountifully bestowed upon us. And we welcome you heartily here to-day, our friends who are not united with us in the Grange, except by sympathy. We welcome you to a hearty enjoyment of these festivities, for while we desire to protect the interests of agriculture in every legitimate way, we do not seek to injure the true interests of any one of you, nor of any class of our citizens. So much do we value Nature and her products in all their richness of trees, grains, textiles, fruits and flowers, so much do we wish to adorn and beautify our homes with them, and through their instructive symbolism to improve the manhood and womanhood that is in us, that we often adorn the halls where we meet, with specimens from the varied domain of the vegetable world, thus to remind us of the wants and pleasures of our occupation, whose success, by the acknowledgment of all, lies at the very foundation of national prosperity.

Then followed a description of the tasteful decoration of Mozart Hall, in Stockton, where the late session of the State Grange was held, and a brief account of the work done during that session, most of which has appeared already in the RURAL PRESS.

The Lecturer went on to say: "Strange as it may seem, there are many persons who still think that the farmers of America have no right to combine, as we are doing in the Grange, to think for themselves and look after their own interests, as every other class of men have been in the habit of doing before us. This is a problem, which I for one, have yet failed to solve. When did the farmers of America give up their inalienable right to freedom, independence and honest government, which our forefathers defended, secured and handed down, as a rich inheritance for their posterity, whether of their own blood, or their children by adoption? Tell me where lies recorded the mortgage which gave any class of men a lien upon the farmers and other producing classes of our land? God did not give it. It lies recorded in a faulty commercial system, in the past apathy of our people which left their most vital interests in the hands of others who have too often proved unfaithful to their trust; and it lies in a deplorably defective financial system which secures privileges for a favored few, which it denies to the masses of the people. These defects the industrial classes of America are to-day laboring to remedy."

Then followed a very full discussion of the mutual interests of the industrial classes, including farmers, mechanics, miners, laboring men and women of every class, as well as a large part of our traders and merchants who properly read the sign of the times.

In this summary the following words occurred: Our people cannot too soon or too clearly understand, so completely identical are the main interests of all our industrial classes. Let us think for a moment what are some of their mutual interests. Among them are cheap transportation, low rates of interest, moderate profits in the supplies we need, including machinery and working tools, and direct trade with each other, as well as true practical education for our children and social culture among ourselves. It is as much to the interest of one class as the other to secure self-protection to every true interest of our land by legitimate trade and legitimate profits. We need equally the cash system and an improvement in the currency system. We should equally discountenance the fashion system and every other system tending to prodigality and bankruptcy.

Politically, without any reference to partisan or sectional distinctions, our interests are identical.

We equally need purity in the parties of our choice. We equally need a just distribution of taxes between the rich and the poor; the selection of true representative men for all positions of trust; and moderate salaries for office, without their numerous and elastic fees and perquisites. We want honest legislation State, and National, in the true interests of the people rather than for the favored few. The tyranny of monopoly, in its myriad forms, is equally injurious to both classes.

We are also opposed to the absurdity of having any public interests delegated as "a private trust."

In short, the line of interests of farmers, the line of interests of mechanics, miners and all laboring men and women, are parallel in every State and Territory of this Union.

Why can they not some day be harmonized and combined, irrespective of all party and religious distinction, for the final salvation of our country? Let us fervently hope this is one of the good results in store for the future.

In concluding this part the speaker said: "Why should we not, and why in the end shall we not conquer, if properly combined, when we recollect our unquestioned power of numbers, and our wealth of products and labor."

Then followed a review of the efforts of the farmers and mechanics for the year past to have the agricultural and mechanical departments of the State University developed to the full extent according to the original intention of the Acts of Congress and our State Legislature.

Among other things Mr. Wright said: "In this struggle for the interests of industrial education, one of our brothers as you know has fallen a martyr to this sacred cause. It was a costly sacrifice We feel this removal of our Professor of Agriculture, and the manner in which it was brought about, was full of injustice. We shall protest against it, and shall defend the fair name of our brother, so long as we can wield tongue and pen for his defence.

"But in a visit I made yesterday to the State University to hear an interesting lecture on Agricultural Education by Prof. Hilgard, now of Michigan, formerly of Mississippi, and after examining the grounds, and plans, and buildings now receiving attention, an old saying with which you are all familiar was constantly with me. 'The blood of the martys is the seed of the church.'

"For, the struggle in which our brother fell, has already led to some steps looking toward the fuller development of industrial education in our University. We find some of the changes and improvements which the farmers and mechanics asked for are now being made, and we hope they will be developed as rapidly as circumstances will allow.

"The students' cottages, six for young men, and two for young ladies, on the University grounds are built in a most comfortable and tasteful style; propagating houses and a barn are completed, and a portion of the ground is being prepared for the purposes of agriculture and horticulture.

"The printing office is operating most successfully, 47 young men and 7 young ladies being employed as compositors. The voluntary labor system by which students, who desire to do so can earn daily wages to aid in paying expenses of board and books is now being employed to a limited extent, which appears to demonstrate its utility. We rejoice at this beginning and trust we shall soon see other industrial features, especially in the necessary machine shops, introduced according to the suggestions of our joint memorial to the Legislature and the appropriations made in accordance with our requests.

The course of the regents in this matter will be closely watched, and though they may consider their right to supervise the interests of this people's University "a private trust," they must expect their action in guarding this trust, for the year to come will have much to do in deciding what should be the action of the people's representatives in our next Legislature to secure the proper development of the industrial features of our State University.

"Hoping the Board of Regents are ready to acknowledge the importance of these industrial features, and are willing to apply them as rapidly as possible, we are ready to co-operate with them in any way we can without sacrifice of principle, to further these great interests of our State University.

"The farmers and mechanics of our State desire nothing more than to have our noble institution receive the full benefit of the liberal donations made for its endowment, and that it may eventually be made complete in all its departments—a model for others, an object of just pride to our people."

After expressing the hope that the pledges of our members may be as firm and lasting as our mountains, which are at once the bulwarks, the purifiers, and the glory of our State, and after reading the verses entitled "California," dedicated to the State Grange, the Lecturer closed with these words:

"Let us never falter, nor allow ourselves to be beguiled from the path of duty, no matter what temptations may be offered as inducements. Be filled with hope and perseverance. 'Trust in God and do good; dwell in the land and thou shalt be established.' Could every one of our members in the United States live up to the principles of our Order, it would not be long before every good citizen could unite in saying, 'God bless the Patrons of Husbandry.'"

Grange Elections.

DAVISVILLE GRANGE.—From John Krimer, Oct. 23d: J. C. Campbell, M.; G. S. Chandler, O.; Wm. Hand, S.; B. Guthrie, A. S.; M. B. Herbert, C.; Holland Bowers, T.; Frederick Rose, G. K.; Mrs. G. Guthrie, C.; Mrs. L. Wilgour, P.; Mrs. J. G. Winters, F.; Mrs. W. H. Marden, L. A. S. [Secretary elect not reported.]

DENVERTON GRANGE.—From G. C. Arnold, Sec't'y, Oct. 16th: J. B. Carrington, M.; O. D. Arnold, O.; R. H. Barkway, L.; G. Y. Stewart, C.; John Bird, L.; Z. Bethell, A. S.; James Blythe, T.; G. C. Arnold, Sec.; J. H. Ballard, G. K.; Mrs. J. P. Jones, C.; Mrs. J. B. Carrington, F.; Samuel Stewart, P.; Miss M. E. Cook, L. A. S.

FRANKLIN GRANGE, TULARE CO.—W. L. Moreton, M.; G. W. Bloyd, O.; G. W. Camp, Sec'y; Theodore Harrington, L.; H. V. Harkins, S.; L. Doyle, A. S.; J. T. Bitts, C.; John Chambers, T.; Aaron Jones, G. K.; Mrs. Chambers, L. A. S; Mrs. Myrack, C.; Mrs. Moreton, P.; Miss Chambers, F.

LAKE GRANGE, TULARE CO.—M. S. Babcock, M.; E. D. Simmons, O.; H. Byron, L.; J. H. Robinson, C.; Mrs. E. D. Simmons, Sec'y; H. Docker, S.; A. Foster, A. S.; R. Armstrong, G. K.; Mrs. G. W. Randall, C.; Mrs. McLaughlin, P.; Miss Josie Gray, F.; Mrs. R. Armstrong, L. A. S. Delegates to District Council—E. D. Simmons, H. Byron and R. Armstrong.

WEST SAN JOAQUIN GRANGE, SAN JOAQUIN CO.—C. E. Needham, M.; C. D. Needham, O.; Mrs. J. E. Fox, L.; John Carroll, S.; R. Saddlemire, A. S.; E. B. Stiles, C.; M. Lammars, T.; J. Quackenbush, Sec'y; Mrs. Aurora Lewis, C.; Mrs. H. Saddlemire, P.; Mrs. E. B. Stiles. F.; Miss Ella Bonsell, L. A. S.

LOS BANOS GRANGE, MERCED CO.—S. A. Smith, M.; W. W. Reynolds, O.; G. Price, L.; W. H. Dollarhide, C.; Henry Acken, S.; John Shaefer, G. K.; John Beaver, Sec'y; A. McGlashin, T.; Mrs Belle Shaefer, C.; Mrs. Lucy McGlashin, P.; Miss Hattie Beaver, F.; Miss Mary Mitchell, L. A. S.

ENTERPRISE GRANGE, BRIGHTON, SACRAMENTO CO.—G. I. Martin, M.; Wm. Baker, O.; Marcius Lowell, L.; Geo. Baker, S.; Samuel Green, A.S.; J. M. Bell, C.; A. A. Nordyke, T.; A. Root, Sec'y: Wm. Birch, G. K.; Mrs. A. Plummer, C.; Mrs. Athertou, P.; Mrs. Wm. Baker, F.; Mrs. Geo. Baker, L. A. S.

SACRAMENTO GRANGE, OCT. 24TH.—W. S. Manlove, M.; C. W Hoit, O.; J. Rutter, L.; D. Flint, S.; Geo. T. Rich, A. S.; Geo. W. Hancock, C.; P. H. Murphy, T.; E. F. Aiken, Sec'y; T. K. Stewart, G. K.; Mrs. Aiken, C.; Mrs. Davenport, P.; Mrs. Holland, F.; Mrs. Rich, L. A. S.

GRAYSON GRANGE, STANISLAUS CO.—From Amos C. Lander. Wm. Love, M.; R. B. Purvis, O.; Fred Moultrie, L.; A. Broncon, S.; Z. Pickworth, A. S; J. W. Van Benscholen, C.; T. C. Brown. T.; Amos C. Lander, Sec'y; W. A. Frydendall, G. K.; Mrs. Copeland, C.; Miss Jennie Powell, P.; Mrs. Bronson, F.; Mrs. Grummett, L. A. S.

BAKERSFIELD GRANGE, KERN CO.—J. R. Riley, M.; J. T. Anderson, O.; R. Hudnut, L; P. Tibbett, S.; R. Yrewin, A. S.; J. E. Beede, C.; E. Tibbett, T.; P. D. Jewett, Sec'y; E. Snodderly, G. K.; Mrs. P. Tibbett, C.; Grace Ranney, F.; Mrs. E. Tibbett, P.; Mrs. L. Hart, L. A. S.

PAJARO GRANGE, SANTA CRUZ CO.—M. D. Clough, M.; D. Crawford, O.; W. R. Speegle, L.; J. J. Stone, S.; Alex. Kerr, A. S.; L. B. Johnson, Sec'y; J. E. Trafton, T; N. A. Uren, G K.; Miss Speegle, C.; Miss Roadhouse, F.; Mrs. N. A. Uren, L. A. S.; G. W. Roadhouse, L. A.; W. G. Hudson, T. [Pomona and Chaplain not reported?]

CERES GRANGE, STANISLAUS CO., OCT. 24TH. From R. K. Whitmore. H. W. Brouse, M.; John Service, O.; Mrs. L. J. Brouse, L.; E. Hatch, S.; R. C. Gilbort, A. S.; Mrs. M B. Kitterell, C.; W. B. Harp, T.; R. K. Whitmore, Sec'y.; G. W. Rush, G. K.; Mrs. R. Whitmore, C.; Mrs. A. Benner, P.; Mrs. Julia Service, F.; Miss Meda Davis, L. A. S.

TEMESCAL GRANGE. OAKLAND.—Oct. 25th: J. V. Webster, M.; Christian Bagge, O.; Mrs. Jeanne C. Carr, L.; J. B. Woolsey, S.; John Kelsoy, A. S.; A. D. Colby, C.; E. D. Harmon, T.; John S. Collins, Sec'y; W. Applogarth, G. K.; Mrs. Emily Bagge, C.; Miss Elnora Bagge, P.; Mrs. A. D. Colby, F.; Mrs. Nellie G. Babcock, L. A. S. Trustee—A. T. Dewoy.

"ARE ANY OF THE MEMBERS SICK?"—Bro. Logan, one of the members of the Executive Committee, has been quite sick at his room in the Russ House. He took a cold on his way down last week and has been suffering from an attack of bilious fever. Tuesday he attempted to meet with the Committee, but was obliged to return to his room. The brothers are giving him every attention and it is hoped that he will soon be up again.

THE Patrons of California have organized a "Graugers' Fruit Association." The object is a concert of action in getting their fruit to market and selling it. They propose to look after the railroad makers as well as the commission men. They have a big job on hand, but the California Grangers are not afraid of big jobs. When they go for scalps there is no use in running or attempting to save any hair.—*Ex.*

Orange, Los Angeles County, Cal.

EDITORS PRESS:—At the meeting of Orange Grange, on the evening of the 17th, a resolution was passed requesting me, as Secretary of the Grange, to communicate with your paper in relation to the tobacco and beet culture in this vicinity. Two enterprising gentlemen (Messrs. Wilmont & Wilson) set out some ten acres of what they supposed were choice Havana tobacco plants, but at maturity they proved to be ordinary Virginia. Of the kind it is very good and yielded well. A portion of the crop is now drying in a large and well constructed drying house, built this season expressly for the perfect drying of the tobacco. The writer set out a few Havana plants, which, though receiving little or no attention, prove by their appearance that our soil and climate are well adapted for the raising of finer grades of tobacco. We feel confident that with a climate free from the injurious effects of frost, soil of unsurpassed richness and ample facilities for irrigation if required, there is no place in the State where tobacco can be raisod so successfully and profitably.

As regards beets they seem to grow almost spontaneously. They grow right along winter and summer, and attain to large dimensions. We think that this locality is the particular place for the establishment of manufactories for making sugar from beets, as the making of sugar could go on all the year round; and certainly if there is any money in it, the running of a factory continuously will pay much better than to run but a part of the time, and have machinery depreciate in value and interest accumulating on idle capital. The great beet growing locality is within three to six miles of this village, though they do well all through this section.

There is a vague impression amongst all the people of the more northern portion of the State that it is too dry in these parts to farm successfully. This is a great mistake, for while there are lands in the foot-hills that cannot be cultivated, all the plains and valleys yield a rich return to the tiller of the soil. Our choicest lands are those lying under the irrigating canals, being peculiarly adapted to the raising of semi-tropical fruits; though if a man wants to farm he can go on putting in new crops almost the entire year. Taking everything into consideration—splendid water power, inexhaustible supply of wood and agricultural products, etc, this section presents unusual attractions for the profitable investment of capital. The Southern Pacific railroad is almost completed to within five miles of this place, and in all probability will be finished to this place before winter sets in. The growth of this locality is remarkable, and the people coming in are of a good class, and the majority of them are going into the fruit business. This year many thousands of orange, lime, lemon, almond and the ordinary varieties of fruit trees have been planted, besides large numbers of the fine foreign varieties of grapes. In less than five years this plain will be the garden spot of the Pacific slope.

The citizens hereabouts, by joint subscription, are building a "sanitarium," with which will be connected hotel accomodations. Mr. and Mrs. Dr. Larkin are to have charge of the institution, which fact, with our delightful and healthy climate, will draw scores of health seekers to receive its benefits.

Our Grange is in a prosperous condition, and I believe none of our members take any stock in such doleful letters as our neighboring Bro. Nicoles writes to the RURAL. Amongst the good things likely to happen to benefit the Grangers, is the opening here, or in this vicinity, of a Grange co-operative store. It will be a branch of the store at Los Angeles. The opening of such a store will save thousands of dollars to its patrons. There are many things I could write about, but for the present must not trespass further on your valuable space.

J. W. ANDERSON.

Orange, Los Angeles Co., Oct. 26th, 1874.

GRANGE RESOLUTION.—Walnut Creek Grange has resolved on the text book question. Favoring the adoption of books published on this Coast; cost and quality being equal to imported publications. Willing to leave the question of a change with the Board of Education.

TEMESCAL GRANGE meets at 2 P. M., at Live Oak Hall, Eighth street, near Broadway, Oakland, for first degree work on the first Saturday in November. A meeting will also be held Saturday evening, October 31st, at 7 o'clock, at Temescal.

ONE of the cardinal principles of the Grange is to buy nothing you don't want, and nothing you can't pay for. No man who always lived up to this principle ever died in the poor house.

THERE are 600 Granges in Texas, averaging about 34 members to a Grange, making a total of 21,420 members in the State, about one-fifth of whom are ladies.

THE load of the "Twilight" has been completed and she will sail soon. And so the Grangers' ships sail on.



Don't Slop Over.

"Don't slop over," the old man said,
As he placed his hand on the young man's head,
"Go it, by all means—go it fast:
Go it while leather and horse shoes last;
Go it while hide and hair on horse
Will hold together. Oh, go it, of course—
Go it fast as ever you can,
But don't slop over, my dear young man.

"Don't slop over. You'll find some day
That keeping an eye to windward will pay;
A horse may run a little too long,
A preacher may preach just a fraction too strong,
And a poet who pleases the world with rhymes
May write and regret it in after times.
Keep the end of the effort ever in view,
And don't slop over, whatever you do.

"Don't slop over. The wisest men
Are bound to slop over now and then:
And yet the wisest at work or feast
Are the very ones that blunder the least.
Those that for spilt milk never wail
Are the ones who carry the steadiest pail.
Wherever you go, go in for the fat;
But don't slop over—and freeze to that!

"Don't slop over. Distrust yourself,
Nor always reach to the highest shelf;
The next to the highest will generally do,
And answer the need of such as you.
Climb, of course, but always stop
And take breath this side of the top;
And you will reach it in wind and strong,
Without slopping over. Thus ends my song."

The Bridal Wine Cup.

"Pledge with wine! pledge with wine!" cried the young and thoughtless Harvey Wood! "Pledge with wine!" ran through the bridal party. The beautiful bride grew pale—the decisive hour had come. She pressed her white hands together, and the leaves of the bridal wreath trembled on her brow; her breath came quicker, and her heart beat wilder.

"Yes, Marion, lay aside your scruples for this once," said the judge in a low tone, going toward his daughter; "the company expect it. Do not seriously infringe upon the rule of etiquette; in your own home do as you please, but in mine, for this once, please *me*."

Every eye was turned toward the bridal pair. Marion's principles were well known. Harvey had been a convivalist, but of late friends noticed the change in his habits; and to-night they watched him to see, as they sneeringly said, if he was tied down to a woman's opinion so soon.

Pouring a brimming cup, they held it with tempting smiles towards Marion. She was very pale, though more composed and her hands shook not, as, smiling back she gracefully accepted the crystal tempter, and raised it to her lips. But scarcely had she done so, when every hand was arrested by her piercing exclamation of "Oh how terrible!"

"What is it?" cried one and all thronging together, for she had slowly carried the glass out at arm's length, and was fixedly regarding it, as though it was some hideous object.

"Wait," she answered, while a light, which seemed inspired, shone from her dark eyes; "Wait, and I will tell you. I see," she added slowly pointing her jeweled finger at the sparkling liquid, "a sight that beggars all description; and yet, listen—I will paint it for you if I can. It is a lovely spot; tall mountains, crowned with verdure, rise in awful sublimity around; a river runs through, and bright flowers grow in the water's edge. There is a thick, warm mist, that the sun seeks vainly to pierce. Trees, lofty and beautiful, wave to the airy motion of the birds; but there—a group of Indians gather; they flit to and fro, with something like a sorrow upon their dark brows. And in their midst lies a manly form; but his cheek, how deathly pale! his eyes wild with fitful fire of fever. One friend stands behind him—nay, I should say, kneels—for, see, he is pillowing that poor head upon his breast.

"Genius in ruins! Oh, the high holy-looking brow! why should death mark it, and he so young? Look how he throws back the damp curls! See him clasp his hands! hear his thrilling shrieks for life! mark how he clutches at the form of his companion, imploring to be saved. Oh, hear him call piteously on his father's name! see him twine his fingers together as he shrieks for his sister—his only sister—the twin of his soul—weeping for him in his native land.

"See!" she exclaimed, while the bridal party shrank back, the untasted wine trembling in their faltering grasps, and the judge fell, overpowered, upon his seat—"seek mercy! Hot fever rushes through his veins. The friend beside him is weeping awe-stricken. The dark men move silently away, and leave the living and the dying together."

There was a hush in that princely parlor, broken only by what seemed a smothered cry from some manly bosom. The bride stood yet upright, with quivering lips, and tears stealing to the outward edge of her lashes. Her beautiful arm had lost its tension, and the glass, with its little troubled red waves, came slowly toward the range of her vision. She spoke again; every lip was mute. Her voice was low and faint, yet awfully distinct; she still fixed her sorrowful glance upon the wine-cup.

"It is evening now; the great, white moon is coming up, and her beams lie gently on his forehead. He moves not; his eyes are set in their sockets; dim are their piercing glance; in vain his friend whispers the name of father and sister—death is there. Death! and no soft hand, no gentle voice to bless and sooth him. His head sinks back! One convulsive shudder—he was dead!"

A groan ran through the assembly. So vivid was her description, so unearthly her look, so inspired her manner, that what she described seemed actually to have taken place then and there. They noticed also that the bridegroom had his face in his hands and was weeping.

"Dead!" she repeated again, her lips quivering faster and faster, and her voice more and more broken; "and there they scoop him a grave, and there, without a shroud, they lay him down in that damp, reeking earth; the only son of a proud father, the only idolized brother of a fond sister. And he sleeps to-day in that distant country, with no stone to mark the spot. There he lies—my *father's* son—my own *twin brother*—a victim of this deadly poison. "Father," she exclaimed, turning suddenly, while the tears rained down her beautiful cheeks, "father shall I drink it now?"

The form of the old judge was convulsed with agony. He raised not his head, but in a smothered voice he cried, "No, no, my child—no!"

She lifted the glittering goblet, and letting it suddenly fall to the floor, it was dashed in a thousand pieces. Many a tearful eye watched her movement, and instantaneously every wine-glass was transferred to the marble table on which it had been prepared. Then as she looked at the fragments of crystal, she turned to the company saying, "Let no friend hereafter, who loves me, tempt me to peril my soul for wine. Not firmer are the everlasting hills than my resolve, God helping me never to touch or taste the poison cup. And he to whom I have given my hand—who watched over my brother's dying form in that last solemn hour, and buried the dear wanderer there by the river, in that land of gold—will, I trust, sustain me in that resolve. Will you not my husband?"

His glistening eye, his sweet smile, was her answer. The judge left the room, and when, an hour after, returning with a more subdued manner, he took part in the entertainment of the bridal guests, no one could tell to see that he, too, had determined to banish the enemy at once and forever from his princely home. Those who were present at the wedding can never forget the impression so solemnly made. Many from that hour renounced the social glass.

The Rear of Houses.

Take the prettiest and best-kept villages of New England, and we doubt if a tenth part of even of the most pretentious mansions and the most ornate cottages will bear examination in the rear. Instead of being nicely finished in all their pretty domestic details and conveniences and kept snug and trig, with trim grass-plots, with all the subordinate avenues and garden approaches well graveled, clean-swept and free of refuse, and everything wholesome and orderly, there is apt to be a look of general untidyness, as if the residual rubbish of years had been dumped therein. Not unfrequently a railroad runs its track in such a manner as to expose the rear of plenty of houses to the eye of the traveler over it—whose sense of neatness offended by the square rods of backyard lumbered up with every conceivable variety of second-handed, damaged and invalided articles known to domestic use, from a horse-cart, disabled by broken thills and wrecked wheels, to the ghost of the baby-carriage, which survives two generations of children; interspersed with broken crockery, rusty and condemned tinware, old boots, sardine-boxes, disabled junk-bottles, hoop skirts which have outlived all usefulness if they ever had any, chips, burdock, mullen, ashes, half-burned lumps of wasted coal and all imaginable litter, *debris*, or dirt. On the other hand, nothing is prettier than a cottage which is thoroughly well kept in the rear as well as its more public portion. It seems inevitably redolent of a purer, sweeter, happier domestic life than one with heaps of festering rubbish crowding hard upon it.

EXTRAVAGANCE.—The first lesson in economy is to learn to "do without." The second is to use what one has without waste.—These two lesson are very hard to be learned by a people which has always been accustomed to have whatever it wanted, and to treat costly things as if they were common, for fear it should not be supposed we are familiar with them. One thing has much contributed with this—the absence of anything like class styles of expenditure. Abroad, a man will not allow his wife and daughters certain modes of dress, unless he can have other things in keeping. A camel's hair shawl and diamonds required a carriage and servants in proportion. The habits of life which fit a particular income are well known. No one goes beyond them without censure. In America there are is no such rule. People live in hotels where waste is the order of the day, and where children are educated in the want of care, and the habit of unlimited ordering.

FOR a young woman to begin to pick lint off a young man's coat collar, is said to be a sign the young man is in peril.

The Scholar's Duty.

Every scholar who now goes forth to take his place in the active world, should feel that to do his part in the work of progress and reform rests upon him as a solemn duty. From pure love of his kind, for the welfare of the race he should labor to promote its success. "A peerage or Westminster Abbey!" exclaimed one of England's heroes as the battle commenced. But in this cause the scholar of to-day should be animated by a nobler spirit, without thought of honor or self, to labor and to do his part to aid its advance. Nor need he, to perform it, impede his progress, or impair his usefulness, in the particular calling upon which he may enter. We all have opportunities of gathering information, of making observations that will be of value in solving the problem; we all may, without entering into the arena of party politics, exercise our influence upon those who surround us, in the instilling of sound views.

Nor is it necessary that we should enter into controversy to accomplish the object. By the presentation of the truth more will be done to depose error, than can effected by wordy combat. He who would cleave a bar of iron must use a weapon of iron; he who would remove prejudice or error should not inflame it by opposing it, but rather raise the people to a plane where they will cast it aside. The fault of the scholars of the past was that they placed before their fellow men too little of the results of their labors. A more liberal spirit now prevails, and the treasures gathered by the scholars of to-day in their searches after the truth are spread with a liberal hand before the people. May they in the future be still more ready to improve and benefit the race by making known to the public the methods and results of their searches!

WHAT IS PERSONAL MAGNETISM?—A magnetic temperament; as nearly as anything, is the temperament of the artist, of genius; and yet it may not be associated with, may be radically opposed to, art or genius. We are usually so much under its influence; if affected at all, that we do not pause think of its composition. If we should think, we should find that the natural magnet is invariably sympathetic, intense, individual, independent, strong of will, generally imaginative, egotistic, self-confident, inclined to be aggressive. Commonly a large degree of discipline goes with it; for the conquering faculty is inclined to conquer first at home, and covers sharp and harsh energies with the velvet and satin of social amenities. But for a certain self-containment, magnetism, so active and penetrating is its force, might escape and waste itself; and there is need of it for many ends.

She who is spontaneously magnetic is hard to affect magnetically. As a rule, she has her erotic fortune in command, and this is rare and lucky to a degree. Thus is she protected from inward amorous assaults, which, more than those from without, place her in the power of her nearest enemy. If the relation of the sexes be a siege, it is unfair; since man, in attacking woman, has his secret ally—herself—within the gates, to whom he looks for support, and on whom he countest every escalade. Impartial as the contest may be, it is always two against one.—*The Galaxy.*

A BEAUTIFUL SENTIMENT.—Life bears us on like the stream of a mighty river. Our boat at first glides down the narrow channel through the playful murmurings through the little brook and the winding grassy borders. The trees shed the blossoms over our young heads; the flowers on the bank seem to offer themselves to our young hands; we are happy in hope, and grasp eagerly at the beauties around us; but the stream hurries on, and still our hands are empty. Our course in youth and manhood is along a wider and deeper flood, and amid objects more striking and magnificent. We are animated at the moving picture of enjoyment and industry passing around us—are excited at some short-lived disappointment. The streams bears us on, and our joys and griefs are alike left behind us. We may be ship-wrecked—we cannot be delayed; whether rough or smooth, the river hastens to its home, till the roar of the ocean is in our ears, and the tossing of the waves is beneath our feet, and the land lessens from our eyes, and the flood is lifted up around us, and we take our leave of earth and its inhabitants, until of further voyage there is no witness save the Infinite and Eternal.

A CHILD'S RIGHT TO HER HAND WORK.—The Sheriff of Kings county New York was sued in the Brooklyn City Court, before Judge Reynolds for the value of a tapestry picture, called the "Last Supper," seized by the sheriff to satisfy a debt against the plaintiff's father. Emma Leiser, plaintiff, sued by guardian, proved that it brought a prize at the Vienna Exposition, and claimed $2000 for its detention. The defence was that the picture was the property of her father, he being entitled to his child's labor. The jury found for the little girl and against the sheriff. A righteous decision.

RETROSPECT.—We should sometimes pause to look back on the landscape behind us, to see its colors softened with the veil of distance, to recall "the tender grace of a day that is dead." There is a great and subtile charm in retrospect. Pleasures are remembered without the accompanying drawbacks, pain has lost much of its sting, and scene and circumstances long past are often far more clearly apprehended than at the time when we took part in them as actors or spectators.

The Duty of a Woman to be a Lady.

Wildness is a thing which girls cannot afford. Delicacy is a thing which cannot be lost and found. No art can restore to the grape its bloom. Familiarity without love, without confidence, without regard, is destruction of all that makes woman exhalting and ennobling:

"The world is wide; these things are small;
They may be nothing, but they are all;"

Nothing? It is the first duty of woman to be a lady. Good breeding is good sense. Bad manners in women is immorality. Awkwardness may be eradicable. Bashfulness is constitutional. Ignorance of etiquette is the result of circumstances. All can be condoned, and do not banish man or woman from the amenities of their kind. But self-possessed, unshrinking and aggressive coarseness of demeanor may be reckoned as a state prison offense, and certainly merits the mild form of restraint called imprisonment for life. It is a shame for women to be lectured on their manners. It is a bitter shame that they need it. Women are the umpires of society. It is they to whom all mooted points should be referred. To be a lady is more than to be a prince. A lady is always in her right inalienably worthy of respect. To a lady, prince and peasant alike bow. Do not be restrained. Do not have the impulses that need restraint. Do not wish to dance with the prince unsought. Feel differently. Be such that you can confer honor. Carry yourself so lofty that men will look up to you for reward, not at you in rebuke. The natural sentiment of man toward woman is deference. He loses a large means of grace when he is obliged to account her a being to be trained into propriety. A man's ideal is not wounded when a woman fails in worldly wisdom, but if in grace, in sentiment, in delicacy, in kindness, she should be found wanting, he receives an inward hurt.—*Gail Hamilton.*

EFFECTS OF INTEMPERANCE.—A short time ago, at a medical temperance meeting in London. Dr. George Lamb, in the course of a speech mentioned the following curious incident in hospital practice: "You have not long to be dresser or house surgeon in any hospital before you become practically acquainted with some of the results of drinking upon the persons of the patients who collect there. You will very soon have brought under your care broken limbs, fractured skulls and disfigured faces. I remember, when it happened to be one of my weeks on duty as dresser, a woman came into the casuality ward carrying her left hand and part of her forearm in her right hand. She had deliberately cut the flesh to the bone, and, finding she was unable to get through the bone with the carving knife she was using, finished the business by chopping it off with a blunt ax. The jagging of the wound by this instrument prevented, in a measure, some of the bleeding that would have otherwise occurred. She was at once placed in bed and the arm had to be amputated higher up, more in accordance with surgical art. The only explanation she could give of her conduct was, that the devil was on her clock, and had told her to do it. I need scarcely tell you that the devil in this case, as in many others, had entered in the form of strong drink."

DO SOMETHING.—It is sometimes a little difficult for a diffident young man to get a start in life—and a start is all they want; but they need not be disheartened, and above all things they need not collapse into the pitiable degradation of saying "I can't." One of a young man's first duties is to butt against the world; if it does not yield at the first trial, let him make another; if it does not yield at second trial, let him make a third; and if it refuses to yield at the third, let him keep on butting till it *does* yield. Sooner or later it will open its doors, and admit him to a fair share of its riches and honors. It does not matter a great deal what a young man goes at at first, provided he goes at something. If he cannot work with his head, let him work with his hands; there are none of us who have a right to imagine ourselves above manual labor, and there are few of us who would not be seasoned and improved by such labor. Employment will show us what we are best fitted for, sooner than years of idleness: and when a young adventurer discovers what he can do best, let him go at that with all his might, and with the blessings of heaven upon his honest efforts, he will find that there is scarcely anything he cannot do.

KEEP THE BIRTHDAYS.—Keep the birthdays religiously. They belong exclusively to and are treasured among the sweetest memories of home. Do not let anything prevent some token, be it ever so slight, that it is remembered. Birthdays are great events to children. For one day they feel that they are heroes. The special pudding is made expressly for them; a new jacket, or trowsers with pockets, or the first pair of boots, are donned; and big brothers and sisters sink into insignificance beside "little Charlie," who is "six to-day," and is soon "going to be a man." Fathers who have half a dozen little ones to care for, are apt to neglect birthdays; they come too often—sometimes when they are busy, and sometimes when they "are nervous;" but if they only knew how much such souvenirs are cherished by their pet Susy or Harry, years afterwards, when away from the hearthstone they have none to remind them that they had added one more year to the perhaps weary round of life, or to wish them, in the old-fashioned phrase, "many happy returns of their birthday," they would never permit any cause to step between them and a parent's privilege.

Make your Own Sunshine.

"Oh, dear, it always does rain when I want to go anywhere!" cried little Jennie Moore. "It's too bad; now I've got to stay in doors all day, and I know I shall have a wretched day."

"Perhaps so," said Uncle Jack, "but you need not have a bad day unless you choose."

"How can I help it? I wanted to go to the park and hear the band, and take Fido and play on the grass, and have a good time, and pull wild flowers and eat sandwiches under the trees; and now there isn't going to be any sunshine at all; and I'll have just to stand here and see it rain, and see the water run off the duck's back all day."

"Well let's make a little sunshine," said Uncle Jack.

"Make sunshine!" said Jennie; "why, how you do talk!" and she smiled through her tears.

"You havn't got a sunshine factory, have you?"

"Well, I'm going to start one right off, if you'll be my partner," replied Uncle Jack. "Now let me give you these rules for making sunshine: First, don't think of what might have been if the day had been better; second, see how many things there are left to enjoy; and, lastly, do all you can to make other people happy."

"Well, I'll try the last thing first;" and she went to amuse her little brother Willie, who was crying. By the time she had him riding a chair and laughing, she was laughing too.

"Well," said Uncle Jack, "I see you are a good sunshine-maker, for you've got about all you or Willie can hold just now. But let's try what we can do with the second rule."

"But I havn't anything to enjoy 'cause all my dolls are old, and my picture-books all torn, and——"

"Hold," said Uncle Jack; "there's an old newspaper. Now let's get some fun out of it."

"Fun out of a newspaper! why how you talk!"

But Uncle Jack showed her how to make a mask by cutting holes in the paper, and how to cut a whole family of paper-dolls, and how to make pretty things for Willie out of the paper. Then he got out the tea-tray, and showed her how to roll a marble round it.

And so she found many a pleasant amusement, and when bed-time came she kissed Uncle Jack, and said:

"Good-night, dear Uncle Jack."

"Good-night, little sunshine-maker," said Uncle Jack.

And she dreamed that night that Uncle Jack had built a great house, and put a sign over the door, which read:

SUNSHINE FACTORY.
Uncle Jack and little Jennie.

She made Uncle Jack laugh when she told him her dream; but she never forgot what you must remember, "A cheerful heart makes its own sunshine."—*The Little Folks.*

A CHILD STRANGLED BY A CAT.—The question so often asked "Does a cat ever suck the breath of a child?" seems to be quite definitely settled by the following occurrence: A strange occurrence took place a few mornings since in the family of Mr. Silas Doloway, engineer in Babcock, Fuller & Co's new hat factory, who occupies J. W. Canfield's house on Mulberry street in this village. Mrs. Doloway is accustomed to have her babe, a little girl four months old, on the bed up stairs while she does her morning's work in the basement, from where she could easily hear the least noise. On the morning in question she heard the little one crowing as usual, but finally noticed that the sounds ceased, and shortly after heard a strange, gurgling noise. Supposing that the child had got its head under the bedclothes and was suffocating, she ran up stairs to see about it, and found the house cat with its nose in the childs mouth. The child was strangled black, and fighting feebly with its hands. She caught the child and shook it several times, when it caught its breath and came out all right. In a few minutes more it would probably have been death. Mrs. Doloway had to pull the cat off the child, so eager was it to remain. It had a paw on either side of the child's head and had its nose pressed deeply into the child's mouth. The cat was instantly killed.—*Middleton (N. Y.) Mercury.*

MINISTERING.—Pure religion and undefiled is "ministering;" not the other thing—"being ministered unto." It is handing over the morning paper to another for first perusal. It is vacating a pleasant seat by the fire for one who comes in chilled. It is giving up the most restful arm-chair or sofa-corner for one who is weary. It is "moving up" in the pew to let the new comer sit down by the entrance. It is rising from your place to darken the blind when the sun's rays stream in too brightly on some face in the circle. It is giving your own comfort and convenience every time for the comfort and convenience of another. This is at once true courtesy and real Christianity. If we mean to copy the spirit of the Master we must be ready in every relation of life, and at every hour of the day, to give up being waited upon, and to practice this self-sacrificing, beneficent and "ministering" graciousness of spirit and conduct.

WRITE your name in kindness, love and mercy, on the hearts of those you come in contact with, and you will never be forgotten.

PRAYER was not invented; it was born with the first sigh, the first joy, the first sorrow of the human heart.

YOUNG FOLKS' COLUMN.

Don't Let Mother do It.

Daughter, don't let mother do it!
Do not let her slave and toil,
While you sit, a useless idler,
Fearing your soft hands to soil.
Don't you see the many burdens,
Daily she is wont to bear,
Bring the lines upon her forehead—
Sprinkle silver in her hair?

Daughter, don't let mother do it!
Do not let her bake and broil;
Through the long, bright summer hours
Share with her the heavy toil.
See, her eye has lost its brightness,
Faded from her cheek the glow,
And the step that once was buoyant,
Now is feeble, weak and slow.

Daughter, don't let mother do it!
She has cared for you so long,
Is it right the weak and feeble
Should be toiling for the strong?
Waken from your listless languor,
Seek her side to cheer and bless;
And your grief will be less bitter
When the sods above her press.

Daughter, don't let mother do it!
You will never, never know
What were home without a mother
Till that mother lieth low—
Low beneath the budding daisies,
Free from earthly care or pain—
To the home so sad without her
Never to return again.

TWO PARISIAN CELEBRITIES.—Lucy Hooper, writing from Paris to the Philadelphia *Press*, decribes two of the street celebrities of Paris: One, she says, a Savoyard, who heads a band of street musicians. He began life many years ago as a street singer, and, as he had a very peculiar voice, he always drew a crowd around him wherever he appeared. He never missed a fete day at Versailles or St. Cloud, and always goes around himself to take up his collection. He is now quite an elderly man, and he has amassed a fortune of some $60,000, notwithstanding which he still continues his toilsome vocation and his penurious mode of living. He is a fine-looking man, tall, gray-bearded, and with a well knit, stalwart form. The other is a woman, who comes every day to the garden to feed the birds. No sooner does she make her appearance and utter the peculiar call which she uses, than sparrows, swallows and pigeons flock around her, and come to perch upon her shoulders and her arms. She bestows upon them plentiful supplies of grain and bread-crumbs, which they take from her hands or for which they scramble into her lap; and when her stores are exhausted she departs to return at the same hour the following day. Winter or summer, rain or shine, she never fails to make her appearance. She is an elderly, respectable-looking woman, of quiet manners, and why she thus devotes herself to her feathered pensioners, no one seems to know.

BE CONTENT.—"O dear! I don't see what you buy such thick shoes for," said little Jennie Ray, "they are only fit for clod-hoppers. Why can't I have a pretty pair of French gaiters like Jennie Swift's?" "We buy such things as we can afford, and think suitable for you," answered her mother. "I am sorry that, instead of being thankful for them, you should fret so. I wish you were more like the man who said, 'I never grumbled but once, and that was because my shoes were worn out, and I had no money to buy new ones. Soon after, I met a man who had no feet, and I went contented with my bare ones." "I'm not so badly off as either of them," laughed Jennie; "so I'll be glad I have got thick shoes, to protect my bare feet, and that I have feet to be protected."

AN INFANT'S PRAYER.—When little-three-year-old sister lays her fair cheek against mine, and, with dimpled arms clasped round my neck, prattles in her innocent way, don't I think of the path her little feet must tread? Are there any thorns to pierce them—any pits into which she may fall? Now I think of it, I must tell you of her little speeches. I think she is so cunning—though perhaps I am partial; if so, pardon. One night last week, she crept into my lap, and ere I was aware of it, fell asleep.—I took her up to her little bed; but, before putting her in I said: "Nellie must not forget her prayer." She commenced: "Now I lay me down to sleep—Dod knows the rest," she murmured. And the white lids closed over the bright eyes and Nellie was asleep again.

WHAT IT COSTS TO BE A LOAFER.—Does the young man who persists in being a loafer ever reflect how much less it would cost to be a decent, respectable man? Anybody can be a gentleman if he chooses to be, but it is expensive being a loafer. It costs time — days, months, years of it. It costs friends. Your consorts will be only the buccaneers of society. It costs health, vigor, comfort — all true pleasure in living, honor, dignity, self-respect, and the respect of the world when living, and finally all regret and consideration when you are dead.

THE Detroit *Free Press* tells about an urchin that was seated on the Post-office steps, going through a watermelon, when a man halted and asked, "This is a great town for hogs, isn't it, bub?" "Wall, no," drawled the lad, as he filled his mouth again, and kept his eyes on the man; "you'll be awful lonesome here!"

NEW READING.—Give a dog a bad name, and he'll learn to answer to it as well as to any other.

Comets and the Comet of 1874.

W. Tegg & Co., an English publishing house, has collected in a little treatise about all that is known as to the matter and motions of those erratic and little understood bodies called comets. In alluding to our late cometary visitor, we are informed on the authority of Father Secchi and Dr. Huggins that the spectrum of its nucleus resembles that of carbon; and they also found that about one-sixth of its light was polarized. The laws of cometary motion are even less understood than their chemical constitution, for they change their paths as well as their aspects so often and so widely that identification is impossible. Some are even suspected, with good reason, to be wandering visitors of many more sideral systems than that of our own sun, and many of them are suspected to have parabolic and hyperbolic paths which never return into themselves. The continuous changes which they assume under observation are curious and unaccountable, and no less so in their behaviour in approaching or receding from the sun, which sets all theories of gravitation at defiance. The vibrations of their tails and other phenomena connected with that appendage also perplex the minds of astronomers. Occasionally comets have come very near the earth. Indeed, it is stated on high authority that the earth passed through the tail of the comet of 1861 on the evening of the 30th of June of that year, and Arago has suggested whether the extraordinary mists which in 1783 and 1831 covered a large part of Europe may not have been the result of an admixture of the vaporous particles of comets with the terrestial atmosphere. Comets are further considered, as respects the length or shortness of their periods, and as to their density or rarity, and the various theories of Herschell, Laplace, and others, described and discussed. Of their numbers we are told, in the words of Kepler, that they are as numerous as fish in the sea; a statement to which is added the further one that most comets of our system are visible to us. but the impression left on the mind, after a recapitulation of the observations that have been made upon comets, is that no reasonable hypothesis has yet been constructed regarding them.

Prof. Agassiz on Specialists.

In an address to the studeuts of Penikese Island, he said, among other valuable suggestions: "You have been told here that books are of little use. Ours is a tirade against complications, and not against original works, which you will find of use for reference. You have here for teachers men who are not only specialists, but each an original investigator in his branch or department. In order to know the animal kingdom right, method is more important than the study of a number of species; indeed a very few specimens are needed to illustrate the study of natural history. An an eminent botanist said, he could teach botany, all he knew on the subject, from nine or ten specimens; so I can count on my fingers the whole number of specimens thoroughly known. Natural history is so vast a subject that if we would accomplish anything, we must be specialists."

We may add to this that the same may be said of all other branches of study; physics, medicine, chemistry, etc., have each become so vast a domain of research, that it has become almost impossible to be equally well informed in the whole field, so it has come to pass that among physicists there are electricians, opticians (we do not mean the traders in specs, who call themselves such), etc.; among physicians there are oculists, aurists, deutists, and special practitioners for special diseases, and for every separate part of the body except one. In chemistry we have metallurgists, also those who make paints or dyes a separate study; others who do the same for vegetable or for animal chemistry, etc. In fact in this nineteenth century all sciences have become so extended, that their branches form separate sciences by themselves, each of them sufficient to command so much attention that a whole life may be devoted to the study and advancement of a single branch.—*Manufacturer and Builder.*

MUSK.—Musk is a secretion, and is obtained from the musk deer (*Muschus moschiferus*), a pretty little animal inhabiting the higher mountain ranges of China, Tonquin and Thibet. The musk is found in a small pocket or pouch under the belly of the deer. The huntors cut off this pouch, which becoming dry preserves its contents and in this state the best article reaches our markets. Musk, when moderately dry, is an unctuous powder of reddish brown color! It gives out a powerful odor, of a warm, aromatic character and most wonderful persistency. Blending well with almost every other scent, it discovers but little of its own peculiarity in compounds in which it is an ingredient.

Genuine musk is very costly, being worth when separated from its sac and all extraneous matter, from $25 to $35 to the ounce. Its great strength compensates in a measure for its price. One part of musk, it is said, will scent more than three thousand parts of inodorous powdor.

As an illustration of the extent of the jute manufacture, it may be stated that 100,000 tons of the fibre have this year been imported into Dundee alone by direct shipment from Calcutta.

It is estimated that 10,000,000 boxes of sardines are annually sent away from the coast of Brittany to all parts of the world.

Gas on Railway Cars.

On one of the railways in Prussia the cars have been lighted by gas for about a year. The experiment has been so successful that there is little doubt of the ultimate exclusion of all kinds of oil lamps on the railways of Germany. The gas is manufactured expressly for the purpose from oil, being a richer hydrocarbon than common street gas. It is compressed to six atmospheres in cylindrical receivers five feet long, and from 16½ to 20 inches in diameter. If more than two receivers are to be connected, the connecting tubes are of one-fourth inch bore, very strong. A regulator is introduced intermediate between the burners and the receivers, in which the requisite low pressure is maintained so steadily that all the tremors and shook to which the cars are subject produce no perceptible effect upon it. This regulator consists of a cast-iron circular vessel 10 inches in diameter and six inches in hight, the open top of which is closed gas tight by a flexible membrane loosely stretched. The middle point of the membrane is armed with a metal disk, connected with a lever acting on the supply valve communicating with the gas holder. The weight of the membrane and its connectious is made sufficient to furnish all the pressure needed to maintain the efflux at the burner. When the supply in the regulator is low, the supply valve is opened by the depression of the membrane. As the gas streams into the regular the membrane rises, and the supply valve is gradually closed. The illumination is thus maintained even more steadily than the gas jets in the cities, though the pressure in the gas holders of course gradually falls off. A single holder of six to nine cubic feet capacity will supply a burner for 45 to 67 hours. The intensity of the light, by photometric determination, is equal to that of ten candles, while that of ordinary coal gas, burnt at the same rate and under similar circumstances, is but about 3½ candles. The burners in actual use give about seven candles light; the Argand lamps usually employed give a light of only four candles. The whole apparatus, except the burners and their protecting lanterns, is placed beneath the cars. There seems to be no possibility of danger from its use, except such as might result from explosion.—*R. R. Register.*

SCAVENGERING IN PARIS.—The *Debats* gives an account of the scavengering of Paris, the efficiency of which might serve as hints to the authorities of our large cities. The superficial area of the streets is eleven million metres, and to cleanse this before the traffic of the day begins, operations have to commence about 3 A. M. The staff employed musters in brigades at certain points of each quarter, and is then dispersed over the various streets. Beside them may be seen the nocturnal philosophers who pry into the filth and rubbish deposited near the curb. The two classes are on very friendly terms, the scavenger facilitating the *chiffonier's* search, and assisting him, if necessary, to obtain a good harvest. In additiou to sweeping by hand, more than forty machines are at work, something like those used in the city of London. The driver, who must keep an eye on his horse, manages a spring which raises or lowers the sweeping cylinder. These are principally used for boulevards, aveuues, wide streets, and squares, and are at work nearly all day. In bad weather they traverse the most frequented streets and sweep away the mud or snow. Sweeping by hand is very active the whole morning in the vicinity of the chief markets, where masses of rubbish of all kinds are found. Between six and ten o'clock scavengers are there hard at work, and heaps of rubbish are carted away.

A CORRESPONDENT of the *Times*, writing from Alexandria, facetiously remarks: "Fancy mutton fattened on ancient Egyptians! The other day at Sakhara I saw nine camels pacing down from the mummy pits to the bank of the river laden with nets, in which were femora, tibia and other bony bits of the human form, some 200 weight in each net on each side of the camel. Among the pits there were people busily engaged in searching out, sifting and sorting the bones which almost crust the ground. On inquiry, I learned that the cargoes with which the camels were ladened would be sent down to Alexandria, and thence to be shipped to English manure manufacturers. They make excellent manure, I am told, particularly for Swedes and other turnips. The trade is brisk, and has been going on for years, and may go on for many more. It is a strange fate—to preserve one's skeleton for thousands of years in order that there may be fine Southdowns and Cheviots in a distant land. But Egypt is always a place of wonders."

PROGRESS IN CHINA.—As an evidence of the progress evidout in the East we learn that a Chinese Polytechnic Institution and Reading Rooms have recently been organized at Shanghai, China, with the object of bringing the sciences, arts and manufactures of Western nations in the most prominent manner possible before the notice of China. When the wants of the enormous population, as well as the immense, but hitherto almost latent resources of that country are taken into consideration, it is easy to see the great advantages that an institution of this kind is calculated to confer both upon the natives generally and upon European manufacturers and merchants. Shanghai being the great center of foreign commerce with the Chinese, is manifestly the most suitable locality for its establishment.

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SAN FRANCISCO:

Saturday, October 31, 1874.

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The Early Rain.

Mr. Croaker expresses a characteristic feeling of disgust at the recent rains. He declares that they are quite out of time; and has notified us that a dry winter must inevitably follow. With the exception of Mr. C., however, the copious showers, several in number, which we have had of late, have been thankfully received. The farmer says it will expedite the inauguration of the plowing season—a very desirable point—it will do something towards opening the dairy season at an earlier date, and will save cured feed.

The city people are also glad. For—thanks to the beneficent powers that are not influenced by discriminating newspaper twaddle—the rain, and its gladdening consequences, falls upon the city as well as upon the country. It is confidently hoped that the price of butter will soon come down in consequence of the rain. It is now nearly out of sight, and beyond the reach of poor people. These realistic causes are sufficient to make the people of the city rejoice at the approach of the rain, but they have reasons of a still finer texture. They want to see the hills in the suburbs of the city covered with the green mantle of winter; and they anticipate with pleasure a general freshening up of field and garden, shrubs and flowers.

There is something about the long deferred rain which is refreshing to the heart, even; and to gauge the appreciation of our late rains by any estimate of dollars and cents, would do injustice to the people who make it a topic of conversation.

WALNUT CREEK AND FLORENCE GRANGES will appear in next week's issue.

California Bred Thoroughbreds.

One of our city contemporaries indulges in a little buncomb on the subject of California as a cattle-raising State, and glories in the fact that many of the thoroughbred premiums at the recent fairs were awarded to cattle raised in California. Thus far we have not met with any expression of dissatisfaction in regard to the awarding of these premiums, but the tone of the article alluded to may justly arouse a suspicion that the strong feeling of local pride which evidently prompted it influenced, to some extent, the judges on these occasions.

This is to be regretted; even the utterance of such inconsiderate stuff, which has a tendency to arouse such suspicions, is a matter of regret. Our State is in no further need of such champions. Or if their excessive local enthusiasm will not allow them to entirely suppress the cry of "Hail, California," common sense should teach them to choose more suitable occasions. It is scarcely to be expected that the popular press should be thoroughly informed in these stock matters, but it is certainly a pity that judges at cattle shows still need to be informed that the question where an animal reared should receive no consideration whatever. Furthermore, they should be taught as judges that they should never allow their admiration for the visible properties of an animal to whitewash its pedigree. This is *the* point upon which judges of thoroughbred stock are called upon to decide. If there is a stitch dropped here the claim for a premium as a thoroughbred should be discarded at once.

There was a time, quite recently, too, when the idea of the question of pedigree predominating over that of apparent merit, would have been hooted down; but the concerted action of the various stockbreeding associations of Europe and America has at length succeeded in establishing a system not unnecessarily rigid, and to which no judicious stockbreeder will refuse to accede. This system does not recognize apparent merit only as the result of breeding. It does not give any consideration to exceptions; in fact, the *prevention* of *exception* is in reality the most desirable point to be attained in thorough breeding. It is evident that in our stock exhibits we shall be obliged to contend with the same difficulties which were encountered in other departments in the early days of agricultural fairs; when the stands in the horticultural departments groaned beneath the weight of monster vegetables and fruits, for which they very judiciously and candidly put in no claim for merit. Now, however, the exhibitor is expected to give the "pedigree" of everything entered; and if he cannot furnish such information as will enable others to produce the like under similar circumstances, the article is not considered worthy of being on exhibition.

This should be the governing principle in all fairs. Monstrosity and precocity, in both the animal and vegetable kingdoms, should only be admitted to the "side shows." The epithets "fine," "noble," "splendid," etc., are quite out of place in judging of thoroughbred stock. We should not look for anything beyond what the record of the family would warrant. We will go even further and declare that even an exceptional merit should be scrutinized as evidence of contamination of blood. This may strike a certain class of enthusiasts as being somewhat rigid, if not absurd; but we are confident that all intelligent stockbreeders will endorse it as sound and orthodox.

The ardent champion of California bred stock, after sympathizing with the cattle of the Eastern States and England, in the sufferings which they are compelled to endure from the severity of their winters and the overpowering heat of their summers, acknowledges that, notwithstanding the climatic obstacles with which our Eastern stock brethren have to contend, "English cattlemen are replenishing their herds from American stock." Yes, and at the same time, American "cattlemen" are replenishing their herds from English stock. Many of the prize animals at the Eastern fairs for several years past have been bought up at once for English and Canadian stock breeders. And Senator Campbell, owner of the celebrated Yorkville herd, while he was making sales from his herd at enormous prices, was sending his celebrated pedigree expert Gibson to England to purchase stock of the same breeds, regardless of cost, if the pedigree were only right.

For us to go into an explanation of the propriety of this course, would indicate a far lower estimate of the intelligence of our readers than the results of our intercourse with them would warrant. They are too well informed in regard to the necessity of this interchange of seed—both in the animal and vegetable kingdoms—to need any explanation whatever. Nor is it necessary to assure them that in these transactions there is nothing that should arouse a feeling of pride in one party, or of humility in the other.

One of the inevitable after-claps of all fairs is the complaint about partial judges; but we are more disposed to question their capacity than their fairness. Especially is this the case in regard to blooded stock. A man may be a capital "judge of horse flesh," and be thoroughly posted as to the requisite points in cattle, swine, etc., for various purposes, but it is to secure the transmission of these points for which cattle breeding proper is practiced, and our only reliance in transmission is in a strict adherance to pedigree. Here is where the ordinary cattle judge fails to accomplish what is required of him; for the simple reason that he has given no study to the subject of pedigree. Our observations at the fairs of the present season have confirmed the conviction in us, that one of our greatest needs, in connection with the breeding of choice stock, is a better informed class of judges.

It is not to be expected that the popular press will divest itself of a seeming partiality for everything produced in California, but where men assume the responsibility of passing judgment on blooded stock, we have a right to demand of them—as they should demand of the exhibitors of such stock—a satisfactory record of the family back to the third and fourth generation.

A Veteran of the Turf.

Among the fast old fellows with whom we were thrown in contact during our visit to the State fair at Sacramento, was the veteran trotter General Taylor, now past his twenty-seventh year. He is owned by a gentleman of Napa, who has had possession of him for the last six years. The General was placed on exhibition at the fair, not as an entry for a premium, but out of respect for his age and well-earned honors, and to gratify the curiosity of spectators. The horse did not appear to advantage in the stock parade around the track, and his owner was quite dissatisfied with the treatment which this celebrated horse received. He is only seen to advantage in harness, and on this occasion he was put upon the track in the procession, under an unsightly saddle, and on this a small boy quite as unsightly. He was pointed out to us as a horse twenty-seven years old, and that was all. Nothing in his movements or general appearance indicated such age. He had the slow, deliberate step characteristic of all trotters when off duty and walking, and he carried his head low like all his fraternity; but like them he had a look that gave assurance of the possession of unusual powers, that only wanted the word "go" to bring them into active force.

Wishing to obtain a more intimate acquaintance with so noted a personage, we visited the General at his stall on the fair grounds, and found that he appeared to much better advantage without the old saddle and the young boy on his back. His eye is expressive of gentleness and intelligence, and we found upon enquiring that he possesses these qualities in a remarkable degree. He is docile and handy on the road, and can still do his mile inside of three minutes on the track. His progeny are as famous for bottom as for speed; and the sources of this quality are at once discernable in the sire, who has withstood twenty-seven years of racing and pampering, and is still fresh and vigorous.

General Taylor is sire to Biddy Magee, Eugene Casserly and Fanuy Lent, and grand sire to Lady Blanchard, Sweet Brier, May Howard and Sacramento, all of whom have beaten 2.30. Unlike the sires of fast offspring generally, the old fellow does not manifest any sense of mortification at the career of his fast-going progeny. He is aware, of course, that the trotters who now occupy the track are faster than those of twenty years ago; but instead of moralizing on the contrast between the horse "of the period" and of the time when he was a boy, he considerately acknowledges that, even in his day, horses were just as fast as they could be "under the circumstances," and this probably may as truly be said of some other old horse whose memories are somewhat warped by age.

In considering the condition of this hardy old veteran of the turf, and taking a general survey of the trotting-horse community, where longevity is more common than in other classes of horses, we are impressed with the conviction that the training and treatment which they receive are not—as has been generally believed—counter to the natural habits and needs of the horse.

JUST WHAT AILS CALIFORNIA.—Recently two boxes of apples came to us from Colfax, weight in all 80 pounds, R.R. freight 10 cts. for the lot. Transfer from R.R. depot to 224 Sansome street, S. F., 50 cts.—three times what it ought to have been. Express to Oakland by slow route, 50 cents. From C.P.R.R. depot, San Francisco, to Franklin street, Oakland, $1. Our citizens are outrageously charged like this for nearly all the little accommodations needed, and it makes living so high that manufacturing and other industrial pursuits, which give so much life and progress to Eastern States, are impracticable at present here. Let us have reform from the bedrock.

FOOTHILL APPLES.—Mr. Moses Heald sends to the RURAL PRESS a box of excellent eating-apples, from Heald's ranch, near Colfax. Four or five varieties—all of them being good—were considerately included in the present. Mr. H. will please accept our thanks.

About Addresses at Fairs.

People, somehow, will persist in believing, or in pretending to believe, that everything connected with agriculture must be serious, solemn, and rigidly practical. This error—and it is as great a blunder as the popular mind ever stumbled upon—has done much toward making agricultural journalism the dull, monotonous, unsatisfying stuff that it is.

The farmer is represented as writhing in the grasp of the monopolist. We must approach the farm-house on tiptoe, as though it were the house of death or hopeless sickness. We should expect to be ushered into the solemn temple of the persecuted worshippers of common sense, by a woful visaged female, who is sinking under the disgrace of being "only a farmer's wife." The imaginary farm house is entered, and the boys and girls—embryo champions of the dignity of labor—are pernsing, or pretending to peruse, the driest roading that the publishers of subscription books ever inflicted upon the country. The man of the house, to be consistent with this newspaper style of farm life, must manifest the serenity of the martyr, combined with the ferocity of a railroad conductor; no subjects, except such as are connected with crops, should be broached in his presence; and he is not expected to say much on any subject, only gasping occasionally, "how long, Mr. Newspaper Writer, oh how long."

We shall not attempt to depict, in contrast with this, farm life as it is really found. Those who "have been there" know perfectly well that it is no more like newspaper farm-life than the social condition of any period is like that picture of it which is given in third-rate fiction. But the present, like all seasons of agricultural fairs, has brought out a point in connection with the error alluded to above, upon which we "rise to explain": it is the character of the addresses at agricultural fairs.

"What can he tell us about farming?" says the guardian angels of agriculture, when some accomplished speaker is announced to deliver an address at some fair. "What we want," they explain, "is plain, common sense; uttered by a practical farmer." It is not, we repeat, the farmer himself who utters this unfriendly criticism; it is the agricultural flunkey who presumes, in the absence of the farmer, to speak for him on all occasions; and in his presence fawns and cringes, and exerts himself exclusively to convince the farmer that he has no sympathizer nor friend in this naughty world but he, Mr. Agricultural Flunkey.

Now, in our humble opinion, the season of fairs should be nothing more nor less than a great agricultural Sabbath. The farmer's mind needs this, as greatly as his muscles. It is not enough that he is able to leave for a brief period the plow, the seeder and the harvester; the mental faculties that are brought into requisition in his vocation also demand their season of respite from toil. And especially should he have a few week's vacation from the school where incompetent teachers are endeavoring to instill into his mind knowledge which they themselves never could fathom. While the farmer is enabled to flee from the sewing machine agent, the lightning rod man, and the book-canvasser, let him escape the presence of that still greater bore, the agricultural demagogue, and dispenser of "useful information." Shallow, whining drivelers, who have got some one-sided Utopian idea into their heads, which they desire to "educate our farmers up to," superannuated professional men, who prate about the "dignity of labor." If ever a man had cause to exclaim "save me from my friends," it is the farmer of to-day.

We are not afraid of being suspected of a design for leading the farmer astray—farmers are not so leadable as some people suppose—when we beg of him to not jealously withhold his own hardened hand from the more delicate one of the patient, enthusiastic student, the finished orator, nor even from the wealthy capitalist; for you will often find in such a one a true friend to yourself, and an ardent admirer of your calling; and either of these unhardened hands may be as honest as your own. Such men are regular visitors, careful observers, and liberal supporters of agricultural fairs; and when they meet the farmer there the pleasure and benefits derived from the meeting are mutual.

We would not, as a rule, go outside the farming fraternity for material for our fair addresses; nor would we wish to be restricted to this circle; and we believe we utter the hearty sentiment of the farming community generally, when we declare that the philosophy, the sentiment, the poetry, and the amenities of farm life, should prevail in these addresses, instead of labored scientific disquisitions, or the details of practical farming.

Let the bow of agricultural labor—mental as well as physical—be unbent for a time. It will be all the more effective when it is brought into service again.

SLIGHT DAMAGES BY THE RAIN.—The latest accounts of the effects the late rains show that in some cases they were slightly damaging. In some localities—in the Russian river region for instance—where the harvests are always late, the unthreshed grain was injured to some extent, and at Watsonville and some other places where a portion of the hay was unprotected, this crop was also damaged by wetting.

Save the Crumbs.

EDITORS PRESS:—Many years ago I received a well-remembered lesson without a spoken remark. A physician was preparing a prescription, and amongst the articles used was gum arabic. After the medicine was duly prepared, every particle of gnm was carefully picked up; not a word was exchanged, but I received a lesson which was never forgotten, and many a time that small act came into my mind when viewing a careless waste. "Waste not, want not" is true to the letter. If the question were asked an old person of philosophic mind what he would do if youth were returned, his answer would probably be—"Pay attention to small things." Drops make the ocean. Grand structures are built by repeated strokes. Fortunes are made by saving the pennies. But my object in calling attention to small savings is to call the attention of those living on homesteads, cultivating the soil, and possessors of a variety of odds and ends necssary to be successful.

Those acquainted with the economical way every arrangement is carried out in the Eastern States, know also that there is woful waste in comparison. I will say almost a reckless waste; the farm yard is generally strewed with broken wheels of wagons, harness broken and thrust aside, plows dismantled and rusting, ropes, grain bags, and sundries, too numerous to mention, either too much exposed or going to decay for the want of proper attention, a system of doing business peculiar to California, but ruinous in the end to the proprietor.

Save the Crumbs,

And in the end the crumbs will save you. It is out of all reason the expense incurred by blacksmithing every time an article is required. As the seasons roll round the blacksmith has to repair the damage of a year's carelessness or exposure to the winter's storms. A friend of mine made a visit to one of the Middle States a few years ago, and while visiting a farmer friend, had occasion to use a small piece of cord. Looking around the yard he was surprised and annoyed at not finding what he required. After wasting some time in a profitless search, he went to the kitchen where the old lady was happy amongst the pots, and inquired for a string. Soon a box was overhauled, and strings short and strings long were brought forth from a careful receptacle. The principle was carried ont in every particular, "Save the crumbs." A farmer from Dry creek, Stanislaus county, informed me that if a California farmer were settling in the Eastern States with a small fortune, surrounded by well-to-do farmers, a few years would suffice to reduce him to poverty, if he continued to do business as in this country. Even now many farmers are under mortgage by reason of not using proper economy and saving the crumbs. Matters and things are coming down to a point. The wise will not go beyond their means, but make every crumb add to the size of the loaf. With some they are too proud to sell many of the smaller productions of the farm, as it would lower their dignity—eggs, chickens, etc. But the Granger farmer must come to the crumb saving, if he would succeed in any great undertaking. Foundations are laid before the spire can stand alone. The useful abont a house or farm should be well taken care of when not in use; and nothing thrown aside until worn out, or unfit for further service; and above all, make the dime perform its mission, rather than burden your homesteads with a mortgage to secure the dollar. Interest is a crumb, to be sure, but it is a growing crumb, without value received, and if the farmer really must have money, better in nine cases out of ten to sell and buy a cheaper farm, free of encumbrance, rather than to live under the canker worm of mortgage and interest.

Save the crumbs and few will be necessitated to do one or the other. Let each article bought perform the mission intended, and each year pay its own debt, and a small margin for the future. Times cannot always be overflowing as they have been in California, and it becomes the farmers to work on a sure and economical foundation.

Luck and chance seem to attend the farmers' results more than real good management, with exceptions. But necessity will mark a reformation. The extravagant and careless will be driven from the field, by unpaid obligations, etc., and those who come after them will be governed by the strict rules of economy practiced in the Eastern and Western States. Ten years hence and farm yards and enclosures will assume a different aspect from what we see to-day, and in many places and cases a degree of intelligence will pervade the community, owing to the diffusion of knowledge through the influence of the Granges. Nothing has ever been introduced to raise the standard of the farming interests like the Grange. May it teach a saving of the crumbs.

JOHN TAYLOR.

Fresno County.

EDITORS PRESS:—We were late in getting to Fresno. The train didn't get there till four o'clock in the morning. I hurried to the largest hotel—"no beds—Circuit Court in session; beds all taken," was answered to my inquiry. That Circuit Court has been the bane of my life. 'Twas so when I was teaching school, away up in Shasta county, bnt then there were only evening sessions, and the circuits were around the plaza, and the courting was done by numerous pairs of my students, male and female, after their kind.

Cotton.

At daylight I was in the saddle, and rode out to the farm of Dr. Brandt, five miles east of town. He has a large field set to grape vines, among which he is cultivating cotton. A large gang of Chinamon were picking it. Some portions of the field were equal to anything I ever saw in the Gulf States.

An immense amount of water is used in irrigating this field. It is brought by a large ditch a dozen miles from King's river, near Centerville, and is conveyed over the surface of the ground between the rows. Everything that is put into the ground thus irrigated, grows with the greatest luxuriance.

Fresno Plains.

We rode many miles around the town on every side, and everywhere it was the same dry, arid plain of yellow loam or sand, level as the ocean, covered with a sparse vegetation of dry grass and weeds, without tree, bush or shrub, and almost without improvement, except shepherder cabins, a half dozen miles apart, and a mirage that makes a flock of vultures around a sheep's carcass look as terrible and more numerous than an army with banners, and a cabin away on the horizon look like a tower, reaching half way to the clouds. My power of description fails. Reader, your imagination, if you please. From here a railroad ride of about thirty miles took us to Goshen. Here the Visalia switch, ten miles in length, takes passengers up to that town. On arriving there we were fortunate in meeting the Hackett brothers, who provided us with conveyance to the town of

Grangeville,

Which is six miles north of Tulare lake, in the famous Mussel Slough country. This is the garden spot of California. The soil is a black, sandy loam. The country is a level plain, with forests of excellent oak timber along the water courses. In places the forests are thick, with trees lofty and symmetrical, while again for miles there are but scattering giant trees with tops a hundred feet in diameter. But most of this country is a level, treeless plain, mostly cultivated, but without fence or other obstacle to a carriage drive from town a dozen miles in any direction.

The town consists of a store, filled as country stores usually are, with everything from a crochet needle to a plow, with the usual dry goods, clothing, groceries and everything else, but drugs and medicines. They are not needed here. Near by are a school house, blacksmith and wagon shop, and a half dozen residences. This is all the town. The proprietor of the land says that he has a lot of land to give to every mechanic who will bring his family and build a house and settle here, and that he has two lots for any one who will start a nursery. This would certainly be a good business in this locality. Franklin Grange meets at this place.

Three Water Ditches

Have been made from King's river through this region. Each is twenty-five feet wide and three feet deep. No flooding of the land is necessary. Each ditch irrigates a half mile in width, by the percolation of the water through the loose, porous soil on either side. And with this slight labor all kinds of crops are raised in perfection. The land is made to produce from forty to seventy-five bushels of wheat to the acre, and everything else in proportion.

Tulare Lake

We took a drive of a dozen miles along the lake shore, yesterday. The broad surface of the clear water of the lake, of which we had a magnificent view, when a few miles distant, was entirely hidden from us when at the shore, by the growth of tules, which fills a half mile's width of the margin, where the water is shallow. In this immense numbers of horses, cattle and hogs were feeding. We have been eating Chicago bacon ever since we have been in the valley. We asked our companion: "Why are not these lots of fat hogs made to supply the valley with meat?" His answer was "O, these hogs eat so many mussels that their meat tastes so fishy that it cannot be eaten." I could not help thinking on the matter. Here in the finest grain country in the world—thousands of fat hogs roaming here at will, and a large proportion of the pork consumed being brought from the distant corn fields of Illinois. The whole thing looks decidedly "fishy," yet it is a veritable fact.

Thousands of water fowl filled every little piece of open water in sight. Geese, ducks, cranes, bitterns, herons, swans, egrets, pelicans and dozens of smaller varieties of fowls would fly from before us with discordant cries and thundering noise of wings, as we passed along. The lake is said to abound in excellent fish of several different kinds, but to this we cannot add our testimony, as they are taken only in deep water, and we had no boat.

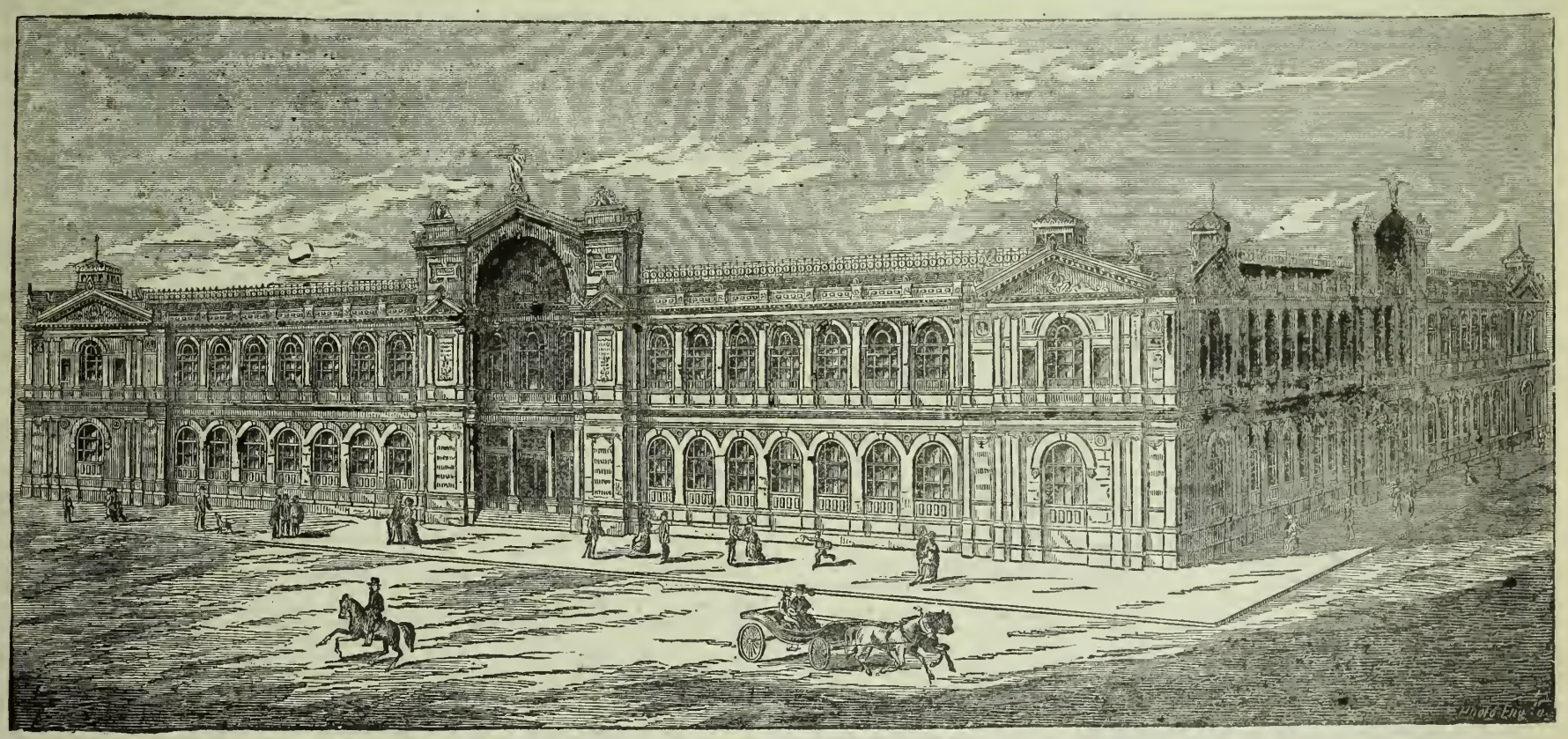
MORE ANON.

King's River Switch, Oct. 26th.

The Chilian International Exposition.

The Government of Chili propose holding a grand International Exhibition at Santiago, Chili, September, 1875. The building in which this exposition will be held—a representation of which is shown on this page—will be architecturally a very handsome structure. It is now nearly finished, and will be thoroughly complete in all its parts and fitted for the reception of exhibits. Besides the main building, there will be several tent-like structures for special exhibits in the spacious, grand old city of Santiago, where the palace is located. As the time within which applications can be made is very short—they having to reach Santiago by the 15th of January—and as the energetic Consul-General is hard at work trying to awake the people of our Coast to the importance of a full exhibit of all our productions, we call the attention of farmers, mechanics and manufacturers to the Exhibition, trusting that California will not be behindhand in getting up a creditable exhibit.

The importance of such expositions is so well known that it needs no comment. In Chili, particularly, where we send large amounts of goods, California should be well represented, and preparations should be made at once by those who intend to make exhibits. The San Francisco *Journal of Commerce*, which made a very creditable display of Pacific coast products at our late Mechanics' Fair, has already applied for a large and commodious space where samples and models of everything that is manufactured or sold in this city, may be exhibited in attractive form, and all brought together in a convenient space, where they may be examined leisurely, and without giving visitors the trouble to wander here and there in search of a particular exhibit. They will have a competent representative to explain the details of the exhibit, which gives parties intending to make a display a good chance to show their wares at little expense.



THE CHILIAN INTERNATIONAL EXPOSITION BUILDING AT SANTIAGO, 1875.

ITALIAN CHESTNUTS.—A correspondent of the PRESS not long since sought to obtain some information on the subject of Italian chestnuts. The following item, which we clip from one of our city papers, will possibly be of interest to parties interested in this matter: To the various semi-tropical products that have been successfully adopted in central California, the Italian chestnut must be added. Lusk & Co., of Clay street, yesterday exhibited a sample of this nut which is superior to the imported article, grown by G. G. Briggs, at Davisville, Yolo county. Only one thousand pounds will be produced this year, but in a few more seasons this product will be in superabundant supply. The lot brought 50 cents a pound wholesale, and was immediately retailed at 75 cents. Mr. Briggs has the honor of sending to market the first considerable lot of chestnuts grown in California. He has also been very successful in his efforts to cultivate the soft-shell almond—last year gathering 300 pounds, and this year 10,000 pounds. The quality is superior, and for the entire lot 17½ cents a pound was refused by his agents here.

Premiums at the Siskiyou County Fair.

Following is a list of premiums awarded at the Siskiyou county Fair, held at Yreka, October 7th.

Horses.

Judges—O. C. Wheeler, William Bybee and Louis Tucker.

THOROUGHBREDS.

As the best of this class exhibited, Mary Tompkins was awarded a premium of $20.

GRADED.

1. A. Reynolds $5 on the yearling Lady Clara, by Norfolk out of Hunkadora; also $5 on the sucking colt Enreka, by the same sire and dam.

Charles Hammond $15 on mare Alamode and sucking colt.

J. P. Wood $20 on the stallion Rochester.

James Quinn $10 on the stallion New York.

E. Flitner $15 on the mare, Queen of Hearts.

ROADSTERS.

E. Winegar was awarded a premium of $15 on Pompey as the best roadster on exhibition.

G. W. Gamble $15 on Lady Clare as the best roadster mare on exhibition.

ROADSTER TEAMS.

Wm. McConnell $10 on Frank and Tip Ward, as the best roadster team on exhibition.

FAMILIES.

Charles Hammond $20 on Alamode, and her colts, Mary Tompkins, Lancet and Kate Kirby, as being the best dam, other than thoroughbreds, with not less than 3 of her colts.

J. B. Wortser $25 on Kirby Smith, and a lot of his colts as being the best stallion, other than thoroughbred, with not less than 3 of his colts.

OF ALL WORK.

F A madee was awarded a prem. of $10 on the stallion, Billy, as the best horse of all work.

COLTS.

J. B. Rohrer $2.50 on the colt Breckenridge, as the best sucking colt exhibited.

Cattle.

Judges—W. J. Segrams, W. Biernbsum and H. H. C. Jensen.

DURHAMS.

Jas. A. Davidson $25 on bull Copay, 6 yrs old.

David Detur $20 on bull Stonewall, 3 yrs old; $15 on bull 5th Duke of May, 2 yrs old; $20 on cow Miss Alice, 6 yrs old; $10 on cow Belle of Yuba, 2 yrs old, $5 on sucking calf, no name, 3 wks old.

DEVON.

Rus Kenyon, $15 on bull Durbenham, 2 yrs old; $20 on cow Daisy, 7 yrs old; $15 on cow Rabbit, 3 yrs old; $7.50 on heifer Alamode, 1 yr old; $5 on sucking calf Rosella.

AYRESHIRES.

James Quinn, $20 on bull New York, 3 yrs old.

GRADED.

J. P. Woods, $15 on bull Derby, 2 yrs old, as best graded bull of any age.

John B. Rorher, $10 on cow Jane, 3 yrs old, with sucking calf, as best graded cow of any age.

Sheep.

FINE WOOL SHEEP.

Judge—O. C. Wheeler.

James Quinn, $10 on merino ram Sam, 4 yrs old; $10 on merino ewes Pegg and Lucy, 3 yrs old; $5 on merino lamb Mary Jane, 7 mos old.

Premiums Awarded on Articles at the Pavilion.

FRUIT, VEGETABLES, GRAIN, FLOUR AND POULTRY.

Judges—L. D. Ladd, J. F. Whitter and J. A. Shepard.

To Mrs Jessie Davis, best 50 lbs wheat, $5.
To Mrs. M. E. Hilt, best 50 lbs besns, $2.50.
To Mrs. M. E. Hilt, best 50 lbs hops, $2.50.
To Samuel Jackson, best 50 lbs corn, $5.
To H. L. Davis, best 50 lbs oats, $5.
To H. L. Davis, best 50 lbs barley, $5.
To Jas. A. Davidson, best 50 lbs onions, $2.50.
To Jas. A. Davidson, best 50 lbs rye, $2.50.
To C. S. Moore, best 50 lbs carrots, $2.50.
To Jas. A Davidson, best 50 lbs potatoes, $5.
To E. Relchman, best 50 lbs flour, $5.
To Eddy McConnell, best dark Brahma chickens, $3.
To Mrs. M. E. Hilt, best Dominique chickens.
To Samuel Jackson, best squashes, $2.50.
To C. S. Moore, best pumpkins, $2.50.
To Jas. A. Davidson, best beets, $2.50.
Jas. A. Davidson, best cabbage, special prem. recommended.
J. R. Kenyon, best turnips, special prem. $1.
F. J. King, exhibit salt, special prem. $5.
Mrs. M. E. Hilt, best tomato, special prem. $1.
Mrs. M. E. Hilt, best variety of peaches, $5.
Mrs. Clarkson, best variety of plums, $3.
Mrs. M. E. Hilt, best variety of grapes, $5.
Mrs. M. E. Hilt, best ten varieties of apples, $10.
Samuel Jackson, best three varieties of apples, $7.50
Mrs. M. E. Hilt, best five varieties of pears, $5.
Henry Hazlett. best three varieties of pears, $3.
Mrs. M. E Hilt, raisins, special prem. recommended.
Samuel Jackson, best bacon—ham, shoulder and side, $5.

CANNED FRUITS, JELLIES AND PRESERVES.

Judges—Mrs. C. H. French, Mrs. L. Warren, Mrs. Ad. Winckler, Mrs. Thos. Orr.

To Mrs. James Clarkson, best wild cherry jelly, $1.
Mrs. James Clarkson, best wild plum jelly, $1.
Mrs. Jesse Davis, best apple jelly, $1.
Mrs. Jacob Martin, best currant jelly, $1.
Mrs. M. E. Hilt, best peach syrup, $1.
Miss Naomi Hazlitt, best quince jelly, $1.
Mrs. F. Fultz, best plum jelly, $1.
Mrs. Louisa Hart, best crab-apple jelly, $1.
Mrs. M. E. Hilt, best blackberry jelly, $1.
Mrs. M. Fultz, best white currant jelly, $1.
Mrs. M. Fultz, best cherry jelly, $1.

CANNED FRUITS.

Mrs. M. Fultz, best tomatos, $2.
Mrs. Jesse Davis, best blackberries, $2.
Mrs. M. E. Hilt, best crimson peaches, $2.
Mrs. M. E. Hilt, best apples, $2.
Mrs. J. Martin, best cherries, $2.
Mrs. M. E. Hilt, best Hamburg grapes, $2.
Mrs. F. Fultz, best peaches, $2.
Mrs. M. E. Hilt, best pears, $2.
Mrs. W. J. Evans, best plums, $2.
Mrs. Jesse Davis, best gooseberries, $2.

PRESERVES.

Mrs. A. Ifland, best apricots, $1.
Mrs. J. Clarkson, best peaches, $1.
Mrs. Jesse Davis, best plums, $1.
Mrs. J. Clarkson, best currants, $1.
Mrs. J. Clarkson, best crab-apples, $1.

PICKLES.

Miss Louisa Fried, (14 years old), best pickled cabbage, $1.
Mrs. M. E. Hilt, best cucumbers, $1.
Mrs. M. E. Hilt, best peaches, 1.
Mrs. H. L. Davis, best tomato, $1.
Mrs. Jesse Davis, best mango pickles, $1.
Mrs. E. Chandler, best mango peppers, $1.

CATSUPS.

Mrs. M. Fultz, best tomato, $1.
Miss Emma Clyde, (14 years old), spiced currants.
Mrs. G. A. Nordheim, best potato starch, $1.

DRIED FRUITS.

Judges—Mrs. L. Huseman, and Mrs. A. E. Schwatka.

Mrs. M. E. Hilt; for most varieties and best specimens, $5.

Mrs. J. Clarkson, second greatest variety, special prem. $2.50.

WINES, LAGER BEER, CIDER AND VINEGAR.

Chas. Peters, best lager beer, $5.
C. S. Moore, best currant wine of 1869.
Mrs. H. L. Davis, best currant wine three years old, $2.50.
Mrs. H. L. Davis, best raspberry wine.
Mrs. H. L. Davis, best bolled cider.
Mrs. M. E. Hilt, best currant wine of 1873.
Mrs. M. E. Hilt, best blackberry wine of 1873, $2.50.
Mrs. M. E. Hilt, best grape wine of 1873.
Mrs. M. E. Hilt, best blackberry wine.
Mrs. M. E. Hilt, best brandy plums, $1.

FANCY ARTICLES.

Judges—Mrs. Sterling, Mrs. Stringham, Mrs. Linton and Miss Emma Doolittle.

Miss Mary Wetzel, 9 years old, crochet tidy, $2.
Miss Louisa Fried, crochet tidy, honorable mention.
Miss Kate Brown, tatting collar, $2.
Miss Mary Pashburg, 5 years old, crochet work, $1.
Miss Lena Klinga, 6 years old, cotton crochet, $1.
Miss Martha Knights, 10 years old, worsted embroidery, $2.
Miss Katie Romme, bead pin cushion, $1.
Miss Lizzie Nixon, 9 years old, bead bookmarks, $1.
Sisters of Mercy, bead work, embroidered picture, $2.
Miss Annie Kelch, 11 years old, braided child's suit, $2.
Miss Lena Blabee, embroidered tidy, $1.
Miss Sophie Winckler, bead hanging basket, $1.50.
Miss Carrie Jones, 9 years old, air castles, $1.
Miss Nellie Heard, horn basket, diploma.
Mrs. Jos. Lang, geranium, dip.
Mrs. Jos. Lang, vine in hanging basket, dip.
Miss Katie Innkor, picture in raised work, $2.
Mrs. A. W. Niles beaded lamp mat, $1
Mrs. Fred Taylor, worsted work tidy, $1.
Mrs. Incz Wheeler, raised crochet work tidy, dip.
Sisters of Mercy, chair in worsted, $1.
Miss Clara Seavers; daisy mat, $2.
Mrs. John Pashburg. crochet tidy, $1.
Mrs. A. Klinge, crochet night cap, $1.
Miss Mary Greenough, crochet edging, $1.
Miss Minnie Winckler, game bag, $1.
Mrs. W. Bisbee, slipper case, applique, $1.
Mrs S. Antenrieth, watch holder, $1.
Miss Minnie Kaster, lamp mat, $1.
Miss Ida Ranous, knit lace, $1.
Mrs. A. W. Niles, shell basket, $1.
Mr. M. E. Hilt, cone and shell basket, honorable mention.
Mrs. A. Iflands, child's embroidered dress, $5.
Mrs. H. B. Warren, silk embroidery, honorable mention.
Mrs. Wm. McConaughy, infant's robe, $2.
Mrs. Dowling, doll, honorable mention.
Mrs. F. Rogler, meshed netting, $1.
Miss Laura Calhoon, Java canvas, $1; also crochet tidy.

PATCHWORK AND QUILTING.

Judges—Mrs. L. Hart, and Mrs. E. M. Lawton.

Miss Maggie Coombs, patchwork quilt, $5.
Mrs. E. Chandler, patchwork quilt. dip.
Mrs. Mary Stringham, worsted quilt, $5.
Mrs. Inez Wheeler, silk quilt, $5.
Mrs. Mary Coombs, worsted child's quilt, $2.50.
Mrs. Thomas Ore, worsted quilt, dip.
Mrs. A. W. Niles, crib quilt, honorable mention.
Mrs. A. W. Niles, drawn hearth rug, $3.
Mrs. E. Ranous, hrsided hearth rug, $3.
Mrs . David Horn, white quilt, honorable mention.

HOME MADE WOOL YARN AND KNITTING.

Judges—Mrs. Besughan, Mrs. E. Chandler and Mrs. G. A. Nordheim.

Mrs A. Shepard for hand made wool yarn, $1.
Mrs. L. Wright, for exhibit knitting, prem.

NEEDLE WORK—BY HAND.

Judges—Mrs. C. D. Fowle, Mrs. Jos. Cavanaugh, and Mrs. Bartlett.

Mrs. Chas. Hammond, child's apron.
Mrs. Chas. Hammond, child's underclothes—tatting and tucks, $2.
Mrs. Chas. Hammond, child's braided suit, dip.
Mrs. Chas. Hammond, lady's night dress, $2.50.

NEEDLE WORK—BY MACHINE.

Mrs. Chas. Munro, lady's chemise, $2.50.
Mrs. Chas. Hammond, child's night dress, dip.
Mrs. David Horn, 3 pieces lady's underclothing, honorable mention.
Mrs. David Horn, gentleman's underclothing, special prem. $2.
Mrs. David Horn, gentleman's shirt, honorable mention.
Mrs. M. E. Hilt, 2 aprons—1 made by hand and 1 by machine—honorable mention.
Miss Katie Remme, 12 years old, pillow slip and toilet cover, $1.
Miss Mary Witherill, 11 years old, suit underclothing second best, dip.

WORKS OF ART.

B. F. Smith, oil painting of Castle Rock, $10; also oil painting Mt. Shasta, special prem.
Miss Nettie King, 11 years old, oil painting, $2.50.
Mr. Alex. Roshorough, pencil drawing, $2.50.
Mrs. W. A. Niles, pencil drawing, honorable mention.

ON CUT FLOWERS.

Judges—Mrs. Bartlett, Mrs. F. Ringe and Mrs. Jessie Davis.

Mrs. Vanchoate, greatest variety of fine flowers.
Mrs. W. Bisbee, most beautiful bouquet of roses, dip.
Mrs. W. Bisbee, finest coxcombs.
Mrs. Vanchoate, most beautiful collection of flowers, having zenias and pansies for a specialty, dip.
Miss Mary Greenough, finest display of dahlias.
Miss Mary Greenough, two vases mixed flowers—very fine.
Mrs. Sisson, two winter bouquets dried flowers, dip.
Miss Clara Hovey, vase purple amaranths, dip.

ON BUTTER, HONEY AND CHEESE.

Judges—Mrs. E. Heard, Mrs. Bills and Mrs. Perry Hoyt.

Wm. McConnell, best cheese, $5.
Mrs. M. E. Hilt, best firkin butter, $10.
Mrs. E. Chandler, best fresh butter, $10.
Mrs. E. Chandler, best honey, $5.
Mrs. E. Chandler, best beeswax—home-made—special premium, $5.
Thos. Orr, box honey, special premium, $3.

ON BREAD, CAKE AND CRACKERS.

Judges—Mrs. J. R. Kenyon, Mrs. J. Martin and Mrs. H. C. Tickner.

Miss Anna Ryan, 12 years old, best soda biscuit, $1.
Mrs. A. Ifland, best pound cake, $2.50.
Miss Jenny Clyde, 14 yrs old, hop yeast bread, $1.
Joseph Lang, baker's wheat bread, $2.50.
Joseph Lang, crackers, $2.50.

LEATHER.

Judges—Jesse Davis, H. Richardson and H. B. Gillis.

To J. C. Tolman, for 11 samples of leather, dip.

LONDON is literally built on a foundation of pipes. In some places it would be difficult to find room to lay another pipe. One gas company supplies two districts with nearly four hundred miles of pipes. Then there are the underground telegraph pipes, and 2500 miles of drain-pipes, the lead and iron pneumatic tubes, the sewers, the water pipes, and the underground railway.

Rattan.

Rattan comes from the Moluccas —principally from Singapore, Pedang, Penang, Samarang, and St. Simon's Bay. Of all the rattan collected in the East the United States consumes three-quarters of the total product, the imports amounting now to something more than 6,000,000 pounds. There are rattans and rattans, and no less than ten different grades can be found, which vary in price from two cents up to ten cents a pound. The first quality should be of a bright color, of a straw yellow, but in addition must be supple, and not sticky, a trade word, meaning dull and wanting in elasticity. It requires a great deal of experience to decide what is good rattan, or the kinds which will work up best for particular sorts of goods. The very choicest rattan comes from Borneo, Sumatra, Java, Malacca, Singapore, Celebes, Borneo, Bombay, Ceylon, Travancore, Cochin, Malabar, Calicut, Mangalore, Goa, Canara

California in the Miocene Epoch.

In our issue of October 10th, we gave the remarks made before the California Academy of Science by Dr. J. G. Cooper on "California in the pliocene epoch." At the last meeting of the Academy Dr. Cooper made some remarks on "California in the miocene epoch," which we give as follows:

Unlike the pliocene which I spoke of at our last meeting, the miocene in California furnishes us, so far, with no *certain* evidence of land animal's existence, and few of vegetable life. It is, however, most probable that such existed, and will in time be determined or distinguished from the pliocene with which they are now mixed. That there was an extensive and most interesting terrestrial fauna in the adjoining regions of Eastern Oregon, Wyoming and Utah has been proved by the treasures of animal remains found within ten years past in those regions, to enumerate merely the names of which now would take up too much time.

As there was much less land above water in this part of the continent during the miocene, the field for such animals to exist in was much more limited than in the pliocene, and therefore, their history requires longer time to work out. Besides this, the convulsions and removals of animal relics from their original beds, during the volcanic and glacial periods, were so general as to mix them up in a manner too puzzling to be deciphered for a long time to come. An instance of this is shown by the tooth of an *Archegosaurus* found by me on Mare Island, some years since, and mentioned in our Proceedings, Vol. V., p 194. This tooth, identified by the lamented Agassiz, belonged to an animal believed to have been one of the earliest reptilian forms known, and characterizing the carboniferous age. It was an enormous development of the strange "four-legged fish," or larval salamanders still found in the Columbia river and other western waters, but must have been 20 feet long, and no similar remains are found in any late formations. Though it is not *certain* that they may not be yet found to have existed among the monsters of the pliocene epoch on this coast, as their supposed descendants live in our fresh waters, still the evidence of this single tooth would have gone far to prove the age of Mare Island to be carboniferous if no other fossils had been found there. As it happens, however, to be one of the richest fossil-beds of pliocene remains in California, the single tooth found on the surface of that formation was probably transported by ice from the Sierra Nevada, where the nearest carboniferons strata are known to exist. Of course the same may be the case with some of the pliocene remains, and possibly others elsewhere. But the peculiar position of Mare Island makes it the most likely place for such mixtures, as it lies just where the outlet of pliocene or post-pliocene lakes or rivers must once have met a great obstruction to their flow. On this animals embedded in floating ice would naturally lodge and decay, just as the celebrated extinct elephant of Siberia was carried by ice to its resting place at the mouth of an Arctic river. The obstruction referred to was no doubt an elevation of the Mt. Diablo ridge, crossing the Straits of Carquinez at this point, during the volcanic period before mentioned. By this pliocene beds were made to accumulate to a depth of over 50 ft., which they still show on the adjoining shores, though the rivers have washed away the obstruction itself, and the greater part of these beds also.

The fossil evidence which we possess relating to the miocene epoch in California is, however, abundant and interesting. It so far consists of beds of marine shells, found at short intervals thoughout the coast range and the foothills of the Sierra Nevada, which contain the proper proportion of living species to prove their age as relatively older than the pliocene. From their comparatively recent date, it is not generally difficult to recognize and follow out these beds throughout their extent though much more disturbed and altered by volcanic action than the pliocene. In some places, however, the contact of eruptive rocks or infiltration of foreign mineral matter by hot springs, has altered them past recognition, though for only limited tracts south of this body.

From these marine beds we find that nearly the whole of the coast ranges south of here were under the sea in the miocene, and the evidences of extensive washing away of the strata are so plain that it is not improbable that the *whole* were submerged.

Beds of excellent miocene, and, possibly, pliocene fossils, are found at the mouth of Kern river cañon, showing that the sea then washed freely against the foot of the Sierra; there is even reason for believing that it extended far up the Colorado river basin; and certainly it deposited a thick bed of the enormous miocene oyster (O. Titan), with other remains, along the west shore of the present Colorado desert, now at an elevation of probably 1,000 feet. Of its extent in the northwest quarter of California, very little is known, and probably most of that region was above water.

As these changes of level were caused by depression of the land below its present level, our mountains were then probably quite insignificant, and no doubt a much more level and uniform surface prevailed on shore. As the miocene was elsewhere the culminating period of existence for the large and strange tertiary mammals, it is altogether probable that some of them inhabited portions of the dry land of California, connected with the regions in which they were so abundant in the north; but so far the geological surveys have not been sufficient to define their limits, either in time or space, within this State.

That marine monsters frequented our shores, is proved by the remains of seals, whales and still undescribed creatures of enormous size, that have been found in this formation in the coast range, even more abundantly than in the pliocene. From the great difficulty of obtaining their stone-imbedded relics, there will be work for future generations of students in describing them. From these animal remains (many of which were only of microscopic size), was produced the petroleum of this coast, a substance so far found only in the miocene period strata of California.

Of the miocene flora as distingushed from the pliocene in California, we know very little. It was apparently of a less tropical character, more like that of the present time, and probably resembled ours now living as nearly as any other. Beds of lignite, four feet thick, but poor in quality, are common near the coast, containing wood and algæ.

The northern hemisphere seems to have had in the miocene epoch a very uniform climate, in which the vegetation of Europe resembled that now in our Eastern States. The most wonderful fact connected with it is, that recent discoveries have proved that Greenland, in lat. 70°, and Spitzbergen, in lat. 78° 58′, had a rich luxuriant forest of trees, mostly American in character, among them a Redwood, undistinguishable from that so common here! In all 137 species are known. It is impossible to reconcile this with the existance of even four months night which we know must prevail so near the pole, even if the climate there were tropical. We are forced to the conclusion in spite of astronomical opinions, that the poles have changed since then, and this may help to explain many geological puzzles both in California and elsewhere. Among these the supposed absence of all EOCENE animal or vegetable remains on this coast is one which might be accounted for by supposing that in that epoch California was under covering of polar ice! Such a theory, though it may be called absurd on account of the present flattening of the poles by centrifrugal force, is as tenable as that of the well known alternations of deep ocean and dry land which geology proves to have occurred on our continent. I may mention in this connection, that Pry Dana saw reasons during his explorations of the Oceanic Archipelago, to believe that it has been slowly subsiding from the condition of a continent in the miocene and pliocene epochs, while this coast has been rising. Thus alternations of land and ocean have doubtless been going on, nsually slow and gradual, since the creation of the world. The changes in fauna and flora, which in our limited field of view seem to have been sudden and convulsive, were probably nearly all through the tertiary, as slow as at present, but from these enormous undulations of the earths' surface half of their history is for us buried beneath a fathomless abyss.

Would changes of the poles be any more wonderful or impossible?

STRAW AS A CONDUCTER OF ELECTRICITY—.An extraordinary account has appeared in a French agricultural journal, to the effect that straw forms admirable lightning conductors. It had been observed that the straw had the property of discharging Leyden jars without spark or explosion, and some one in the neighborhood of Tarbes had the idea of constructing straw lightening conductors, which were formed by fastening a wisp or rope of straw to a deal stick by means of brass wire, and capping the conductor with a copper point. It is asserted that the experiment has been tried on a large scale around Tarbes, eighteen communes having been provided with such straw conductors, only one being erected for every sixty arpents or 750 acres, and that the whole neighborhood has thus been preserved from the effects, not only of lightning, but of hail also. The statement comes from a respectable source.

PREMIUM FOR CIRCULAR SAW.—The Board of Commissions of the Cincinnati Industrial Exposition for 1874, offer a special premium of $100 in gold, in addition to the regularly advertised premium, for the best circular saw. The conditions for competition are: The saws must all be 56 inches diameter, teeth either inserted or solid, gauge at option of exhibitor, eye 2 inches diameter, pin holes ⅝ inch, and 3 inches from center to center. The saws will be tested on the same engine, while diagram cards are taken from the engine during the performance of each saw. This offer is made at the request of the western lumbermen, who are very much interested in good saws and also confident that notwithstanding late years have shown many important improvements in this line, still further economical improvements can be accomplished.

INCOMBUSTIBLE WOODEN SHIPS.—The English admirality is going to put the wood made incombustible by the new chemical preparation the tungstate of soda, to a very severe test. A vessel is being built of which all the wood has been thus prepared. After it has been launched, it will be filled with all kinds of combustible matter, which will be set on fire, then it will be exactly known what results can be achieved in this way. If favorable, wood has the advantage over iron in lightness, absence of rust, and consequent durability, cheapness, less expense in preservation and elasticity, as wooden ships are not subject to leakage after shocks, as is the case with iron vessels at the joints of the plates.

Ink.

We might bring many other accusations against ink. Among them is the difficulty of carrying it about. The patent bottles, which open like a jack-in-the-box were no doubt a great discovery, and are as convenient as may be. But bad is the best. For the ink when long shut-up acts as a glue upon the lid, when either gives way or opens with a jerk and makes a mess. It is almost impossible to keep ink in good order. The best part of it sinks to the bottom of the pot, like the cream in good London milk. If it is not frozen in winter or dried up in summer, it gets full of hairs, or becomes a cemetery for the dead bodias of flies. There is nothing among the small worries of life more trying to the temper than when the pen at every dip is clogged with something that makes writing impossible. Ink is almost useless without a paraphernalia of other things. You must have pens whose nibs, however good, are corroded after a few hours writing with the acid in the ink. You must have either sand or blotting paper, an inkstand, an ink-eraser, a pen-wiper, etc. But it may be asked after all this abuse of ink, what can be offered in its place? One cannot draw up deeds in pencil or write histories in blue chalk. No doubt the one merit of ink is that it is practically indelible. But surely in these days of chemical science we need not be driven to galls and water in order that what we write may not be rubbed out. There must be some means of preparing a paper such that the mere touch of a chemical pencil should make an indelible mark. The man who should confer this boon on the public would deserve a prize medal at the next exhibition. But perhaps we should say good-by with sadness to ink, after all. For ink would be to the new compound what the old stage coach is to the train. The poetry of writing would be gone. With a chemical pencil on chemical paper, the old triumphs of penmanship, the ups and downs, and flourishes produced by fine nibs would no longer be possible. True, we should be saved the trouble of dipping our pens, but how often does an inspiration come at the moment of rest, when the pen needs filling? And as to wiping it, there is a positive pleasure in wiping a good pen when it has done its work satisfactorily. —*Saturday Journal.*

SUBMARINE PHOTOGRAPHY.—Dr. Neumeyer's plan of a photographic apparatus, designed for the determination of the temperature and currants at the bottom of the sea, is described as follows: "A copper box hermetically sealed is provided with an exterior appendix made like a rudder. A mercurial thermometer and a compass are in the interior, each in a glass receptacle, into which are admitted traces of nitrogen gas. A small electrical battery completes the contrivance. When the apparatus is lowered into the sea, attached to a sounding line, the action of the current on the rudder indicates the set of the flow, by the relative position of the compass-needle and rudder. The temperature is recorded by the thermometer. To fix these indications, a piece of photographic paper is suitably disposed near the glass case containing the instruments. At the proper moment, a current of electricity is established through the gas in the receptacle, causing an intense violet light, capable of acting chemically upon the paper for a sufficient length of time to allow of impressing photographically thereon the images of the compass-needle and of the mercury column. The time required for this register is said to be three minutes, after which the instrument is hoisted the paper removed, and replaced by another for a second observation.

VALUE OF BIRD'S-EYE MAPLE.—The Green Bay *Advocate* says: "The machine of S. C. Carpenter and Dr. M. E. William, for cutting veneering, which we have previously described is an undeubted success. It does its work smoothly and well. It is a knife shaped like a pencil-sharpener and commences cutting at the end of the log, the log feeding into the knife or the knife to the log on a common lathe, the veneering coming off in the shape of a scroll. There is a machine for cutting veneering from round blocks, but it is different from this. In that the knife is parellel with the log, and in some kinds of wood the beauty of the grain is lost, while with the knife set at an angle it is preserved. A few words will give an idea of the profit of using a machine like this. A bird's-eye maple log scaling 1,000 ft can be put down at the manufactory for $6 to $8. The machine cuts the veneering one twenty-fourth of an inch thick, and the log would therefore cut about 24,000 ft. Two men, it is thought, could cut the log in half a day. At one cent per foot the veneering would be worth about $240. But this veneering. is new worth six cents per ft, or $1,540 for the log."

THE average cost of a ton of coal, as purchased by the London gas companies in 1873, was £1 4*s*. 6·14*d*., the total outlay being £1,753,-715. In 1862 the average was 17*s*. 6·15*d*. per ton; in 1871, 15*s*. 9·92*d*.; in 1870, 16*s*. 3·74*d*; and in 1869, 16*s*. 3·75*d*. Accordingly, these figures show between 1869 and 1873 a rise of 50 per cent. in the price of coal as purchased by the London gas companies.

THE grain crop in Lowis county, W. T., is considerably above an average. The worst feature is, nearly one-third of the wheat was slightly damaged by rain.

Compound Engines of the U. S. Coast Survey Steamer "Hassler."

Mr. Charles E. Emery, consulting engineer, has communicated the following to the *Journal* of the Franklin Institute. If other engineers would follow his example, the question of relative merit between simple and compound engines would soon be permanently settled. We omit the details of the experiments, which seem to have been conducted with great care, and simply give results.

The vessel, on her trial trip, using Schuylkill coal and both boilers, developed 125 horse-power with 250 pounds of coal per hour, a performance of two pounds of coal per horse-power per hour, when the boiler and engines were not felted and the weather quite cold. Only one boiler was in use during the run.

The following extracts are from the official report of Commander P. C. Johnson, U.S.N., commanding the "Hassler."

It gives me pleasure to request your notice of the consumption of coal while engaged in such work as the "Hassler" was designed for.

At San Diego, before starting the fires, the ship had in her bunkers	101.09 tons
To-day on hand	68.30 "
Deduct for distilling water, galley, stoves, etc.	3.60 "
Showing a consumption in 35 days of	29.19 "
Averaging per day	0.83 "

The ship has been under steam every moment since leaving San Diego. Excepting Sundays, she has been under way during the day, and banked fires at night, having steamed 1,069 miles and made 704 026 revolutions. The bunker-doors are closed and locked at all times (except when in the act of getting out coal), and the key always in possession of the engineer. Besides weighing, the bunkers are frequently examined and their contents measured.

In a subsequent letter Commander Johnson writes: We have been 58 days under steam, running from daylight till dark generally. Banked fires at night and Sundays, and have consumed in the furnaces only 1,891.4 lbs of coal per 24 hours—0,844 tons per day.

There is no mistake about it. There has been no stealing of coal. The bunker-doors were locked, except when serving out, and the measurement shows the proper amount on hand now.

Mr. Emery claims that the above facts are sufficient to show conclusively the great economy which may be obtained by the use of the compound engine.

A. E. HALLENBACK writes as follows to the N. Y. *Sun*, from Canandagua, Mich., Oct. 5th: On Thursday, October 1st, while scraping ont the county ditch on his farm in Seneca township, Lenawee county, Michigan, Oramon Tuttle came in contact with an obstruction that overturned his scraper. On examination it proved to be an immense horn, the remains of some extinct animal. Further digging has developed the other horn, part of the skull, collar-bones, and a number of ribs; also one tooth. The water running back into the pit has put a temporary stop to the digging, but it will be resumed this morning, and measures will be taken to preserve the bones. The animal had evidently died standing up.

I have just visited the spot and examined the bones and the place from which they were taken. A large number of physicians and professors of the Hillsdale and Adrian colleges pronounced them horns and not tusks. They have an outside shell and a distinct pith.

The space occupied by the skeleton is over twenty feet long, and the tip of the horns were about twenty feet apart. The ends of each are decayed, but they now measure eight feet nine inches in length, and must have measured about ten feet when whole. Three feet from the large end they are twenty-two and a half inches in circumference, and they weigh 175 pounds each. Some of the ribs were seven feet long. The tooth secured is a frontal tooth, three inches square and weighs four and a half pounds. They have been viewed by several thousand people, many of whom have seen the tusks of the mastadon, which are quite common in this State, and all those agree that they bear no resemblance to them.

The animal's horns must have measured twenty feet across. His hight was probably about fifteen feet, and length, independent of horns, nearly twenty. The above statement is perfectly reliable. There is no canard about it, and, if you think proper, you are free to publish it.

NEW NAVAL GUN CARRIAGE.—A new naval gun carriage and platform are to be experimented upon at Woolwich Arsenal. The invention is said to utilise the application of hydraulic power to such an extent that all the work of the gun detachment, with the exception of taking aim, may be dispensed with. A peculiar railway truck, adapted to the purposes of a gun carriage, is also about to be tried. Before going to the expense of making these carriages the principal was tried in a rude way with an ordidary railway truck on the ordinary rails which were level with the ground. A gun was securely fastened to the truck with chains and fired with a 500 lb. projectile and 80 lbs. of gunpowder. When discharged the gun and its extempore carriage recoiled about 100 yards along the level line, and Major Maitland R. A., the Assistant Superintendent of the Royal Gun Factories, by mathematical calculations, arrived at the conclusion that by inclining the rails upwards towards the rear at a very slight gradient the recoil of the heaviest gun would be kept within reasonable bounds.

Agricultural Notes.

ALAMEDA.

Barley.—*Enterprise*, Oct. 24: On Monday the house of A. Esdon shipped from here to Modesto twenty tons of harley. This is no sigu of a duck's nest, but one of importance to our farmers. If our neighbors over in the great San Joaquin can't raise good barley they know where to come and get it. Several car-loads have been sent to Bantas for aeed purposes, within the past week. Our hay and graiu is aought for all over the country.

BUTTE.

Curious Phenomenon.—*Record*, Oct. 24: At the residence of Mr. L. Fargo, Chico, may be witnessed a curious freak of naturo. Several apricot trees which were badly scorched hy the late fire, have blossomed, presonting a sight seldom witnessed at this season of the year.

Indian Valley.—We received a call on Friday from E. M. Prince of Indian valley, who has lately heen East on a visit. He reports Indian valley as prosperous, and Taylorville as indnlging in new brick huildiugs, which gives the place an air of permanent prosperity. The wheat crop in that valley was a partial failure, owiug to the late cold summer and consequent frosts. Flour has to be carried into the valley for use the comiug winter.

COLUSA.

Cotton Picking.—*Sun*, October 24th: We regret to learn that Andrew Rutland had not succeeded in gathering the hnlk of his cotton crop before the rain set in. By the advice of Col. Strong he put off the picking until the 20th of September and then most of the Chinamen employed got sick or did not do good work. If he had begun a week earlier and had put on a greater force he would have heen all right. He will make money as it is, but uot so much as he could if he had had the experience he now has. We think Mr. Rutland will put iu several hundred acres next year on Grand Island, and he will reap much benefit from his experience of this year. Persons who desire to plant can make good arrangements with him about putting in on shares. We must vary our crops, and it stands us in hand to give oncouragement in all the staple crops.

CONTRA COSTA.

Preparing. — Antioch *Ledger*, Oct. 24: Plows, harrows, seed sowers, and farming utensils generally, are daily arriving from San Francisco, and farmers are preparing for extensive farming operations during the coming winter. The New York ranch haa heen leased to various parties for a term of years. William Carter, of Vallejo, who has for several years farmed exteusively on the Marsh Grant, has leased a large tract of Robinson, on the New York ranch, for a term of six years. All will pray for, and many predict a wet winter; but the opinions of all combined are worthless. No ono can determine that fact until next March. Last season the rain fell at regular intervals favorahle to working the land, and all the moisture was absorhed. All anticipated a favorable season, still the result showed less than a third of a crop. It is the late spring rains that mature the crops in this section, and without them we have but little hope. A larger quantity of land has been summer-fallowed than ever before, and it is to be hoped that all our farmers will soon learn that this is the safest and surest method of farming on the west side of the San Joaquin.

EL DORADO.

Potatoes.—*Mountain Democrat*, Oct. 24: We are in receipt of a sample lot of potatoes, grown at Fuller's ranch, Squaw Hollow, near this city. They are Humboldts, symmetrical, smooth, solid, thin-skinned, mealy when cooked, and in all respects as fine potatoes as ever grew out of doors. Two of the largest of those sent to ns, answering to every point of the above description, measured and weighed as follows: No. 1 measured 12 inches around by 21¼ inches in longitudinal circumference; No. 2 measured 11¼ by 17¾ iuches in circumference, and the two weighed a fractiou over four pounds. Mr. Fuller has ahout five acres in this potato patch, from which he feels safe in estimating the crop at not less than 20 and probably nearly 30 tons. This shows what can be done at farming in these hills.

FRESNO.

Rain.—*Expositor*, Oct 28: Since our last issue we have had several rain-storms. Monday morning a storm of considerable severity prevailed, and the ground is now in condition for plowing. The grass and volunteer grain is already sprouted, and it will be but a few days before the face of the earth will be covered with a vesture of beautiful green. This is certainly a very early spring, or winter as it is termed, and it is to be hoped that rains will follow at such intervals aa to sustain the growth of the vegetation, otherwise considerable loss must ensue. Usually the vegetation does not start until December.

KERN.

Stock.—*Courier*, Oct. 24: The shoop men are purchasing laud in tracts of 160 acres, and seeding it down to alfalfa. This is a precaution which it would he well for our stock-growers and dairymen to adopt. It doesn't take a very large field of this grass to furnish feed for a large number of cattle. It will pay to spend money and time to secure a good setting, as it will more than pay for itself in one aeason after it gets fairly going.

LOS ANGELES.

Figs.—*Herald*, Oct. 24: Last spring Capt. Beane planted a small fig-cutting on the place of Judge King. It has now grown to the aize of a man's wrist, and last week the captain counted 82 figs growing on a siugle stalk—and this was all effected in one summer's growth.

MARIPOSA.

Cotton in the Foothills.—*Gazette*, October 24th: Mr. Hugh Cosgrove sends to this office a sample of cotton raised on his ranch, situated ahout a mile from Indian Gulch. Experts who have examined it say that it is a good quality—fine strong fiber and average staple. Mr. Cosgrove only planted a small patch, by way of experiment, and is so well pleased with the yiold that he intends extending his operationa in that line, and expects to make it a profitable crop. Success attend this, or any other enterprise calculated to develop the latent resources of Mariposa.

MERCED.

Cotton.—*Tribune*, Oct. 24: Cotton picking has commenced in Merced couuty. The price paid at that poiut is 18 cents per pound, and the yield will be greater than in any previous season.

NEVADA.

Potatoes. — Truckee *Republican*, Oct. 24: Levi Cox, a former Truckeeite, has gone into the potato huainess helow Verdi, and is proving the value of the soil along the hanks of the Truckee river. This year he has succeeded in raising thirty tons of excellent potatoes on eight acres of ground. From one acre of ground he has already secured eight tons of the variety known as the Pelas No. 9. The other principal varieties raised hy Mr. Cox are the Early Rose and the Goodrich. Mr. Cox has a potato on exhibition from this year's crop which weighs five and a fourth pounda. In raising his crop but very little manure was used. The productiveness of tho soil along the banks of the Truckee river, from Bronco to Reno and beyond, is a surprise even to our most sanguine agriculturists.

Dairying.—Mr. S. Euer, at his ranch, six miles northwest of town, has made 9,000 pounds of choice butter the present season. Mr. E. has 100 cows, and leaves to-day with all of his stock (180 head) for the vicinity of Folsom, where he will pasture his cattlo during tne coming winter.

PLACER.

Grapes.—*Argus*, Oct. 24: Our sunny slopes are better adapted to the grape than tho valley lands, and thoy are not so well calculated for grain and grass. Many acres that are naturally fertile are so situated that they cannot be irrigated, at least cannot get water enough to inaure a crop of grain. Vines, however, ueeding no more irrigation than will give them a atart when first planted, flourish on these hillsides, and yield a better quality of fruit than when grown on the rich, moist soils of the valleys.

Nut Trees near Auburn.—Cor. *Foothill Tidings*, Oct. 17: These trees do well here in Auburn, and might he made a source of profit. There is a tree in town, the trunk of which is at least six inches in diameter, and several small trees on Mr. Crutcher's place have beeu well filled with nuts, the last two years. Crutcher also has Italian chesnuts only four years old from the seed, that are well filled with nuts. There are numbers of black walnut trees in town, some of them loaded with walnuts. The English walnut also flourishes here, and there is no reason why a profitable business might not he done in their culture.

Hay.—Large quantities of hay havo been passing through town lately, from the valleys helow to the mountain towns.

Silk.—Mr. Bernhardt has not yet, we believe, secured the services of anyone to reel the silk from the cocoons he produced last summer. If a few more of our people would go into the business on a small scale, there would soon he business enough at reeling silk to induce skilled operatives to locate among ns. There is no doubt that silk worms can be raised here with ease and certainty. Mr. Bernhardt has had excellent success so far, and is encouraged to go on in the business.

SANTA CLARA.

Grain.—*Argus*, October 24th: The greatest portion of the grain harvest in our valley this year is under covor. We learn that the Granges have made arrangemeuts whereby our farmers can retain their grain until such time as a rise may come.

Reclamation.—*Mercury*, Oct. 23: One of the most important enterprises recently inaugurated in Santa Clara county is that which has for its object the reclamation of 5,000 acres of the salt marsh lands iu the vicinity of Alviso by an English company. The landa were recently purchased from E. L. Beard, for a considera-tion of $25 per acre, and we understand it is the intention of the company, if the enterprise provea a success, to establish a sugarie and engage in the manufacture of sugar from sugar beets. The land, it is said, when once drained is well adapted to the growth of this vegetable, and if this be true, the prospects are favorahle for the success of the project, as there aeems but little doubt aa to the question of drainage. The company is now having a levee five fect high constructed around their land, with a largo ditch on the outside, and gives employment to betweeu 200 and 300 Chinamen.

SANTA CRUZ.

Beet Sugar.—*Sentinel*, October 24th: The Beet Sugar Company of Soquel is now at work making a good quality of sugar, so we are informed. The beet crop thia year on the average has been better than expected. The recent rain worked an injury to the growing beets in the field, as liable which is at the expense of the aaccharine juice of the beet. The company feel encouraged at the succesful result so far as they have experimented.

SAN JOAQUIN.

Wheat.—There are 58,228 tons of wheat in the Stockton warehonse, and ahout 200,000 more will be added.

SISKIYOU.

Weather.—*Union*, Oct. 24: Duriug the past week it haa been warm and pleasant with a decided tendency toward showers. On Saturday evening there was quite a shower; again it rained an hour or two aome time during Wednesday night. In addition to these showers, there have been several light sprinkles.

Picking Fruit.—Knights & Short have now over a dozen hands employed in picking and putting away their immense crop of fruit.

SONOMA.

Wine.—*Ledger*, Oct. 23: The California wines are now not only popular in America, hut are sought for even in Europe, and our vintners are truly encouraged. The number of acres in the valley is variously estimated from 2,000 to 2,500 each, and each year more are being added. Taking as a basis to work from that there are 2,000 acres in vine, and multiplying that by 180, the number of vines generally allowed to the acre, we find that the product will bring us 1,360,000 hearing vines.

Grain.—*Argus*, Oct. 13: Theo. Skillman commenced operations in thia vicinity with a steam thresher in July, and closed up the aeason's work last week. He threshed over 40,000 bushels of grain, mostly wheat. The latter gave an average yield of 23 bushels to the race, tho grain being of good quality, and the yield larger than the farmers expected. The hest was of the Australian variety, raised by the McCune brothers, near Donahue, and hy D. H Parks, near Bloomfield, which was good seed wheat as it came from the machine. The barley threshed was of good quality, and gave 28 bushels to the acre on au average. Tho crop of W. L. Lloyd in Two Rock valley, yielded 78 hushels, aud that of H. M. Hammel 70 hushels. Barley sowed late in the season generally gave a light return. The oat crop in this vicinity this year was unusually light, most of it beiug affected with rust.

Agricultural Notes.—*Democrat*, Oct. 24: H. Kier is making wine in the vicinity of Cloverdale. Mr. Preston will also crush his grapes, having huilt a fine cellar this summer. There are now in the vicinity of Cloverdale 300 tons of grapes and no facilities for wine making. A wine cellar there next summer would pay well. H. C. Schrimf raised on Sidney Cooper's place, two miles and a half helow Santa Rosa, a crop of corn, 22 acres. He hrings us four stalks as a sample, containing twenty-three ears of corn, all the ears of good size. He wants to know if Dr. Boyce can beat it. Notwithstanding the clouds, the thunder storm and rain more or less for a week past, the weather wise shake their heads and say a "dry season." "You see sir," says Jim Fulton, and he is a close observer, "we have had over the average rain fall for the past two seasons and no deficiency for the preceding eight years. Last year it commenced with a vicious storm—this year with moderate and gentle showers, and so it will continue, or I am not a prophet."

SUTTER.

Repairing Break.—*Banner*, October 24th: We are in formed by Mr. Reece that Tisdale & Hiatt are engaged in filling up a break in the bank of tho Sacramento river on their farm, known aa the old Perdue ranch. Tho break is ahout 1,000 feet long and was made last winter. These enterprising gentleman are doing the work at their own expense.

All Busy.—Farmers and mechanics are all busy this fall. Farmers aro seeding their summer fallow, aud house building is actively going on, both in town aud country. Yuba City, especially, is doing a good deal of building.

TULARE.

Double Crops.—*Delta*, October 22d: Our Mussel Slough subscribers have made double crops through irrigation this season, and don't seem to think it much of a trick either. First comes the crop of cereals and then a crop of corns, beans, pumpkins, and, in fact, most anything with which they choose to seed the ground. Melons produce and re-produce all the season, and for ought we could see, looked determined to keep right on till spring. Jesse Brown's ranch had a volunteer watering in the spring, through the breaking of the ditch, and the moisture from heneath, to a considerable tract of land. Corn, melons and potatoes were planted hy way of experiment. Everything matured. Tho potatoes and melons we tried were superior to any othora that we have seen grown at this very late season.

Fruit raising in our valley is no longer an experiment. The fine samples of apples being brought to town every day demonstrate that we can raise as fine fruit here aa anywhere in the State, and we hope our owners of farms, who have made up their minds to stay here, will at an early day put ont orchards and vineyards. We believe limes, lemons and oranges can be successfully grown in many parts of our valley, if fairly tried.

Ditching.—Six "Mancope" ditching machines, from Chicago, in charge of agent McBean, have heen landed at Delta. They are signed to operate in Fresno, Tulare and Kern counties. A large plow connects with a draper, which conveys the dirt twenty feet or less aa desired, from the furrow. The whole is mounted on wheels. It seems like a practical scheme when used in moist land.

TUOLUMNE.

Raisins.—*Independent*, Oct. 24: Mr. Jarvis, of Gold Springs, is curing a large lot of raisins this year, from his muscut grapes. He expects to net over $1,200 from the experiment, as they are of ready sale helow, bringing 10 cents per pound at wholesale. We are informed that his grape crop this year will be over 100 tons, the bulk of which he makes into wine.

YOLO.

Wine.—*Democrat*, Oct. 23: The Woodland winery is doing quite an extensive husinesa the present aeason. Abont 400 tons of grapes of all varieties have been purchased, and hy the close of the season 60,000 gallons of wine will ho manufactured. The grapes raised in this vicinity are not excelled in any part of the State, and embrace all the best varieties. Consequently the wine will also be of the hest and choicest qualities. Six new tanks, each holding 2,000 gallons, and costing $60 each, have just been received, and au additional building rented to obtain sufficient storing capacity. This makes a market for some of the grapes raised hereahout, but still there are acres of them allowed to rot upon the vines.

Cotton.—I. F. Nason planted a patch of ground to cotton last spring, as an experiment. It has matured heautifully, and we are informed hy a gentleman who knows what good cotton is, and who saw samplea of Mr. Nason's, that it ia equal to the best cotton raised at the South. The same gentleman informs us that Fowler, just south of town, has been equally successful in raiaing cotton. That satisfies us that Yolo is just as well if not hetter adapted to cotton raising than the counties farther south. Her land is at least equally rich, and less liable to drouth.

YUBA.

Crops.—Marysville *Appeal*, Oct. 22: Many of our farmers, who raised big crops and sold at high prices in 1873, became excited over the value of agricultural lands for wheat-raiaing, and bought all that joined them—if not all that was for sale. They figured that at '73 prices they could not become involved, and that two or three years' crops on the newly-purchased land would clear up all indebtedness. This financial estimate was clear, and the venture was considered safe and sure. The new lands were plowed and harvested, and the yield was satisfactory. But the farmer of other and foreign lands was also favored with full crops. The foreigu demand fell off, and prices began to tumble, and continued until they reached a figure hut a little above the cost of production in California.

Early Season.—We would remind those intending to advertise this season in the Rural Press that it may be best for them to aend in their noticea at once. All who wish to let the agricultural public know what they have to sell should publish in the Rural. The paper has a choice circulation and a more numeroua list than ever before. If you have a good article to sell, advertise in the best jonrnal for your trade, first of all.

The thirty-three Chinese students that arrived by the Japan, a few days ago, are en ronte for Springfield, Mass.

There are now over four miles of drives in the Golden Gate Park, and some 300 acres under cultivation.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Oct. 27th, 1874.

For Week Ending Oct. 13th, 1874.*

Process of Manufacturing Products from Animal Fats.—Geo. Bloom Van Brunt, S. F., Cal.

Gang Plow.—Robt. N. Howes, Wm. A. Dorr and J. B. Webster, Stockton, Cal.

Sun Dial.—David B. Scofield, Auburn, Oregon.

Reissue.

Shingle Machine.—Frank A. Huntington, S. F., Cal.

Trademark.

Hair Restorative.—Tilton & Cammet, S. F. Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

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S. F. MARKET REPORT.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Oct. 28th, 1874.

Receipts have fallen off except in the item of Wheat which has approached close to 300,000 centals. The aggregates has been: Flour, 2,3741 qr-sks; Wheat, 291,218 ctls; Barley, 15,388 do; Oats, 2, 34 do; Bran, 2,165 sks; Middlings, 134 do; Beans, 2 171 do; Buckwheat, 96 ctls; Cornmeal, 345 qr-sks; Mustard Seed, 76 sks, Hops, 151 bls; Hay, 11,071 do; Straw, 330 do; Wool, 4,476 do; Cotton, 54 do; Potatoes, 3,675 sks; Onions, 1,709 do; Wine, 4,279 galls; Brandy, 20 do; Hides, 1999; Pelts, 139 bdls; Leather, 179 rolls; Lime, 300 bbls; Granite, 82 tons; Ore, 217 ctls; Butter, 955 do; Cheese, 778 do; Tallow 678 do; Sugar Pine Lumber, 158,000 ft; Base Bullion, 1,214 ctls; Quicksilver, 590 flasks; Copper Ore, 1,258 ctls: Straw Boards, 80 bdls, Doors, 3 car loads; Staves, 21 cords: Broom Corn, 471 bdls; Chicory, 130 bbls and csks; Paper, 300 reams; Borax, 1695 ctls; Tan Bark, 70 cords; Salt, 210 tons; Ochre. 11 do.

Barley—Receipts last week: Bay, 15,388 ctls; Coast, 13,813 sks, nearly double previous week's receipts. The range of prices has widened, and quotations for low grades have declined from 2½@5c, Sales of 2,300 sks, good feed at $1.07½, 200 do st $1.10, 1,000 do Brewing $1.17½, 200 do Coast at $1.7½@$1.10; 500 do good Brewing at $1.20; 10 car loads for Cincinnati, $1.27½ (delivered from San Jose), 1,900 do Bay Brewing at $1.30, and 1,023 do extra choice Bay at $1.35.

Beeswax—Firm st 25@27½c.

Buckwheat—Small receipts, and sales of 66 sks at $3.

Beans—Beans declined ¼@½c in consequence of large receipts which have aggregated for the week, 4,015 sks of Bay and Coast.

Broomcorn—Receipts last week of 471 bdls. No change in prices, which range from 5c to 8c ₱ lb.

Corn—Receipts of Corn last week, 980 sks. Steady at $1.35.

Cornmeal—No change from last week's quotations.

Feed—Firm and active with an advance of $2 in Bran, which is now quoted at $19. and of $1@1.50 in Middlings, which are now quoted at $28@ 8.50.

Fruits—There is but little change. There are no Peaches in the market. Common Pears are cheaper. Malaga Lemons sell at $10@12 ₱ box.

Fresh Meats—Pork Dressed has advanced to 8¼@ 8½c.

Flour—Receipts last week of 23,741 qr-sks. California exports 2,220 bbls. Sales for export 4,000 bbls Extra by the Golden Age and 1,000 by the Golden Gate.

Game—Prices have advanced. Hare is worth $3.50 @4. Venison is scarce, and in general the market is ahead of last week.

Hay—Firm within the range of $9@15.50.

Hops—There is a good deal of speculative damand in New York for California for brewer's use and for shipment to England. The crop here is mostly in second hands. We note sales of 130 bls of Washington Territory at 31c, sold for shipment East.

Hides—In good demand. Dry at 19½@20½c Sales of 1,000 at these rates. Wet Salted are largely in demand by tanners.

Honey—Firm at slightly advanced prices. Last week two car loads were shipped East.

Nuts—There has been no change in quotations within the week. California Peanuts are as yet scarce. Chile Walnuts sell in small job lots.

Oats—Range contracted. Sales 400 sks of good feed at $1 47½; 400 do for feed at $1.37½; 60 do medium at $1.41½. and 100 do Surprise at $1.65. Receipts last week, 21,634 ctls of Bay, and 18,745 sks of Coast, greatly in excess of the previous week.

Onions—Receipts last week 1,309 sks Yellow, which is the only kind in the market.

Pearl Barley—No change in prices.

Potatoes—Receipts last week 13,449 sks Bay and Coast. Prices are a little better than previous week.

Rye—Weaker; no sales. Receipts of Coast last week 114 sks.

Straw—Will improve, as all not baled will be destroyed by the rain.

Tallow—Dull and weak, having receded to 6@7c, a decline of ½c.

Vegetables—Scarce and dearer.

Wool—Market still dull, though more activity has been shown than during the previous week. Sales of 170,000 lbs, of which 140,000 sold within the range of 14@19c, and 20,000 within the range of 15½@22½c. Receipts last week, 5,334 bls of Interior and Coast, an increase on the previous week. The following is the telegraphic review of the Eastern markets:

There has been a little more business done during the past three days, still the market cannot be called active. The demand only for small lots to meet the wants of manufacturers is good. The market not having improved enough to induce mill agents to buy largely. Foreign Wools are still dull, and holders show little disposition to lower their quotations. California Wool is rather quiet and prices are easier. Sales of 12 bls washed Fall at 33c, and 20,000 lbs unwashed do at 26@28c; 105 bls do at 19@25o; 1,000 lbs do, private; 19 bls Fall Lambs at 29½c; 5,000 lbs scoured Fall at 72@73½c; 95,000 lbs and 67 bls of Spring, private. At Boston the Wool market was more settled. There was a fair movement in California Wools, which sold to a fair extent, the sales being 102,100 lbs at 30@42c for Spring, 26@27c for Fall.

The following notice has been issued from the Chamber of Commerce:

"A meeting of the gentlemen engaged in the Wool trade, members of the Chamber of Commerce, and others, will be held at the rooms of the Chamber, on Monday, 26th inst., at 3 o'clock, to consider what simplification in the classification of Wool can be made. Alterations in the collection of duties will be asked of the Government at the next session of Congress."

Similar movements are taking place in other places, and a hearing of the joint Committees of New York, Boston, Philadelphia, and Baltimore is promised before Congress meets.

Wheat—The probable result of the failure of the shipping house of Morgan Sons will be a great reduction in freights, on account of the number of vessels on the way that when they arrive will be without charters. A decline to £2.10 is not improbable. The Liverpool market has declined 2c during the week on the low grades of California, being quoted yesterday afternoon at $2.39@2.49 for California Average and $2.51@ 2.61 for California Club. The following shows the price of California Average Wheat in Liverpool for the past three years:

Year.	Date.	Price.
1874	Oct. 27	$2.39 to $2.49
1873	" 26	$3.04 to $3,10
1872	" 26	$3.04 to $3.10

This shows a falling off of 63c per cental as compared with either of the past years. The local market has advanced 2½c during the week, and is now quotable at $1.47½@1.50 for Shipping, and $1.50@1.57½ for Milling. Sales for the week:

Sks.		Price.
400	Inferior	$1.35
800	Ordinary	$1.40
900	Fair	$1.45
5,000	Shipping	$1.45 to 1.47½
10,900	Good Shipping	$1.50
2,000	do	$1.51¼
4,000	do	$1.52½
5,000	Choice Milling	$1.55
2,000	do	$1.57½
1,300	do	Terms reserved.

Receipts for the week have been 291,218 ctls of Bay and 8,286 sks of Coast. Exports small, 112,802 ctls, as follows:

Vessel.	Destination.	Cargo.	Value
City of Brooklyn	Liverpool	47,914	$ 71,270
Carl Both	Queenstown	17,808	31,000
Naworth	do	11,129	17,000
Oneota	Liverpool	35,951	54,000
Total		112,802	$173,270

DOMESTIC PRODUCE.

WEDNESDAY M., Oct. 28, 1874.

BEANS.

Beans, sm'l wh. ₱	3¼@	—	
do. butter	4½@	—	
do, hayo	2¾@	—	
do, pink	3 @	—	
do, pea	— @	—	

BROOM CORN.

Per ₱	5 @	8	

COTTON.

Cal. 1874. ₱	— @	18	

DAIRY PRODUCE

Butter, Cal. choice			
	₱ 50 @	52½	
do, good	45 @	55	
do, inferior	32½@	45	
do, firkin	30 @	35	
do, pickled	35 @	42	
Cheese, Cal. new	12½@	17	
do, Eastern	12 @	17	

EGGS.

Eggs, Cal. fresh	45 @	50	
do, Oregon	30 @	35	
do, Eastern	15 @	25	
do, Duck's	40 @	45	

FEED.

Bran, per ton	— @	17 00	
Middlings	— @	7 00	
Hay	9 00@	14 00	
Straw, ₱ bale	—50 @	55	
Oil cake meal	— @	30 00	
Corn Meal	— @	32 00	

FLOUR.

Extra	4 25 @	5 62½	
Superfine	3 90 @	4 30	

FRESH MEAT.

Beef, fr quality. ₱	7 @	8	
do, second do	6 @	7	
do, third do	4½@	5	
Veal	4½@	6	
Mutton	4½@	5	
Lamb	5½@	6	
Pork, undressed	6¾@	6½	
do, dressed	8¾@	9	

GRAIN, ETC.

Wheat, coast	1 45 @	1 50	
do shipping	1 40 @	1 45	
do milling	1 50 @	1 55	
Barley, coast	1 05 @	1 10	
do brewing	1 15 @	1 25	
Oats, ch ice	1 50 @	1 65	
do common	1 35 @	1 55	
Corn, White	— @	1 35	
do, Yellow	— @	1 35	
Buckwheat	2 75 @	3 00	
Rye	— @	1 02½	

HOPS.

California, 1874	32½@	37½	
East'rn, '73 cb'ice	— @	—	

MISCELLANEOUS.

Sceswax, per lb	25 @	27½	
Honey in comb	18 @	22½	
do Strained	5 @	10	
Pulu	9 @	10½	
Onions	60 @	90	

NUTS—JOBBING.

Cal. Walnuts	10½@	12½	
Peanuts per lb	7 @	9	
Chile Walnuts	8 @	9	
Pecan nuts	13 @	15	
Brazil do	14 @	16	
Almonds h'd shell	10 @	12½	
do, soft	20 @	25	
Filberts	17 @	18	
Cocoanuts, 1000.60	00@	—	

POTATOES.

Sweet, per cwt	90 @	1 12½	
Cuffee Clove	90 @	1 00	
H. M. Bay	80 @	90	
Pigeon Pt	1 00 @	1 05	
Humboldt	95 @	1 00	
Petaluma	95 @	1 00	
Mission	80 @	90	
Salinas	50 @	70	
Bodega	85 @	1 00	
St Barbara	— @	—	
Sac. River	— @	—	

POULTRY & GAME.

Live Turkeys, hens per ₱	16 @	17	
do gobblers	16 @	17	
Hens, per dz	5 00 @	6 50	
Roosters, young, large	5 00 @	6 50	
Broilers, small	2 00 @	3 00	
do large	3 00 @	4 00	
Ducks, tame, doz	5 00 @	6 00	
Geese, per pair	2 00 @	2 50	
Hare, per doz	3 00 @	3 50	
Snipe, Eng., doz	— @	—	
Quail, per doz	1 50 @	1 75	
Mallard Ducks	3 00 @	4 00	
do small	— @	2 00	
Wild Geese, gray	— @	—	
do white	— @	—	
Doves, per dozen	50 @	75	
Prairie Chickens	— @	—	
Grouse	— @	—	
Rabbits	1 25 @	1 50	
do tame	5 00 @	6 00	
Venison, per lb	6 @	8	

PROVISIONS.

Cal. Bacon, Light	— @	16½	
do Medium	— @	15½	
do Heavy	— @	13½	
Eastern do	14 @	16	
Hams, Cal	14 @	14½	
do Whittakers	— @	17	
do Dunfield, ch	— @	15½	
do Plankton & Arm'r	— @	15	
do Boyd's	15 @	16½	
do Stewart's	— @	16½	
Eastern Should's	9 @	9½	
do new hams	— @	—	
Cal. Smoked Beef	9 @	10	
Lard	14½@	17	

SEEDS.

Alfalfa, Chili	— @	11	
do California	— @	15	
Canary	4 @	4½	
Cotton	6 @	10	
Flaxseed	3 @	4	
Hemp	— @	8	
Ky. Blue Grass	50 @	60	
do 2d quality	40 @	50	
do 3d quality	30 @	40	
Millet	12 @	15	
Mustard, white	2 @	3	
do. Brown	1¾@	2	
Italian Rye	30 @	40	
Perennial do	30 @	40	
Rape	— @	11	
Timothy	11 @	12	
Sweet V Grass	60 @	75	
Orchard do	30 @	35	
Red Top do	30 @	40	
Hungarian do	10 @	13	
Lawn do	50 @	60	
Mesquit do	27 @	—	
Clover Red	— @	20	
do White	— @	65	
Alsike	— @	60	

WOOL, ETC.

FALL—

Good to choice	19 @	22	
Fair grade	16 @	18	
Heavy free	14 @	16	
Defective	12 @	15	
Hides, dry	19 @	20	
do wet salted	8½@	9	
Tallow, Crude	5 @	6	
do Refined	6½@	7½	

FRUITS AND VEGETABLES.

WEDNESDAY M., Oct. 28, 1874.

FRUIT MARKET.

Tahati, Or. ₱ M	— @	35 00	
Lorita, do	— @	—	
Cal. do	— @	—	
Limes, ₱ M	— @	20 00	
Cal. Lemons, ₱ M	— @	45 00	
Australian do	— @	—	
do per box	— @	—	
do Sicily ₱ h'x	— @	—	
Bananas, ₱ bnch	3 — @	4 —	
Cocoanuts, ₱ 100	— @	—	
Pineapples, ₱ dz	5 00 @	7 50	
Apples, ₱ box	40 @	1 25	
Cherries	— @	—	
Blackberries	— @	—	
do wild	— @	—	
Huckleberries	— @	—	
Strawberries ₱ lb	15 @	20	
Gooseberries	— @	—	
Raspberries	— @	—	
Currants	— @	—	
do black	— @	—	
Apricots	— @	—	
Plums	5 @	6	
Peaches, bskt	1 00 @	1 50	
do, ₱ box	— @	—	
do ext Mountain ₱	5 @	8	
Pears, Bartl, bx	— @	2 50	
do Cooking	40 @	1 25	
Crab Apples	— @	—	
Nectarines	— @	—	
Wat'rmel's ₱ 100	6 00 @	10 00	
Muskm'l's ₱ 100	5 00 @	10 00	
Pomegran's ₱ 100	6 00 @	7 00	
Figs	@	3	
Grapes, Bl'k H'g	75 @	1 00	
do Muscat	1 00 @	1 50	
do Malavo'e	— @	—	
do Sweetw'r	— @	75	
do Mission	1 @	2	
do Rose of Peru	@	3	
do Tokay	75 @	1 25	
do Morocco	5 @	8	
do St. Peter	— @	—	

DRIED FRUIT.

Apples, ₱ lb	7 @	8½	
Pears, ₱ lb	10 @	11	
Peaches, ₱ lb	8 @	12	
Apricots, ₱ lb	10 @	12½	
Plums, ₱ lb	8 @	10	
Pitted, do ₱	— @	15	
do Extra, ₱ lb	— @	—	
Raisins, ₱ lb	5½@	12½	
Black Figs, ₱ lb	5 @	—	
White, do	10 @	15	
Prunes	6 @	8	
do German	14 @	—	
Citron	@27½	32½	
Zante Currants	8 @	—	
Dates	12½@	—	

VEGETABLES.

Asparagus	— @	—	
Beets	— @	1	
Cabbage, ₱ 100 lbs	50 @	75	
Carrots, ₱ 100 lbs	60 @	87½	
Cauliflower, doz	50 @	60	
Celery, doz	50 @	65	
Garlic, ₱ lb	8 @	10	
Green Peas	3 @	3½	
Green Corn ₱ doz	15 @	20	
Sum'rSquash, box	— @	1 25	
Marro'fat Squash, tn	8 00 @	10 00	
Artichokes, ₱ doz	15 @	25	
String Beans, ₱ lb	1½ @	2½	
Lima Beans	4 @	5	
Parsnips	12½@	15	
Shell Beans	@	4	
Peppers, green ₱ lb	6 @	7	
Okra, ₱ lb	@	8	
Okra, Green	6 @	8	
Cucumbers, box	50 @	—	
Tomatoes, box	62½@	75	
Egg Plant, box	1 00 @	—	
Rhubarb	— @	—	
Lettuce	10@	—	

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ₱ lb*	35	do do (whole,) ₱ lb†	12½
do unpared, ₱ lb †	32	Apples, 10-lb boxes family use, extra	18
Peaches, do, ₱ lb †	16	Plums, pitted, ₱ lb†	25
do pared, ₱ lb*	33½	do do ₱ lb*	40
do do ₱ lb†	30	Rhubarb, ₱ lb†	35
Bartlett Pears, pared, lb*	45	Corn, ₱ lb†	32½
Pears, pared (sliced) lb*	30	Beans, ₱ lb†	60
Pears, 10-lb boxes, family use, extra	35	Potatoes, ₱ lb†	14
Currants, stemmed, lb*.	30	Sweet Potatoes, ₱ lb†	15
Royal Ann Cherries pitted, ₱ lb*	25	Onions, ₱ lb†	40
Kentish Cherries, pitted, ₱ lb	55	Beef, ₱ lb†	40
Apples, pared (ring) lb†	12½	Tomatoes, ₱ lb†	75
		Squash, ₱ lb†	20

*In caddies. †In bulk.

RETAIL GROCERIES, ETC.

WEDNESDAY M., Oct. 28, 1874.

Butter, Cal. ch'ice	— @	65	
do common	45 @	—	
Cheese, Cal., lb	15 @	25	
Lard. Cal., lb	18 @	20	
Flour, ex. fam, bl's	00 @	5 50	
Corn Meal, lb	3½@	5	
Sugar, wn. orsb'd	— @	12	
do lt. brown, lb	7 @	10	
Coffee, Hawley & Co family gr'nd, lb	25 @	40	
Coffee, green, lb	25 @	35	
Tea, fine blk, 50, 65, 75	@1	00	
Tea, finst Jap, 55, 75, 90	@1	00	
Candles, Adamant'ine	@	30	
Soap, Cal., lb	6 @	10	
Rice, lb	10 @	12½	
Yeast Powders, dz 1 50	@2	00	
Can'd Oysters, dz. 200	@4	00	
Syrup, S F. Gol'n	— @	75	
Dried Apples	8 @	10	
Dr'd Ger. Prunes	14 @	16	
Dr'd Figs, Cal	9 @	10	
Dr'd Peaches	10 @	12½	
Oils, Kerosene	28 @	33	
Wines, Old Port	3 50 @	5 00	
do Fr. Claret	1 00 @	4 50	
do Cal., dz. bot.	3 00 @	4 50	
Whisky, O.B, gal.	3 50 @	5 00	
Fr. Brandy	4 00 @	10 00	

GENERAL MERCHANDISE.

WEDNESDAY M., Oct. 28, 1874.

BAGS.

Eng. Stand Wht	—	@12	
Detrick's Machine Sewed, 22x36 E.	—	@12¾	
do 22x36, do E W	—	@13¾	
do 20x40, do A	—	@13½	
Flour Sacks ½s	9½	@11½	
" ¼s	6	—@ 7	
Stand. Gunnies, double seam	15	@15½	
single seam	13¾	@14	
" Wool Sacks	60	@67½	
Barley Bags 24x36	—	@14	
do 23x40	—	@11½	
do 24x40	—	@15	
do 24x36	—	@16	
Oat Bags, 24x40	16	@16½	
do 28x36	—	@17	
Hessian 40-in. gds	9½	@10	
do 45	10½	@11	
do 60	—	@15	

CANNED GOODS.

Asst'd Pie Fruits in 2½ ₱ cans	2 75	@—	
do Table do	3 50	@ 4 00	
Jams & Jellies	3 75	@ 4 00	
Pickles ½ gl	—	@ 3 50	
Sardines, qr box	1 85	@—	
do hf boxes	3 25	@—	

COAL—Jobbing.

Australian, ₱ ton	10 50	@11 00	
Coos Bay	—	@10 00	
Bellingham Bay	—	@ 8 50	
Seattle	—	@11—	
Cumberl'd, cks	—	@18 00	
do bulk	16 00	@17 00	
Mt. Diablo	6 25	@8 50	
Lehigh	—	@17 00	
Liverpool	10 50	@11—	
West Hartley	9 50	@10 00	
Scotch	10 00	@11 00	
Scranton	—	@13 00	
Vancouver's Isl	11 00	@11 50	
Charcoal, ₱ sk	75	@ —	
Coke, ₱ bbl	—	@ 60	

COFFEE.

Sandwich Island	—	@ 22	
Central Americ'n	19	@ 20	
Costa Rica per ₱	19	@ 22½	
Gnatemala	19	@ 20½	
Java	—	@ 27	
Manilla	19	@ 20	
Gronnd in os	19	@ 27	
Chicory	9	@ 10	

FISH.

Pac. Dry Cod, new	5	@ —	
cases	—	@ —	
do boneless	11	@ 12	
Eastern Cod	—	@ —	
Salmon in bbls	9 00	@9 25	
do ½ bbls	4 50	@4 75	
do 2½ ₱ cans	—	@3 00	
do 2 ₱ cans	2 65	@2 75	
do 1 ₱ cans	1 75	@ —	
Do Col. R. ½ b	—	@ —	
Pick. Cod, bbls	22	00 @ —	
do ½ bbls	11	00 @ —	
Bos. Sm'k'd Herr'g	40	@ 50	
Mack'l, No. 1, ½ bbls	8 00	@8 50	
" Extra	—	@9 00	
" in kits	2 00	@2 50	
" Ex mess, ½ bs	3 00	@3 50	
" Ex mess, ½ bs	—	@12 00	
Sm'k Herr'g, bx	56	@ 60	

NAILS.

Assorted size, lb	4 37½	@7 50	

OILS.

Pacific Glue Co. Neat F't No. 1	—	@ 90	
Pure	—	@ —	
Castor Oil, No. 1	—	@1 75	
do do No. 2	—	@1 60	
Cocoanut	60	@ 65	
Olive Plagniol	5 00	@ —	
do Possel	4 75	@ —	
Palm lb	9	@ —	
Linseed, raw	—	@1 05	
do boiled	—	@1 10	
China nut in cs	82½	@ 88	
Sperm, crude	—	@1 40	
do bleached	—	@2 20	
Coast Whales	60	@ —	
Polar, refined	50	@ 55	
Lard	1 15	@1 30	
Coal, refined Pet	37½	@ —	
Oleophine	20	@ 23	
Devoe's Bril't	25	@ 28	
Long Island	20	@ 23	
Eureka	—	@ —	
Devoe's Petro'm	20	@ 23	
Barrel Kerosene	20	@ 23	
Olive	4 00	@9 50	
Downer Kerose'e	—	@ 37½	
Gas Light Oil	—	@ 26	

PAINTS.

Atlan. W. Lead.	6	@ 10¾	
Whiting	—	@ 2	
Putty	4	@ 5	
Chalk	—	@ 2½	
Paris White	2¾	@ —	
Ochre	2	@ 5	
Venetian Red	3½	@ 5	
Red Lead	7	@ 11	
Litharge	10	@ 11	
Eng. Vermillion	2 00	@2 10	

RICE.

China No. 1, ₱ lb	6¾	@ 6¾	
do 2. do.	5½	@ 5¾	
Japan	—	@ 6½	
Siam Cleaned	5½	@ —	
Patna	5½	@ 5¾	
Hawaiian	7¼	@ 8	
Carolina	10	@ 10½	

SALT.

Cal. Bay, per ton	10 00	@14 00	
do Common	6 00	@ 7 00	
Carmen Island	11 00	@13 00	
Liverpool fine	—	@22 00	
do coarse	16 00	@—	

SOAP.

Castile ₱ lb	10	@ 11	
Local brands	5	@ 8	

SPICES.

Cloves	45	@ 50	
Cassia	26	@ 27	
Citron	—	@ 30	
Nutmeg	1 20	@1 25	
Whole Pepper	18	@ 19	
Pimento	—	@ 15½	
Gr'nd Allsp'rdz	—	@1 12½	
do Cassia do	—	@1 50	
do Cloves do	—	@1 50	
do Mustard do	—	@1 20	
do Ginger do	—	@1 00	
do Pepper do	—	@1 00	
do Mace do	—	@2 10	

SUGAR, ETC.

Cal. Cube per ₱	11½	@ —	
Partz' Pro. Cube bbl or 100 ₱ bxs	—	@ 11¾	
do in 50 ₱ bxs	—	@ 12	
do in 25 ₱ bxs	—	@ 12¼	
Circle A crushed	—	@ 11½	
Powdered	—	@ 11¾	
Granulated	—	@ 11	
Dry granulated	—	@ 11½	
Hawaiian	8	@ 10½	
California Beet	—	@ 1	
Golden O	—	@ —	
do Rey'g grade	—	@ 60½	
Cal. Syrup in bls	—	@ 70½	
do in ½ bls	—	@ 67½	
do in kegs	—	@ 75	
Hawaiian Molasses	25	@ 27½	

TEA.

Oolong, Canton, lb	19	@ 25	
do Amoy	28	@ 50	
do Formosa	40	@ 80	
Imperial, Canton	25	@ 40	
do Pingsuey	45	@ 80	
do Moyune	60	@1 00	
Gunpo'der, Cant.	30	@ 42½	
do Pingsuey	50	@ 90	
do Moyune	65	@1 25	
Y'ng Hy., Canton	28	@ 40	
do Pingsuey	40	@ 70	
do Moyune	65	@ 85	
Japan, ½ chests, bulk	30	@ 75	
Japan, lacquered bxs, 4½ and 5 lbs	45	@ 67	
Japan do, 3 lb bxs	45	@ 90	
do pl'n bx, 4½ lb	35	@ 65	
do ½ & 1 lb paper	30	@ 55	

TOBACCO—Jobbing.

Bright Navys	50	@ 55	
Dark do	50	@ 55	
Dwa f Twist	65	@ 70	
12 inch do	60	@ 70	
Light Pressed	65	@ 75	
Hard do	50	@ 60	
Coun. Wrap'r	35	@ 40	
Penn. Wrapper	20	@ 45	
Ohio do	15	@ 20	
Virgi'a Smok'g	45	@ 75	
Fine ct cbe'g, gr	8 50	@9 25	
Fine cut chewing, buc'ts ₱ lb	75	@ 90	
Banner fine cut	9 00	@ 9 25	
Eureka Cala	—	@9 00	

TURPENTINE.

Eastern	65	@ 70	

METALS.

WEDNESDAY M., Oct. 28, 1874.

American Pig Iron, ₱ ton	—	@ 42 00	
Scotch Pig Iron, ₱ ton	42 00	@ 46 00	
White Pig, ₱ ton	—	@ 42 00	
Oregon Pig, ₱ ton	—	@ 46 00	
Refined Bar, bad assortment, ₱ lb	—	@ —	3½
Refined Bar, good assortment, ₱ lb	—	@ —	4
Boiler, No. 1 to 4	—	@ —	5½
Plate, No. 5 to 9	—	@ —	5½
Sheet, No. 10 to 13	—	@ —	5½
Sheet, No. 14 to 20	—	@ —	5½
Sheet, No. 24 to 27	—	08 @ —	09
Horse Shoes, per keg	7	50 @	8 00
Nail Rod	—	9½@ —	
Norway Iron	—	8 @ —	
Rolled Iron	—	6 @ —	
Other Irons for Blacksmiths, Miners, etc	—	@ —	4½

COPPER.—

Braziers'	—	31 @ —	32
Copper Tin'd	—	45 @ —	—
O'Niel's Pat	—	50 @ —	—
Sheathing, ₱ lb	—	— @ —	24
Sheathing, Yellow	—	— @ —	25
Sheathing, Old Yellow	—	— @ —	12½
Composition Nails	—	24 @ —	—
Composition Bolts	—	24 @ —	—

TIN PLATES.—

Plates, Charcoal, IX ₱ box	13 00	@ 14 50	
Plates, I C Charcoal	12 75	@ 14 50	
Roofing Plates	11 50	@ 14 00	
Banca Tin, Slabs, ₱ lb	— 31	@ —	33

STEEL.—English Cast, ₱ lb

Anderson & Woods' American Cast	—	10 @ —	17
Drill	—	18 @ —	22
Flat Bar	—	18 @ —	22
Plough Points	—	16 @ —	17

ZINC.

Zinc, Sheet	—	— @ —	11½

NAILS—Assorted sizes — 5¾@ — 8

QUICKSILVER, per lb — — @ 1 45

LEATHER.

WEDNESDAY M., Oct. 28, 1874.

City Tanned Leather, ₱ lb	26@29
Santa Cruz Leather, ₱ lb	26@29
Country Leather, ₱ lb	24@28
Stockton Leather, ₱ lb	25@28
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	63 00@ 67 00
Cornellian Females, 14 to 16 Kil	71 00@ 76 50
Simon Ullmo Females, 12 to 13, Kil	60 00@ 63 00
Simon Ullmo Females, 14 to 15, Kil	70 00@ 72 00
Simon Ullmo Females, 16 to 17, Kil	73 00@ 75 00
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 35
California Kip, ₱ doz	40 00@ 60 00
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Backs, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs,

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Also send $15 currency, amount of first fee of the Government. The case will be placed on our regular file, the drawings executed, and the documents made up, and soon sent to the inventor for signing.

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For further information, send a stamp for our illustrated circular, containing a digest of PATENT LAWS, 112 illustrated mechanical movements, and HINTS and INSTRUCTIONS regarding the RIGHTS and PRIVILEGES of inventors and patentees, which will be furnished post paid. Also a copy of NEW PATENT LAW of 1870.

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A COMPLIMENT.

PLAINSBURG, MERCED CO., CAL., June 22, 1874.

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Although you were entire strangers to me when I first communicated with you, I soon felt satisfied you were gentlemen of integrity, and shall always be happy to represent you as such. Very truly yours,

H. W. RUCKER, M. D.

A. W. THOMPSON,

Attorney at Law,

No. 6 Leidesdorff street, - - San Francisco

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GLENGARRY,
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First m'th 50 cts ₱ ton } If delivered on Eureka wharf.
Afterwards, 30 cts ₱ ton }

Season Rates, fixed at time of storing, $1.50 per ton.

If hauled with teams, first month 25 cts per ton.

Afterwards, 30 cts per ton. Second Weighing, 10 cts.

Grain received on Dock, weighed and delivered to order, or stored without expense of wharfage or cartage.

Refer, by permission, to E. E. Morgan's Sons, S. F.

sep19 A. J. GOVE, Manager.

Hooper's South End Grain Warehouse,

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I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

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Write for Catalogue to ELWOOD COOPER,
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C. J. CRESSEY, Vice-President.

415 California street
San Francisco, Sept. 8th, 1874. sep12-4t

Brittan, Holbrook & Co., Importers of

Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento

The Pacific Mutual Life Insurance Company of California.

No. 41 Second street, - - - Sacramento.

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$100,000 Approved Securities, deposited with the California State Department as security for Policy holders everywhere.

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☞ Policies issued by this Company are non-forfeitable, and all profits are divided among the insured.

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Remainder subject to call.

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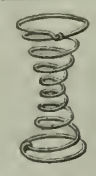
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We manufacture all sizes of BED and FURNITURE SPRINGS, from No. 7 to the smallest Pillow Spring; also, the Double Spiral Spring, which is the most durable Bed Spring in use. It is adapted to upholstered or skeleton beds. We have the sole right in this State to make the celebrated Obermann Self-Fastening Bed Spring. Any man can make his own spring bed with them. They are particularly adapted to Farmers' and Miners' use. Send for Circulars and Price List to

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Our business being exclusively Commission, we have no interests that will conflict with those of the producer. 4v23-1y

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For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; O. W. Reed, Sacramento, Cal.; A. Lusk & Co., Pacific Fruit Market, San Francisco, Cal. 3v4-1y

AGRICULTURAL ARTICLES.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

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IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

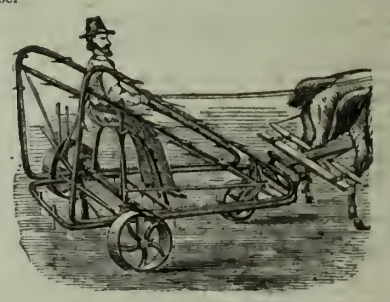
FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board hut 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



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TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

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WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

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LAUFKOTTER BROS.,
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THE CELEBRATED MITCHELL WAGON



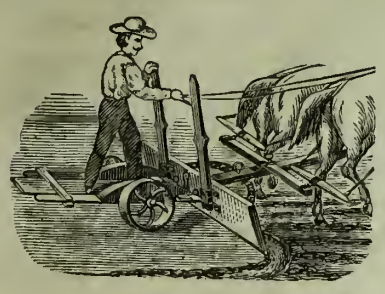
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THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

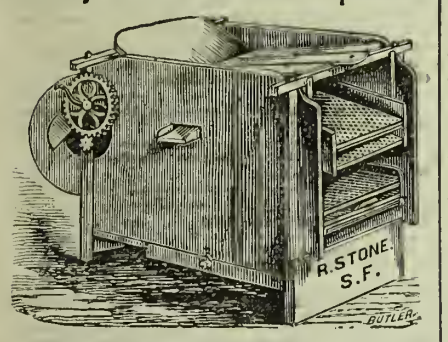
The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

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Novelty Mill and Grain Separator



Is one of the greatest improvements of the age for cleaning and separating grain, while it combines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

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Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

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Also, a large assortment of single and double Harness, of the most celebrated makers:

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Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

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MATTESON & WILLIAMSON'S

AMERICAN CHIEF

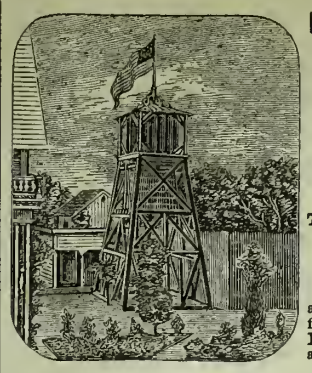


GANG PLOW.

Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the **Plains of Kansas, Nebraska, Missouri, Iowa and Illinois**, where no other mills have been known to stand any length of time. All we ask is a full investigation of the **DEXTER.**

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO.
4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.

The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept on the MERINO RANCH,



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. **City Office—315 California Street, San Francisco.**

SEVERANCE & PEET,
10v7-eow Importers and Breeders of Spanish Merino Sheep.

ALFRED S. MOORE. W. L. THWING

ALFRED S. MOORE & CO.,

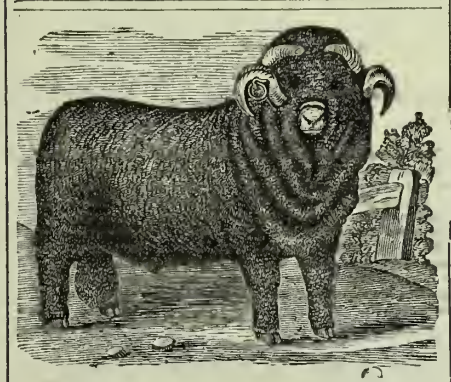
Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - - SAN FRANCISCO.
7v8-3m

STOCK NOTICES.



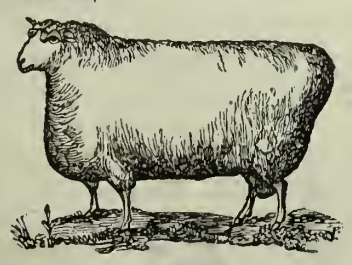
300 Head Pure Blooded French Merino Rams and Ewes,

For sale by MRS. ROBERT BLACOW, of Centreville, Alameda County, Cal., near Niles Station, on the Western and Southern Pacific Railroad.

These Sheep are guaranteed of pure descent, from the French Imperial Flock at Rambouillet.

And are equal, if not superior, to any of this breed in size and quality of wool, and are proved to be the heaviest shearers in the world. 12v5-3m

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats; as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT

P. S.—*Special rates to members of the Grange.*

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

To be obtained of **Messrs. CROSS & CO.,**
San Francisco.

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office—Room 5, 402 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.
11v7-6m

YOSEMITE HOUSE,

STOCKTON, CAL.

JAMES COLE, Proprietor.

This House contains all modern improvements; Saloons, Bath Rooms and Telegraph.

The only first-class Hotel in Stockton.

Lands & Homes For Sale

RANCHOS
FOR SALE ON A LONG TIME.

The "JURUPA RANCHO," situated on both sides of the Santa Ana River, between Anaheim (Los Angeles county) and the town of San Bernardino, containing 35,717 acres, of which a large proportion is level and adapted to grain, general agriculture, grapes, semi-tropical fruits, etc. The famous "Riverside Colony," founded by Judge North, embraces a portion of the east end of this Rancho.

Also, for sale, the Rancho "LA SIERRA SEPULVIDA," adjoining on the southeast, and containing 17,769 acres.

The Southern Overland Railroad will necessarily pass through or very near the Jurupa Rancho. Apply to

ALFRED ROBINSON, Trustee,
542 MARKET STREET,
ap25-tf N. E. Cor. Montgomery.

RICH FARMING AND DAIRY LANDS
In Alameda County for sale at a bargain.

The undersigned offers for sale 800 acres of farming and grazing lands in Alameda County, lying between the Bay of San Francisco and the Central Pacific R. R., and equi-distant from Niles, Warm Springs, Decoto and Washington stations. The land is rich alluvial loam, and is the best locality in the State for vegetable gardening and dairying, as rapid and frequent communication with the city is afforded by the railroad and steamers, touching at a wharf near the property. Apply to B. B. MINOR,
Room No. 4, No. 411½ California street, S. F., Cal.

FINE FARM FOR SALE.

160 acres good farming land adjoining the town of Petaluma, well watered, fenced and improved, with a comfortable house, barn and outbuildings, orchard, vineyard and garden. Title U. S. patent. Price $8,000. Apply to

BERRY & CAPP, 418 Montgomey St.,
sep-26 Real Estate Agents and House Brokers.

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, ETC.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, ETC.

For Sale, wholesale or retail, by

B. F. WELLINGTON,
(Successor to E. E. Moore).
425 Washington St., San Francisco. 22v7-1y

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIEROE & CO., 627 Sacramento St.,
14v7-3m bet. Montgomery and Kearny Sts., S. F.

The Pacific Rural Press

Is a Large and Handsomely Illustrated Agricultural Home Journal; Original, Instructive and Attractive; its varied contents, ably written and condensed, render it popular with its readers. We endeavor to make it a credit to the field it occupies, and to every intelligent circle it enters. ENTIRELY FREE FROM POLITICS, its columns are filled with cheerful words of encouragement for our Pacific Industries and instruction for the people. It extends information of the growing wants and necessities of our rapidly increasing and progressing agriculture. You can read it with pleasure, for present and future profit; you can send it with satisfaction to your friends anywhere. Its editorials are earnest and its contents reliable. No questionable advertisements darken its pages. It is a journal for rural homes throughout the Coast. It is a handsome home print, without a rival on this half of the Continent. Subscription, in advance, $4 a year.

DEWEY & CO., Publishers,

No. 224 Sansome St., S. F. 3p-tf

The Mining & Scientific Press

Started in 1860, is one of the oldest weekly journals now published in San Francisco. It has been conducted by its present proprietors for ten years, during which period it has been repeatedly enlarged and constantly improved. The active and steadfast efforts of its publishers have gained for its conduct an amount of practical experience greater than any other publishers have accumulated on this coast, of a weekly journal.

The sum paid by us for the best editorial talent obtainable for our special class journal; for engravings, for interesting news and correspondence, and for printing a large-sized, handsome sheet, is unequalled by that of any other American weekly west of the Mississippi.

As a PRACTICAL MINING JOURNAL it has no rival on this Continent.

It is the only MECHANICAL, and the only SCIENTIFIC journal of the Pacific States.

Miners, Assayers, Milliman, and Metallurgist in the United States should take it.

Pacific Coast Mechanics, Engineers, Inventors, Manufacturers, Professional Men, and Progressive and Industrial Students should patronize its columns of fresh and valuable information.

Mining Engineers, Superintendents, Metallurgists, Mine Owners and Mine Workers throughout the world should profit by its illustrations and descriptions of New Machinery, Processes, Discoveries and Record of Mining Events.

Intelligent thinkers throughout the land, in high or humble situation, who would avoid literary trash for genuine information, should SUBSCRIBE AT ONCE.

DEWEY & CO.,

No. 224 Sansome street, S. F.

Office of the State Grange, P. of H., San Francisco, Oct. 27th, 1874.

To the Members of the Grangers Fruit Association of California:

Notice is hereby given that the regular semi-annual meeting of the said Association will be held on

Wednesday, the 11th day of November, 1874,

at 2 o'clock P. M., at the office No. 6 Leidesdorff street San Francisco.

A. W. THOMPSON, Secretary.

THE TREADWELL SULKY



GANG PLOW.

Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

18v27-tf San Francisco.

SUPERIOR FRUIT TREES,

TRUE TO NAME.

A fine collection of Evergreen and Deciduous Trees. Australian Gum Trees in variety, by the hundred or thousand. Monterey Cypress in quantities and sizes to suit all. Orange and Lemon Trees at reduced prices. A general variety of Nursery stock.

Also, Rhubarb and Asparagus roots.

T. CORLEY,

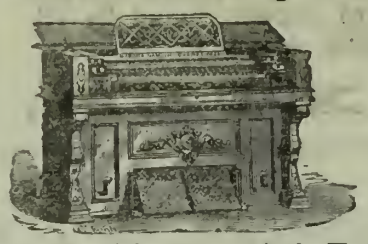
18v29-tf 315 Washington Street, S. F.

Geo. W. Chapin, Real Estate Agent, 434 Montgomery St., San Francisco, buys and sells Ranches in all parts of the State. City Real Estate exchanged for Country Property. MONEY LOANED. Post Office Box 1120.

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator-429 Montgomery street, San Francisco. 2v7-6m

THE

Mason & Hamlin Organ Co.



Make the Best Cabinet Organs in the World,

and present the following evidence that they succeed in doing so:

1. At competitive comparisons in Industrial Exhibitions, they have always taken highest premiums. It would be easy to do this by exhibiting at small fairs where there was little or no competition, or where judges were incompetent, or could be influenced. But the Mason & Hamlin Co. have won their honors at most important Expositions, where competition was widest, and comparisons most competent and rigid. At the recent Vienna Exposition, was the most extensive and exhaustive comparison ever made, the contest being between makers of all Countries. The Mason & Hamlin Co. were awarded the highest honors for demonstrated superiority. The Austrian Industrial Society also awarded their Grand Medal and Diploma of Honor for improvements presented in these organs. Other American organs were declared, in an official report to the Austrian government, "not to rise above respectable mediocrity," in comparison. At the Paris Exposition, 1867, the Mason & Hamlin Co. also received the first medal, and they are the only American makers who ever obtained any award at a World's Fair.

2. The mass of evidence from cultivated musicians that these organs are unequalled is overwhelming. Any one who will examine the Testimonial Circular of the Mason & Hamlin Co. will find such opinions from more than one thousand musicians, including many of the most eminent in both hemispheres.

3. The Mason & Hamlin Cabinet Organs are the only American instruments of the class which have been able to present such superiority as to obtain wide sales in Europe, notwithstanding difficult competition there with products of cheap labor.

The Mason & Hamlin Organ Co. now offer the finest assortment of the best organs they have ever produced, and they have the satisfaction of announcing that they will hereafter sell not only for cash exclusively, as formerly, but also on installment plan of easy payments. They also rent their organs with privilege of purchase.

Illustrated Catalogues and Circulars, with lowest prices and full particulars, sent free. Address

KOHLER, CHASE & CO., Agents,

633 & 635 Clay Street,

SAN FRANCISCO.

POISON! POISON!

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is SURE DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be as economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, O. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

Plows

☞Black Hawk, Collins, "Jones," Peoria,

Of all kinds and sizes. The largest stock ever offered in California; all NEW and just received, at low prices. Also, Cultivators, Harrows, Seed Sowers, etc. Sold by TREADWELL & CO., San Francisco.

☞Send for Price List. 18v27-tf

MOUNT DIABLO VINEYARD—FOR SALE.

Consists of 40 acres; can make 11,000 gallons of wine this year. Climate mild. Situated at the northern base of Mount Diablo. Good Brandy Distillery; Wine Barrels; Wine Press; Large Concrete Wine Cellar. Good Spring of living water handy. Good reasons given for selling. Age of Vines from eight to ten years. A choice variety of Vines. A large quantity of fine grape land can be bought adjoining the above. The whole to be sold at a great bargain. Apply to

E. F. CLAYTON, San Jose.

Or C. J. CLAYTON,

10v7-6m Clayton, Contra Costa Co., Cal.

GEO F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

And Tree Seeds,

GARDEN TOOLS, TREES, PLANTS, Etc.

No. 317 Washington Street, San Francisco,

Between Battery and Front.

jy11

LOMPOC RANCHO.

Near Point Conception, Santa Barbara.

Sixty miles northwest of Santa Barbara.

AUCTION SALE

—OF—

Town Lots, 5, 10, 20 and 40-acre Farms

Will Commence on

Monday, November 9th, at 12 o'clock, M.

And Continue Five Days.

The Sale will take place on the Rancho. Parties desiring to purchase should be on the ground a few days prior to the sale, in order to examine the property. Steamers leave San Francisco on October 31st, November 3d and 6th.

W. H. MARTIN,

Gen. Agent Cal. Immigrant Union,

oc31-1t 534 California Street, S. F.

SHINN'S NURSERIES,

NILES' JUNCTION,

Alameda County, - - - California.

The attention of persons intending to set out Trees is requested to the well grown and large variety offered for sale by the undersigned at the above Nurseries. An examination of our stock will satisfy any one of the quality, being all that can be asked, and when the low prices we have fixed are taken into consideration, we believe we are offering the very best inducements for buyers to deal with us. For full particulars we refer to our circular for the approaching season, which will be sent, as requested, on application to either of the undersigned.

SHINN & CO.,

Proprietors.

Address James Shinn, Niles, Alameda County, Cal., or, Dr. J. W. Olark, 418 California street, San Francisco, Cal. 8v17-4mo.

IMPROVE YOUR POULTRY.



IT COSTS NO MORE TO KEEP GOOD FOWLS THAN POOR ONES.

Oakland Poultry Yards,

Cor. 16th & Castro Streets, Oakland, Cal.

A fine assortment of imported Rouen and Aylesbury Ducks just received; price, $8 per pair. Warranted of the best strains in the country. Send stamp for circular to

GEO. B. BAYLEY,

4v8-tf P. O. Box 659, San Francisco.

M. EYRE, Napa, Cal.

Bronze Turkeys. Emden Geese,

Brahmas, Houdans,

LEGHORNS, and GAMES.



Black Cayuga and Aylesbury Ducks,

Bantams, etc.

Eggs, fresh, pure, true to name; well-packed so as to hatch after arrival.

ILLUSTRATED CIRCULAR AND PRICE-LIST FREE.

14v9-16p-tf.

Notice—To Tule Land Owners.

I am manufacturing a Gang Plow specially adapted to ploughing Tule Lands. Address

Vallejo Foundry, J. L. Heald, Prop.,

18v29-3m VALLEJO, CAL.

FREE to all applicants—my Nursery and Bulb Catalogues. F. K. PHŒNIX, Bloomington, Ill. 8v17-1m

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short Horn Cattle.

CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Naps, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

WM. QUINN, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petaluma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Mooey & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

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GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

SWINE.

A. T. HATCH, Suisun City, Cal., breeder of Poland China Swine.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

PACIFIC RURAL PRESS

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Grafting the Grape.

[Written for the RURAL PRESS by Felix Gillet, of Nevada City.]

Having been asked to write for the RURAL PRESS all the information I could get on the grafting of the grape vine, I send you to-day for publication the present letter.

The subject, I know, is not a new one to the readers of the PRESS, for you have already published several articles and communications on the grafting of the grape; however, I must confess that all those modes of grafting were new to me, although they may be as good if not better than those in general use in the old wine districts of France, and from which they so materially differ.

Of all the modes of grafting the grape known and used in Europe, the one most recommended as never failing and otherwise having certain advantages on all others, is

Grafting by Approach.

This might be done in four different ways. First, if the variety to be grafted is close by the stock upon which grafting will be done, just bend down a sprig of the former to the foot of the stock and set it in a kind of groove made in the body of the stock with a gouge, or better with a gouge-like tool (see fig. 2). This groove must be deep enough to hold the sprig, of which the bark or rather epidermis has to be scraped off, that is the side that goes into the groove. It is then well tied up to the stock; wax or clay might be used, although it is not absolutely necessary.

Fig. 1 shows well the whole operation. This is the second way of grafting by approach. First, rooted cuttings of the varieties to be grafted have to be set in pots sometime before grafting; said pot with vine is then buried in the ground close by the stock and the same operation as the one described for fig. 1 is done in a similar manner, as is represented by fig. 3.

These two modes of grafting by approach never fail and a great advantage with them is to not endanger in the least the crops of both vines, which are at liberty to grow and bear their usual crop. So if the graft does not take, the stock or rather both vines are all right, which is not the case with cleft grafting. Next year, provided the graft has taken, the stock has to be cut above the graft and the sprig below it.

Some people in California—for we are a fast State—may have objections to this slow, although sure way of grafting by approach, particularly when it has to be done on a large scale. Here, however, are two other and quicker modes of that special way of grafting.

Instead of a rooted vine set in a pot, a common cutting is used, being set on the stock on the same kind of groove and in the same manner as for the preceding grafts. From five to six inches of the cutting must stick in the ground so as to keep the cutting fresh and green. (See fig. 4). Here again, if the operation does not succeed, the stock is all right. The French call this way of grafting, cutting graft.

The fourth method of grafting by approach is somewhat like the one above, with this difference that instead of having the cutting sticking in the ground it is dipping in a bottle filled up with water, which bottle may be partly buried in the ground. The bottle has to be kept full until the graft is well taken. With tall vines, that have to be grafted high, like those running along walls, porches, etc., this mode of grafting is of some advantage, the bottle in this case being tied up higher where it is needed near the graft.

English Graft.

This is the next best method of grafting the grape. As shown by figs. 5 and 7, this graft is done a little above the surface of the ground, with the end of the scion, (fig. 6), sticking a few inches in the ground. Fig. 5 represents the stock ready to get the scion, (fig. 6), and fig. 7 represents the operation completed. The earth has to be drawn around so as to cover the graft, as represented by the dotted line, *d*, in fig. 7.

Cleft Graft.

This graft, the only one spoken of by authors in their works, succeeds well enough when it is done below the surface, or still better as we are going to describe it, the graft in this case not taking root.

The stock in the first place has to be cut off from four to six inches above the surface, (see fig. 8), and the scion set in the same manner as for common apple-grafting; the earth, too, has to be drawn around as represented by the dotted line; this little mound being removed after the operation has succeeded. Instead of splitting the stock in the middle, a hollow cut or groove might be made deep enough to hold in the scion.

Fig. 1

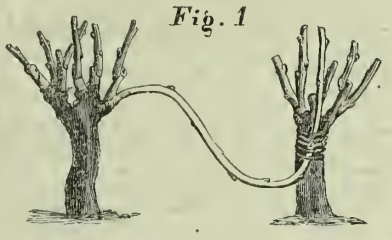


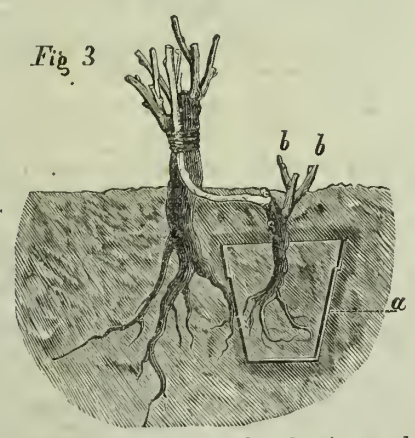
Fig. 2



Saddle Graft.

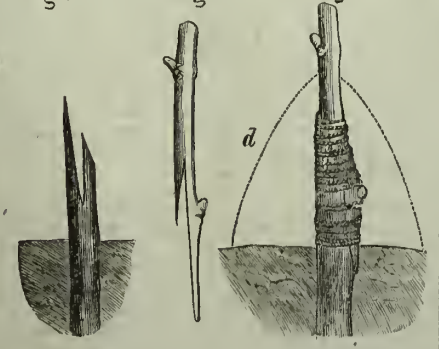
This mode of grafting is also used with success. Fig. 9 shows the stock and scion ready to be grafted together, and fig. 10 the grafting done. The dotted line represents the earth drawn around the graft.

Fig. 3



With all these grafts, a little wax or clay might be used, though they generally succeed without it. When the scion, as is generally the case, is smaller than the stock, it has then to be set so that its bark will correspond with that of the stock.

Fig. 5 Fig. 6 Fig. 7

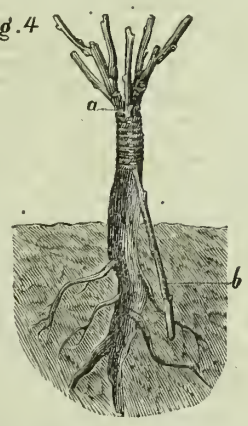


Time For Grafting.

The best time for grafting the grape is when the sap is getting ready to go up; when it commences to run; say the latter part of March for the foot-hills, earlier of course for the valleys and southern counties of California. Scions for grafting have to be cut not later than January, and better in the fall, as soon as the vines have shed their leaves; their length being about one foot. They are put up in bunches, the butt end several inches in the ground or sand, and in a sheltered place. I put in my cellar, buried one-third in moist sand, all kinds of cuttings, being the best place to keep them against frost and winds.

For grafting take only that part of the branch nearest to the old wood; the bud, too, should be close enough. In grafting it must be seen that a bud be close to the graft; for not only will it be liable to be broken off, but it is the one that will give the finest shoot.

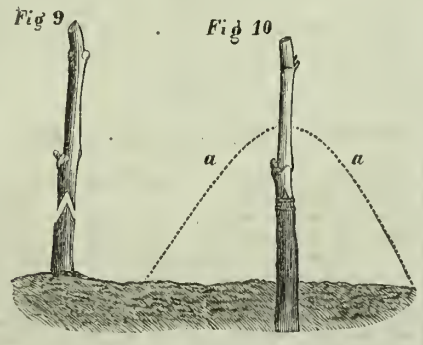
Fig. 4



General Remarks.

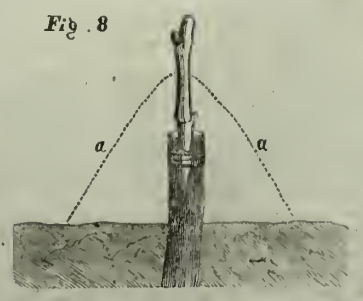
When the graft is growing all other shoots around the stock have to be mercilessly nipped off, leaving none but those of the graft. Short stakes might be set at the foot of each grafted stock, so as to tie up the shoots from the graft when they are long enough for that; young shoots, as every one knows, are very easily broken off by the wind. Grapevines having no live bark, the sap goes up indistinctly through the capillary vessels which nature has placed in great number in the wood of that plant; while with trees the sap circulates exclusively between the bark and the wood of the tree. It is therefore immaterial which way the graft is placed in the cleft, whether even with the stock's outside or sideways; in either case it will take.

Fig. 9 Fig. 10



Do not graft black grapes on white grapes,

Fig. 8



and vice versa. Do not graft on weak or sickly vines, but, on the contrary, on most healthy and vigorous ones. Common varieties do generally better than fine ones. Do not graft when it is raining or threatens to rain, too much moisture rendering the sap too impetuous, watery and devoid of gluten; if through the summer the graft grows too long, shorten it with the shears or knife.

The Rain.

The rain-fall in this city for the month of October was 2.73 inches, against 0.08 inches in September. In Sacramento the rain-fall in October was 2.257 inches, against 0.050 inches in September and 0.310 inches in October, 1873. In looking over the rain tables for the last twenty-five years we learn that there have been but two years in which the rain-fall at Sacramento for October has exceeded two inches. These years were 1858, in which the fall in October was 3.010 inches, and 1869, when the rain-fall for that month was 2.120 inches. We notice, also, that during this same period there have been but two other years in which the rain-fall for October exceeded one inch. In 1849 the rain for October was 1.05 inches, and in 1854, for the same month, was 1.01 inches. In the years 1850, 1852, 1855, 1859, 1866, 1863, 1867 and 1868 there was no rain in October at Sacramento. In October, 1849, in this city in three days 3.14 inches of rain fell, or over an inch a day. In 1861, 1863, and 1870 no rain fell in October in this city. Last October 0.68 inches fell here, against 2.73 inches this year. The rain-fall for October, 1849, was the heaviest we have ever had in that month in San Francisco.

The "weather sharps" of different localities can make their own predictions about the coming winter to suit their own fancies. The farmers will hardly need to be reminded to put in their grain as soon as there is sufficient moisture to start the plow; and they know that the sooner the grain has a good start, when the spring opens, the better it will come to maturity in most localities. Those who have not, as well as those who have, an idea that this will be a "dry year" will put in their grain as soon as the ground is ready, whether figures prove that they are correct or not. We know that in older settled countries than California, where accurate records are kept of the rain-fall, they are unable to prove with any degree of probability what the coming season will be; and we are therefore of the opinion that it is of little use yet to prognosticate, taking the rains of former season's as a basis of calculation. These are "weather wise" here as well as in older communities, and no argument would change their own opinions, as this is a subject on which every one thinks he knows best. We therefore leave our readers to judge for themselves, knowing at the same time that our friends, the farmers will take advantage of the early rains.

A Dastardly Assault.

One night last week Mr. P. H. Sumner, a well known and highly respected citizen, residing on 12th street, Oakland, while going to his residence was set upon by some one and knocked senseless with a sand-club. He was found shortly after, and received prompt surgical assistance, but the blow of the terrible weapon had so stunned him that he could give no coherent statement. As none of his bruises had bled, and he had a stone covered with blood in his hand when found, it is fair to suppose that he fought hard with his assailants. Revenge, and not robbery, was evidently the object of the cowardly attack, as his valuables were untouched. Mr. Sumner is slowly recovering from the effects of the blow, but is not able to sit up.

He has offered a reward of $1,000 for the discovery of his assailants and it is to be hoped that they will be brought to justice. An attack of this kind is so dastardly in its character that proper words of condemnation are not to be found. It is difficult to understand what motive could have impelled so cowardly an assault as this; and although Mr. Sumner made himself quite prominent in certain matters with which he was connected, it does not seem as if such extreme measures would be taken by his opponents. In this country, where freedom of speech and dutiful action are among the cherished rights of the people, it seems hard to think that a man can be thus almost killed for saying and doing what he thinks right. It is a matter of public interest and importance that the evil doer should be brought to light and punished.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

How to Eradicate the Grape Vine.

EDITORS PRESS:—Having heard that they are digging up a good many of the Mission grapes in the lower parts of the State, and knowing there is a right and wrong way to do everything, I thought perhaps you could give me such information as would enable me to do it in the right way without experimenting, as I already know it is not an easy matter, they are so apt to come up from the roots afterwards.

J. S. F.

Petaluma, Oct. 27th, 1874.

[Why does our correspondent wish to get rid of the Mission grape? He desires to discontinue the growing of all kinds of grapes on the land under consideration—then he will find it advisable to dig them up in the readiest manner possible, without any attempt at immediate eradication, then plow the land thoroughly and subject it to one or two seasons' cultivation. The roots of the grape vine strike deep, and are extremely tenacious of life; and any attempt to entirely exterminate them by digging would probably fail. Perhaps our friend only wishes to substitute some other variety for the Mission. If so, then he should bud them in his Mission stalks, and secure an almost immediate transformation in his vineyard. In the present number of our paper will be found an able and practical article on the subject of grafting and budding grapes, with explanatory cuts.

Is our correspondent well advised in getting rid of the Mission grape? There is, we fear, too much of the fashion element in these changes of fruit varieties. There are indications of a slight reaction in regard to running out the Mission grape. It is getting to be more popular here as an eating grape, and is said to make a good common raisin; excellent for cooking purposes; while as ordinary wine fruit they are a standard article.—EDS. PRESS.]

About Those Vacaville Raisins.

EDITORS PRESS:—Many thanks for your favorable comments regarding the sample of raisins from our factory. As many wild stories are going the rounds of the papers about Alden raisins, it may be well to correct them so far as our information upon the subject will allow.

Reporters are apt to confound the amount of grapes used with the amount of raisins produced, and are very careless of their decimal places at that. We have been reported as using 40 tons of fruit per day, when we were only using 40 hundred weight.

Our experience leads us to think that when our factory has five evaporators we shall be able to produce a ton of raisins per day. We recognize the importance of time in producing the chemical changes necessary to make a good raisin, and expect to build curing rooms where they can be exposed to a current of air for 10 or 12 days.

If any of your readers know of a process by which this result can be obtained without such a curing room, we should be pleased to learn of them.

We think the importance of some artificial means of curing raisins at this season of the year needs no further argument, after this last deluge. Such a raisin as you have seen can be made by the Alden process fast enough to make it a profitable business. The preparation in which we dip them has quite an important bearing on the amount and quality of work that our machines will do, and we think it will be of almost as much advantage in prunes and other kinds of fruit that are to be evaporated whole.

ALDEN FRUIT PRESERVING CO., OF VACAVILLE.

Vacaville, Oct. 28th, 1874.

Cotton in Los Angeles.

EDITORS PRESS:—I hereby send you a specimen of cotton raised near this place on the farm of Mr. Carney. The seed was planted last year, and a fine crop came from it. People from the cotton States pronounced it a good yield, and fine staple. Many of our Arkansas neighbors were astonished to see such fine cotton grown here and were still more so when this spring it began to bud out on the old stalk, and now leaves appeared on the stalk, that in other States would have been dead. It grew rapidly, set well and matured, and is now giving the second crop of cotton from one seed. Why is not this a cotton country?

Los Nietos, Los Angeles Co., Oct. 23d, 1874.

[The sample of cotton alluded to above came as we prefer to have all agricultural products reach us—that is, in the condition in which they leave the field. It compares favorably with what we have received from other portions of the State. Our correspondent should have sent us his name.—EDS. PRESS.]

Cork Trees at Los Angeles.

EDITORS PRESS:—I see in the RURAL PRESS of August 15th a notice from the Placer *Herald* of August 8th, about cork trees. I have two on my place thirteen years old from the acorn, which have bark three inches thick. The trees are three feet in circumference, and from thirty-five to forty feet high. I have kept the limbs cut off to keep them from shading an orange tree, and find the wood of the cork tree the longhest of anything of the wood kind in California, or any other State.

Los Angeles, Oct. 24th, 1874. S. R.

THE VINEYARD.

Phylloxera.

The French government recently offered a prize of $60,000 to any one who would discover a method of destroying the phylloxera of grape vines, which was efficacious and easily and cheaply applied. This award was mentioned in an elaborate article published in a recent number of the *Scientific American*, which brought a response from a correspondent of that paper, who claims the prize. His remedy is economical and easily applied, but whether it fills the first and most important part of the bill, remains to be tested. The *Scientific American* says:

We recently published the terms of the reward of $60,000, offered by the French government, for a remedy for this extraordinary vine pest. At a recent *seance* of the Paris Academy, no fewer than eleven communications were received relating to the destruction of the phylloxera. A letter from a vineyard proprietor proposed sowing tobacco seed among the vines; he had found this an effective remedy in the case of artichokes, for destroying an aphis which attacked the roots. Hemp and *datura stramonium* were proposed as preferable to tobacco, on account of fiscal restrictions on the latter. One suggestion was to destroy the insect by electrical discharges. A committee of the Linnæan Society, of Bordeaux, have pronounced, as the result of their researches, that the phylloxera is not the cause of the disease, but an effect of an organic malady, attributable to five causes, which they specify, (exhaustion of soil, inclement seasons, bad choice of stocks, and bad treatment, etc.) They state that while phylloxera is an effect, it may aid in deteriorating the vine.

A correspondent declares that the liberal use of cow dung manure is a sure cure for the phylloxera on vines. He wants the editors to bring it to the attention of the French authorities, and offers to give them one-half of the reward, namely, $30,000, when the whole sum is paid over. We accordingly take pleasure in making the remedy known to the Paris Academy and the French government. Our correspondent avers that the effect of the liberal use of cow dung is to give new life and stimulus to the vine, and thus put a prompt end to the phylloxera and other bad conditions. The researches of the Linnæan Society of Bordeaux appear to confirm the theory of the *Scientific American's* correspondent; and should the remedy proposed be adopted in France as effective, we must request the French authorities to remit the amount of the reward to this office without any formalities.

Gathering Grapes and Making Wine.

The Detroit *Tribune* publishes the following valuable suggestions:

The fault of the American vineyardists is gathering the crop too early. Whoever will take pains to observe the grapes sent to market, will find in a large share of the bunches a portion of the fruit unripe; among black grapes many that are reddish-brown, and even tinged with green, and among amber colored grapes that are slightly tinged with amber, only half ripe and unfit to eat. Such grapes will not make wine, being nearly destitute of sugar. Some fruits may be picked before they are perfectly ripe; most kinds of pears are improved in quality by gathering them before they are ripe, but not so with grapes; they must mature and ripen completely on the vine. Then they will contain all the sugar which the variety produces. Without the complete formation of sugar, there is neither flavor nor aroma to the fruit, nor strength to the wine.

As a general rule it is far better to let the grapes hang a week past maturity, than to pick them one day before.

Dr. Jules Guiot gives very full directions for making the best French wines, from which we extract a few valuable hints. He says that when unripe grapes are used, the acids are not changed into sugar; sweet musts alone give good wine. He had believed that it would be better to gather the crops in the south of France, where the sugar in grapes is superabundant, and the wines in consequence too spirituous, if the fruit were gathered before it was ripe; but he found himself deceived, and now thinks it better to reduce the sugar by the addition of water before fermentation. Wines from grapes not mature are unhealthy on account of their acids.

In the middle and north of France those who press their grapes very late almost always make the best wines. The vintage should be made in clear, dry, warm weather. After the grapes have been gathered in a state of complete maturity, on a bright, warm day, the most important thing to do is to get up a quick and vigorous fermentation. To do this the grapes are picked, warmed, crushed and placed in the fermenting tub or vat the same day. If the crushed grapes are not up to the temperature of 68 or 70 degrees Fah., they should be warmed by means of hot water in tin cans placed among the must, or by means of steam coils. When this temperature is reached, cover with some stout pliable covering, like thick canvas. In less than twenty-four hours, fermentation will declare itself, and will increase so rapidly that the pomace will rise above the vat or vessel containing it. But this must be kept down by placing weights on the pomace, under the covering. When the fermentation subsides the whole mass must be thoroughly and completely stirred and mixed from top to bottom—cover again and let the mass remain twenty-four hours unmolested. At the end of that time the wine will have settled to the bottom, while the pomace will be lying on top. The wine should now be drawn off and put in casks of forty gallons each, filling each about two-thirds full. The pomace then should be be immediately pressed out; it should have three cuttings and turnings, and four separate pressings, and the liquor divided around among the casks. This wine, which comes from the press, contains more color, more sugar, and more tannin than the liquor which was drawn from the vat, and the union of the kinds is necessary to make perfect wine. The vat fermentation should be as speedy as possible to make it—the warmer and swifter and more violent, the more spiritnous, high colored and desirable will be the wine. A prolonged fermentation destroys the strength and keeping qualities of the wine. Long fermentation yields dull and flat tasted wines.

As the fermentation in the cask goes on the seeds and feculent waters work out at the bung-hole, and the casks must be filled daily, by liquor reserved from the pressings. Red wines should remain in dry, warm out houses or sheds till the 1st of November, and then be placed in a cool airy cellar where they will not freeze nor be too warm. Filled every eight days at first, and then once a month, the wine should be drawn off into new casks some cold, clear, dry day in January or February.

Osage Orange, or Bois d'Arc.

Some months since, Mr. C. D. Gibbes called the attention of Californians, through the Academy of Sciences, to the Bois d'Arc or Osage orange (Maclura aurantiaca), both for hedges and for timber. He said he had seen it in its native State, in the swamps of the Bois d'Arc fork of Trinity river, Texas, where it grows to the hight of 60 or 70 feet, with a diameter of two or three feet, and is one of the most beautiful of the native trees. The wood is one of the most durable in the world, and is remarkably strong, elastic and tough. It is of a beautiful yellow color, close grained, and receives a free polish, making it valuable for furniture. In Texas it is used for wagon wheels, as it is not liable to shrink.

For ship-building, Mr. Gibbes stated that this wood is preferable to live oak, and by Indians is preferred for bows to all other wood. It also yields a yellow dye. For an ornamental tree, it is one of the most graceful, with its dark-green foliage and hard, smooth bark, drooping branches and large, orange-colored fruit. It forms a good belt of hedge-row for sheltering gardens, vineyards or orchards, being of a rapid growth and bearing formidable thorns for hedges. A plantation of osage orange set out now, would, in a few years, afford a most valuable timber that would pay well, as it sprouts rapidly from the stump and soon renews the timber cut.

At the last meeting of the Academy of Sciences, Mr. Gibbes exhibited some of this wood, which had been sent to the Academy by Dr. R. K. Reid of Stockton. Some of the wood had been polished, showing a beautiful grain. Some cloth dyed with the dye from this wood was also shown. The dye is of a bright yellow color. Mr. Gibbes again called the attention of our land-owners to the importance and value of cultivating plantations of this tree for timber. In swampy soil it grows very rapidly, and in our swamp land, firm enough to produce sycamore and willow, it would do well. It requires a good, moist soil, but not too wet. This tree could be used to great advantage in strengthening levees on the tulee land, where it would not only be valuable for timber, fuel and shade, but also for forming a substantial protection to the levees, strengthening them and assisting to hold them in position.

THIN SAWS.—It is claimed by some saw makers that there is a great waste of both power and timber in using the thick saws so commonly run, that a saw to cut in the roughest timber should never be heavier than eight gauge, and for walnut and poplar not more than ten or twelve gauge. It is true, doubtless, that sawmill men are generally of the opinion that a thin saw cannot be successfully run; but whether this is one, as is asserted, to a vicious education, fostered by saw makers who had not the ability to make a thin blade, is a question which has two sides probably. At any rate, the advocates of the thin blades say those who test them are satisfied of their superiority.

A NEW LAMP.—A new lamp has been patented for taking photographs at night, in which bisulphide of carbon is burned on oxide of nitrogen. It is said to be equal to sunlight in its effects and intensity.

Aleut Mummies.

At the last meeting of the California Academy of Sciences, Dr. W. H. Dall, of the U.S. Coast Survey, who has recently returned from the Coast of Alaska, gave the following account of Aleut mummies found on the Island of Four Mountains.

"I have previously given the Academy some account of the Aleutian method of mummifying their more distinguished dead. Many tales are current among the Aleuts in regard to particular cases of this practice, and among others one has been frequently related to me in regard to some mummies preserved in a cave on one of the volcanic islands known as the "Four Craters," or "Four Mountains." When in the vicinity in 1873 we were unable to land and test the truth of this history on account of bad weather and the absence of any harbors. More recently, however, this has been successfully done. The Alaska Commercial company has a standing order to its agents to collect and preserve objects of interest in ethnology and natural history, and the cabinet of the academy bears witness to the generosity of the company and the value of some of the material thus acquired. Captain E. Hennig, of the company's service, with the company's schooner "Wm. Sutton," being employed in removing some hunters from the island of the Four Mountains, he was enabled, after seven unsuccessful attempts, to land at the base of the cliff where the fallen rocks form a kind of cave, and was directed by the natives to the exact spot. Here he obtained 12 mummies, in good condition, beside several skulls of those which, being laid near the entrance of the cave, had become injured by the weather. There were also a moderate number of carvings and implements found, though some natives, less superstitious than the rest, had appropriated a quantity of weapons (reported to have once been there) for use in hunting. The island being volcanic and, in fact, still active, the soil is still warm and the atmosphere of the cave was quite hot, which accounts for the extremely good preservation of the remains. Most of the bodies were simply eviscerated, stuffed with grass, dried, wrapped in furs and grass matting and then secured in a water-proof covering of seal-hide. Two or three had much more pains bestowed upon them, and were of course of much more interest. The story of their deposition is too long to be given here, and is not particularly interesting, but it includes the fate of an old chief of the Island of the Four Mountains and his family, all of whom were buried in the cave. Among the others were a female, who died when with child from a premature birth, brought on by an accident, and the essential correctness of the tradition is attested by the presence of a little mummy of the still-born infant. The date of the first interment is very well fixed by the fact that the old chief died the autumn before the spring in which the Russians made their first appearance at the Four Mountains; and, consequently, none of the bodies are much over 100 years old. Hence they should not be confounded with the ancient pre-historic remains which I have formerly described in the academy's proceedings.

"The mummies of real interest were few in number. The most conspicuous was that of the old chief. I am informed that this body was enveloped in furs, dressed in the usual native attire, and furnished with a sort of wooden armor, formerly worn by the Aleuts. The whole was placed in a sort of basket, in a sitting posture, and carefully covered with water-proof skins, secured by line made of sinew, either braided or made into what sailors call "square sennit." This line, together with a net made of sinew in which another of the bodies was secured, were very finely made, and nearly as perfect and strong as when first placed there. The matting, made of prepared grass, was exceedingly fine, in most cases far superior in finish and delicacy to any now made in the islands. One of the smaller mummies, in a triangular-shaped bundle or basket, had a pattern of a maltese cross worked into a stripe of another color; this was quite fresh, and the grass still retained its red and yellow tinge. The largest basket has a wooden arrangement fastened with bone buttons, forming a broad hoop, which served it for a base. Most of the more carefully-preserved specimens had been once suspended in the air by handles or cords attached to their envelopes.

The other articles found in the cave were stone-knives, and other implements, and a few carvings, one of which was supposed by the finder to be an idol, but this is probably an error. A child's boot of native make was found in the cave, with the fur perfectly preserved, and in it was a little ivory image of a sea-otter. A number of other bone and ivory toys or trinkets were also found. These articles are expected here on the bark "Cyane," in a few weeks, when those interested in these matters will probably have an opportunity of making a careful examination of them.

A NEW AMERICAN BAROMETER.—At the August meeting of the American Association at Hartford, a paper was read by Prof. B. S. Hedrick, describing "An Improvement on Descartes' Barometer;" referring to an instrument containing mercury and heavy petroleum, which boils at about 300°, the tube being enlarged above the position of the mercury, so that the light liquid on top exhibits all changes very readily, and is plainly visible even at some distance.

Good Health.

Good Food and Good Health.

Upon this topic Prof. Blot expresses himself as follows: "The man who does not use his brain to select and prepare his food is not above the brutes that take it in the same state. It is to the physique what education is to the mind—course or refined. Good and well-prepared food beautifies the physique the same as a well-directed education beautifies the mind. People's taste is in food as in dress, differing not only in colors but also in shape; therefore, by our variety of dishes and our different styles of dressing them, by the ease with which they can be prepared, in the cheapest as in the most costly way, we think we meet all wants and tastes. In fact, to make a very little remark, you cannot make a gentleman by feeding him on codfish."

There is no country where there is so much dyspepsia as in America, because our people pay but little attention to food, and eat too much meat for the exercise they take. If one has mental labor fish every second day at least is a requisite. Soup sets all the glands at work, and prepares the stomach for the most important functions of digestion; and therefore should be taken at dinner every day. Beef broth is to old age what milk is to the young. Cookery, properly attended to, keeps man in health. If the stomach is out of order the brain is affected.

We have the hard and soft parts in our anatomy, and the bile, and therefore it is requisite to vary our food. We should eat more fruits, vegetables, soups and fish. Fish and cheese are the best articles of diet to give to children. The United States has the most money of any people, and the greatest abundance of the raw material; yet they live more poorly, in comparison, than any civilized nation. For instance there is a millionaire in Brooklyn, who has pork and beans every second day for dinner. Wrinkles are produced by a want of variety in food.—*Ex.*

What Girls Should Drink. — Dr. Dio Lewis, in his book, "Our Girls," says: I am astonished that a young woman who is ambitious of a clear, fine skin, should drink tea. It is a great enemy to fair complexions. Wine, coffee and cocoa may be used without tinging the skin, but as soon as tea drinking becomes a regular habit, the eye of the discriminating observer detects it in the skin. Tea compromises the complexion, probably, by deranging the liver. Weak tea or coffee may be used occasionally, in moderate quantities, without noticeable harm; but I advise all young women who would preserve a soft, clear skin, and quiet nerves, to avoid all drinks but cold water. It is an excellent plan to drink one or two glasses of cold water on lying down at night and on rising in the morning. If you have good teeth, and can help the food into your stomach without using any fluid, except the saliva, it will, in the long run, contribute much to your health.

Red and White Muscles. — M. Ranvier points out that the red and white muscles of a body—very clearly seen by removing the skin of a rabbit—which exist mingled in the same region, are different both in structure and properties. On applying the electric current, the white portions contract almost instantly, and respond even to rapid and continuous shocks. The red portions, on the contrary, are much more sluggish; it requires a certain time for them, apparently, to feel the excitement, while, on quick interrupted discharges of electricity being administered, they simply assume permanent contraction. It is believed by the author that the latter are involuntary and of the nature of the muscles of the heart or other portions relating to the animal existence; the former, however, he thinks, are controlled by the will.

Bathing in Cold Water.—Nothing is more common than a custom of many persons to have a cold water bath immediately on leaving their beds as a daily habit. Delicately organized ladies not unfrequently have established the same course, considering it conducive to the health. There is an impression that it invigorates the individual, hardens the muscles and strengthens the constitution. The sudden abstraction of caloric or vital warmth in that way has not only injured but destroyed more than ever were benefited thereby. A reaction, as it is called, a glow of warmth that subsequently follows, a direct draft upon the system to meet a sudden loss of vitality, is by no means as beneficial as theoretically imagined. A tepid bath makes no such injurious demands, and therefore is not injurious to those of a frail structure.

Increase of Short-Sightedness.—There is no doubt that the largely increasing number of short-sighted persons results from the imperfect mode of teaching and learning. It is, in a large measure due to the unnatural positions children are compelled to assume by reason of the construction of the desks and seats, and to the imperfect lighting of the school buildings. It is high time that steps be taken to remedy this increasing evil, by not allowing children to keep their books closer to their eyes than is necessary for correct vision, and to give them a chance to exercise their eyes periodically and often at distant objects.

Bone Felon.—Of all painful things can there be anything so excruciatingly painful as a bone felon? We know of none that flesh is heir to. As this malady is quite frequent, and the subject of much earnest consideration, we give the last recipe for its cure, which is given by that high authority, the London *Lancet:* As soon as the disease is felt put directly over the spot a fly blister, about the size of your thumb nail and let it remain for six hours, at the expiration of which time, directly under the surface of the blister, may be seen the felon, which can instantly be taken out with the point of a needle or a lancet.

Hash and Health.—At last science grapples with this mysterious compound. The attention of the average New York boarding house keeper is directed to the words of Prof. Redfern, who condemns the process of cutting up meat into small blocks, and then stewing it, the effect of which is that the albumen in the outer surface of each block becomes firmly set, and the whole affords about as indigestible a mass as can well be imagined.

Useful Information.

Strength of Various Kinds of Glass.

Acquaintance with the strength of glass, in the various forms in which it is employed in art and industry, has generally been quite limited, and the result of recent experiments shows some interesting facts, not commonly understood, as to the tenacity, the resistance to compression, and to burstiug and collapse, characterizing this widely used material.

The experiments relating to the tenacity of glass, made by tearing specimens asunder, showed the tenacity per square inch, of flint glass, to be 2,413 pounds; of green glass, 2,896; of common glass, 2,146; these, of course, being the mean results.

To test the resistance of the material to crushing, small cylinders and cubes of glass were crushed between parallel steel surfaces by means of a lever. The cylinders were cut of the required length, from rods drawn to the desired diameter, when molten, and then annealed—in this way retaining the exterior and first cooled skin of glass. The cubes, however, being cut from much larger portions, were consequently in a less perfect condition as regards annealing. Without attempting to present the details involved in this part of the investigation, suffice it to say, that the specimens were crushed almost to powder by the violence of the concussion—but it appeared that the fracture occurred in vertical planes, splitting up the specimens in all directions. Cracks were noticed to form some time before the specimen finally gave way; then these rapidly increased in number, splitting the glass into innumerable prisms, which finally bent or broke, and the specimen was destroyed. The mean resistance to crushing was, in the case of flint glass, 13,130 pounds; green glass, 20,206; crown glass, 21,867.

Mine of Liquid Sulphur.—It is reported that a few miles from San Martino, near Palermo, a mine of liquid sulphur is being worked. That is to say, the sulphur is being removed as it runs from the fissures in the rock, at the rate of 400 to 500 quintals (about 40 or 50 tons) a day. The sulphur proceeds from a mine in the interior of the mountain which is in a molten state. The men are often obliged to stop up the fissures from which the molten sulphur runs so as to give it time to cool sufficiently to be removed, after which the fissures are again unstopped. It happened at the end of July, on unstopping one of these fissures, that no sulphur was found, and the idea entered the heads of the workmen to reopen the hole by blasting. They succeeded in re-establishing a communication with the interior, but the pressure had become so strong during the obstruction, that the expansion of the gas produced a terrible explosion, which blew the workmen out of the mine and even sent them flying 50 meters (nearly 55 yards) into the air. Five were killed on the spot, four were seriously injured, and two had to be left in the mine, whence it was impossible to remove them, owing to the suffocating smoke which was evolved. Not one of those eleven workmen came out safe and sound.

To Make Good Dutch Cheese.—Set the sour milk on a warm stove until the whey separates from the curd; then put it into a large, coarse towel or thin cloth, and tie it up. Lay it in a pan and let it lie. Occasionally turn off the whey until no more whey runs out. Then put it in a dish, and with the hands work in it salt to taste, and a piece of butter and cream to make it adhere sufficiently to make into balls. Some persons like to eat it with sweetened cream.

Wind Power.—There are said to be upwards of a hundred private mansions near New York city which employ windmill power for pumping water, sawing wood, grinding, threshing grain, etc. The *American Manufacturer* states that in many instances they are superseding steam engines, water wheels, hydraulic rams, horse power and caloric engines, being run without cost, except for lubricating oil. These mills are not only noiseless, as now constructed, but they are also self-regulating.

How Eggs are Hatched.

People have an idea that the hen sits on the eggs for a time, and when the time comes for hatching the chick bursts forth. There never was a greater mistake. The chick, until liberated from the shell by outside aid, is as incapable of motion as if it formed a solid egg, which it nearly does. You might as well inclose a man in an iron boiler, and tell him to get out of the shell without help. The chick grows on the inside of the shell, until at last the excrescence on the point of the beak of the bird presses against the inside of the shell, and bursts up a very small scale. Of course when it does this, it at the same time "breaks in that spot" the inside of the egg. This admits the air; in a short time it breathes and gets strength to cry loudly. The hen then sets to work to liberate it; she brings it forward under the feathers of the crop, and supporting it between the breast-bone and the nest begins the work of setting it free. She hitches the point of her beak into the hole formed by the raising of the scale by the chick's beak, and breaks away the egg-skin or shell all around the greatest diameter of the egg. The joint efforts of the hen without and the chick within then liberate the prisoner, and he struggles into existence, and gets dry under the feathers and natural heat of the hen. All female birds which sit on their eggs to hatch them have the hook in the beak strongly developed. Even the broad-billed duck and goose have those hooks specially developed, and with them they liberate their young. In Anstralia, where everying seems to be by contraries, it is the cock of the bush turkey that hatches the eggs, and not the hen. It would be interesting whether the hook of the beak is better adapted for this service in the male bird than in the female. The hook of the beak of the ordinary cock of the common fowl is quite different from that of the hen—it is adapted for wounding in fighting, but not for hatching of eggs.

Cause of the Rusting of Iron.—It has usually been supposed that the rusting of iron depends principally upon moisture and oxygen. It would appear, however, from Dr. Calvert's experiments, that carbonic acid is the principal agent, and without this the other agencies have very little effect. Iron does not rust at all in dry oxygen, and but little in moist oxygen; while it rusts very rapidly in a mixture of moist carbonic acid and oxygen. If a piece of bright iron be placed in water saturated with oxygen, it rusts very little, but if carbonic acid be present, oxidation goes on so fast that a dark precipitate is produced in a very short time. It is said that bright iron placed in a solution of caustic alkali does not rust at all. The inference to be derived is that by the exclusion of moist carbonic acid from contact with iron rust can be very readily prevented.

To Extinguish Kerosene Flames.—The alarming frequency of accidents from kerosene flames, coupled with the great difficulty encountered in subduing them, renders the acquisition of any ready and convenient means of extinguishing them a matter of much importance to every household. Perhaps one of the most ready means is to throw a cloth of some kind over the flame, and thus stifle it; but as the cloth is not always convenient to the kitchen, where such accidents most frequently occur, some one recommends *flour* as a substitute, which is always at hand in the kitchen, and which it is said promptly extinguishes the flames. It rapidly absorbs the fluid, deadens the flame, and can be readily gathered up and thrown out of doors when the fire is out.

Explosive Paper.—Make a mixture of saltpeter, 8 parts; chlorate of potash, 5 parts; charcoal powder or pulverized coal, 1 part; fine saw-dust of hard wood, 1 part; and a little mucilage, gum or other binding material; put water enough on it to change it into a pasty mass, work it well through, and soak strips of heavy blotting-paper or its equivalent in it. If you dry these strips, you obtain explosive paper; if you roll them up tightly when wet and let them then dry, you obtain little blocks which, when confined and fired, will explode with great violence, but will not easily go off by percussion or friction alone.

A Cure For Corns.—A French medical journal reports the cure of the most refractory corns by the morning and evening application with a brush, of a drop of a solution of the perchloride of iron. It states that after a fortnight's continued application, without pain, a patient who had suffered forty years from a most painful corn on the inner side of each little toe, was entirely relieved; pressure was no longer painful, and the cure seemed to be radical. Other and similar cases are reported as equally successful under the treatment.

To Remove Perspiration from Kid Gloves. —Where the coloring matter of dyed gloves has been affected, we know of no method of renewal except re-dyeing. Where benzine fails to remove the dirt, you can try the following French invention: Curd soap (in small shavings) 1 part, water 3 parts; mix with heat and stir in essence of citron 1 part. The glove is stretched on a wooden hand of appropriate size and the compound rubbed over the glove (with a piece of flannel, always in one direction) until it is sufficiently clean.

Domestic Economy.

Economise Your Strength.

Household details are so numerous and complicated that the mother of a family is often obliged to attend to many of them at once, and she ought to learn to mingle the lesser tasks with the greater, so that one set of muscles is resting while another is called into action. In this way some intervals of comparative rest can be secured, and the work move along more to the purpose than if there were no partial breaks in the endless chain from morning till night. For instance, if pies or apple sauce are to be made, when the breakfast dishes are washed, sit down to prepare the apples and it will not infringe our code of domestic by-laws if you should happen to mix the pie-crust also while sitting, for rolling it out and finishing the pies will be more easily done after this brief rest. When the coffee is to be browned, it is well to give that process close attention, though sometimes mending stockings or reading will not interfere very much with the roasting, if one eye is kept on the oven.

In many houses the washing machine has shorn Monday morning of half of its discomforts, but genius has not rescued us from the thralldom of ironing day; so here necessity becomes the "mother of invention." We find a board like those used for ironing dresses and skirts furnished with four legs just long enough to come over the lap is very convenient. On this one can iron all small articles, and, if necessary, even shirts and large garments, though not quite so rapidly as at the table, and the change of posture, for a short time, is a relief when there is a large ironing to do.

Cutting garments on a table is tiresome work, and the ironing bench can be used for this purpose, but a lapboard is better. It should be about three feet in length by two feet in width, with a half circle cut out on one side to fit the form. After a few hours of hard work in the kitchen, the weary housewife will appreciate the advantage of being able to prepare garments for the sewing machine without extra exertion.

Perhaps a healthy, energetic woman might despise these simple expedients for lifting heavy burdens; but in time even she may have ample need for some strength held in reserve; while there are thousands of feeble women who gratefully accept any suggestions that will, in the least, lessen their labors. If they do the best they can, there will be many wide gaps in the course of the year which they can not fill; and without wishing to be misunderstood, or to appear as an advocate for sloth and "inglorious ease," I believe that the ambitions wife and mother who does the most of her own work is more apt to do too much than too little. She can well afford to economize strength and preserve health, thereby securing more time for her own mental culture and retaining the ability to wisely superintend the moral and physical education of her children. —*Ruth Lee in Moore's Rural.*

Here is a recipe for making Graham biscuit without yeast, soda or cream tartar. Take cold water—say one pint or quart, according to the quantity one desires to make, or the size of the family demands—and with one hand sift in the Graham flour through the fingers, stirring with the other till you have rather soft dough; then knead it for about five minutes; roll to about three-fourths of an inch thick; cut out with a common biscuit cutter and prick with a fork (this is done to prevent blistering over top) and place in a very hot oven to bake 30 to 45 minutes, according to the heat of your stove. Care should be taken not to burn the biscuit. This plan will make very light and sweet Graham biscuit.

Spiced Tomatoes.—To four pounds of large red tomatoes take two pounds of gold brown sugar, a pint of cider vinegar, half an ounce of cloves, and half an ounce of stick cinnamon. Stew altogether, in a preserving kettle, over a slow fire, until the tomatoes are nearly cooked. Take them out and put them on dishes to cool, letting the syrup go on simmering slowly. When the tomatoes are cold return them to the syrup and finish cooking. Let them become cold before putting them into jars. The syrup must be boiled down until as thick as molasses, and poured cold over the tomatoes. Tie them down with bladder or waxed paper.

Lemon Tartlets.—Rub a teacupful of sugar in lumps over the rind of a fresh lemon so as to absorb all the essential oil; squeeze the juice of the lemon over the sugar; crush it fine with a sponge; add to it two eggs well beaten and two tablespoonfuls of sweet butter; beat all together and bake in little patty-pans, lined with puff paste.

Sugar Snaps.—One cup of butter, two cups of sugar, four cups of flour, one egg; stir sugar and butter to a cream; add the egg well beaten, and a small teacupful of water with a quarter of a teacupful of soda dissolved in it; stir half a spoonful of cream tartar into the flour; roll out very thin, and bake in a moderate oven.

Flannel Rolls —One cup of sweet milk, whites of two eggs, two-thirds of a cup of butter, flour to make a thick batter, one-half of a cup of yeast, two tablespoonfuls of sugar. Raise over night; add the butter and eggs in the morning; work in some flour, making a limber dough; form into rolls, and after the second rising bake.

Patrons of Husbandry.

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I. G. Gardner, Stete Agent; Executive Committee Rooms; Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, 415 California street, S. F.

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	NEVADA.	
.....	A. J. Hatch,	Reno.

Farmers desiring to organize Granges, can apply to J. M. Hamilton, (W. Master), Guenoc, Lake Co.; W. H. Baxter, (W. Sec'y), No. 6 Leidesdorff St., S. F.; J. W A. Wright, (W Lecturer), Borden, Fresno Co.; or to the nearest Deputy to their locality.

California Subordinate Granges.

[This list contains the names of Masters and Secretaries so far as reported to us, elected to serve during the year 1874. Secretaries and others will greatly oblige us by making needful corrections.]

ALAMEDA COUNTY.

CENTERVILLE, Cent.: Jas. Shinn, M.; J. L. Beard, S.
EDEN, Hayward's: Thos. Hellar, M.; Wm Pearce, S.
HAMILTON, Biggs' Station: H. L. Lasselle-M. A. Randall.

LIVERMORE, Liv. Valley: D. Inman-F. R. Fassett.
SUNOL, Sunol Stat'n: E. M. Carr, M.; S. W. Millard, S.
TEMESCAL, Oakland: E. S. Carr, M.; John Collins, S.

BUTTE COUNTY.

CHICO, Chico: F. Hallett, M.: H. W Barnes, S.
EVENING STAR, Biggs Station: E. W. S Woods, M.; C. F. Butler, S.
NORD, P. O. Nord: G. W. Colby, M.; Peter Kern, S.

CALAVERAS COUNTY.

CALAVERAS, Jenny Lind: M. F. Gregory-A. Miles.

COLUSA COUNTY.

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COLUSA, Colusa: W. K. Estell, M.; R. Jones, S.
FRESHWATER, Colusa: P. S. Perdue-R. A. Wilsey.
FUNK SLOUGH, Colusa: E. O. Hunter-J. G. Wolfe.
GRAND ISLAND: Wm. Ogden, M.; J H.Duffield, S.
NEWVILLE: B. N. Scribner, M.; S. Osborne, S.
PLAZA, Jacinto: F. C. Graves, M.; M. Kendrick, S.
PRINCETON, Princeton: A. D. Logan, M.; R. R. Rush, S.
SPRING VALLEY: D. H. Arnold, M.; L. T. Hayman, S.
UNION, Princeton: J. F. Garr, M.; W. Dollings, S.
WILLOWS, Princeton: J. W. Zumwalt-G. T. Hicklin.

CONTRA COSTA COUNTY.

ALHAMBRA, Martinez: John Strenzell-W. A. Frazer
ANTIOCH, Antioch: M. A. Walton, M ; J. D. Darby, S.
DANVILLE, Danville: C. Wood, M.; John B. Sydnor, S.
MOUNT DIABLO, Mount Diablo: R. G. Dean, M.; J. E. W. Carey, S.
WALNUT CREEK, Walnut Creek: Nathaniel Jones, M.; Wm. K. Daly, S.

EL DORADO COUNTY.

CLARKSVILLE, Clarkeville: R. T. Mills-I. Maltby.
EL DORADO, El Dorado: C. G. Carpenter, M.; J. M B. Weatherwax, S.
PILOT HILL, Pilot Hill: P. D Brown-A. J. Bayley.
SUTTER MILL, Coloma: A. J. Christie-Henry Mahler.

FRESNO COUNTY.

ADAMS, Big Dry Creek: T. P. Nelson, M.; T. Wyatt, S.
BORDEN, Borden: J. W. A. Wright, M.; J. Fontaine, S.
FRESNO, Fresno City: D. C. Libby, M.; F. Dusy, S.
GARRETSON, King's River: W. J. Hutchinson, M.; W. W. Phillips, S.
RISING STAR, Panochi: Calvin Valfez-W. M. Pouge.
SYCAMORE: A. C. Bradford, M.; J. A. Allen, S.

HUMBOLDT COUNTY.

ELK RIVER, Eureka: Theodore Meyer, M.; D. A. De-Merritt, S.
FERNDALE, Ferndale: F. Z. Boynton-J. A. Davenport.
KIWELLATAH, Arcata: H. W. Arbogast, M.; C. Daniels, S.
MATTOLE, Petrolia; S. Goff, M.; D. J. Johnson, S.
ROHNERVILLE, Rohnerville: H. S Case-S. Strong.
TABLE BLUFF: J. Sawyer, M.; B. H. C. Pollard, S.

INYO COUNTY.

BISHOP'S CREEK: T. J. Furbee, M.; W. T. Wiswall, S.
INDEPENDENCE: Josiah Earl, M.; J. B. White, S.
LONE PINE: C. L. Jackson, M.; R. A. Loomis, S.

KERN COUNTY.

BAKERSFIELD: S. Jewett, M; Jerome Troy, S.
CUMMINGS' VALLEY, Tehaichipa: Geo. W. Thompson, M.; T. M. Yates, S.
LINN'S VALLEY, Glenville: A. B. Du Brutz, M.; S. E. Reed, S.
NEW RIVER, Bakersfield: J. G. Dawes, M.; J. Dixon, S.
PANAMA, Bakersfield: H. D. Robb, M.; J. F. Gordon, S.
RISING STAR, Panoche: C. Valfez-J. W. Craycroft.
TEHAICHIPA, Tehaichipa: J. Norboe, M.; J. Prewett, S.
WELDON, Weldon: R. T. Melvin, M.; J. T. H. Gray, S.

LAKE COUNTY.

GUENOC, Guenoc: H. A. Oliver, M.; A. A. Ritchie, S.
KELSEYVILLE: D. P. Shattuck, M.; T. Ormiston, S.
LAKEPORT, Lakeport: O. Cutler, M.; N. Phelan, S.
LOWER LAKE, Lower Lake: A. E. Noel-G. H. Snow.
UPPER LAKE: D. V. Thompson, M.; D. Q. McCarty, S.

LOS ANGELES COUNTY.

ALLIANCE, El Monte: S. S. Reeves-J. W. Marshall.
AZUSA, El Monte: W W. Maxey, M.; J. C. Preston, S.
COMPTON, Compton: C W. Cottren, M.; A. F. Cottren, S.
EL MONTE, Los Angeles: G. C. Gibbs-J. H. Gray.
ENTERPRISE, Los Angeles: A. M. Southworth, M.; W. T. Henderson, S.
EUREKA, Spadra: C. Burdick, M.; P. C. Tonner, S.
FAIRVIEW, Anaheim: E. Evey, M ; J. M. Guinn, S.
FLORENCE, Los Angeles: J. Russell, M.; W. Porter, S.
FRUITLAND, Santa Ana: N. O Stafford-G. L Russell.
LOS ANGELES: T. A. Garey, M.; T D. Hancock, S.
LOS NIETOS: J. F. Marquis, M.; W. S. Reavis, S.
NEW RIVER, Los Nietos: W. Newton, M.; S. G. Baker, S
ORANGE, Orange: J. Beach, M.; J W. Anderson, S.
SILVER, Los Nietos: H. L. Montgomery, M.; W. P. McDonald, S.
SPADRA, Spadra: A. T. Currier, M.; Jos. Wright, S.
VINELAND, Tustin City: Dr. A. B. Haywood, M.; R. L. Freeman, S.
WESTMINSTER, Anah'm: M. B. Craig-W. F. Poor.

MARIN COUNTY.

NICASIO, Nicasio: H. F Taft, M.; J. W. Noble, S.
POINT REYES: N. H. Stinson, M.; A. H. Stinson, S.
TOMALES: Wm Vanderbilt, M.; R. H. Prince, S.

MENDOCINO COUNTY.

CAHTO, Cahto: R. M. Wilson, M.; J. P. Simpson, S.
LITTLE LAKE: B. G. Mast, M.; W. A. Wright, S.
MANCHESTER: Joseph Wooden, M.; B F. McClure, S.
MENDOCINO COUNTY, Ukiah City; L. F. Long, M.; J. A. Knox, S.; Sanel.
POMO, Pomo: J. Mewhinney, M.; Geo. B. Nichols, S.
POTTER VALLEY: L. A. Preston, M.; Mrs. A. H. Slingerland, S.
ROUND VALLEY, Covelo: P. Handy-J. A. Crawford.
SANEL, Sanel: Alex. Marshall, M.; Jos. A. Knox, S.
UKIAH: W. D. White, M.; G. McGowen, S.

MERCED COUNTY.

BADGER FLAT, Los Banos P. O, A. P. Merritt, M W. F. Clarke, S.
COTTONWOOD: J. L. Crittenden, M.; J. M Daley, S.
HOPETON, Hopeton: John Ruddle, M.; T. Eagleson, S.
LOS BANOS, Los Banos P. O.: Wm. M. Viney, M.; A. McGlashan, S.
MERCED: W. E. Elliot, M.; F. E. Tadlock, Jr., S.
PLAINSBURG: P. Y. Welch, M.; T. J. E. Wilcox, S.
SNELLING, Snelling: D. Yeiser M.; W. L. Hamlin, S.

MONTEREY COUNTY.

HOLLISTER: M. Pomeroy, M.; Wm. H. Oliver, S.
MORNING STAR, Castroville: C. E. Williams, M.; F. Blakie, S.
PAJARO, P. O. Watsonville, Santa Cruz Co.: D. M. Clough, M.; G. W. Roadhouse, S
SALINAS: C. S. Abbott, M; Clara Westlake, S.

NAPA COUNTY.

BERRYESSA, Monticello; J. W. Smittle-O. Schetter.
CALISTOGA, Calistoga: J. N. Bennett-L. H Hopkins.
NAPA, Napa City: J. M. Thompson, M.; Manuel Eyre, S.
POPE VALLEY: J. A. Van Arsdale, M.; C. A. Booth, S.
RUTHERFORD, Yountville: G. S. Burrege-H. W. Crabm.
ST. HELENA: J. Llewellyn, M ; J. L. Edwards, S.
YOUNTVILLE: J. M. Mayfield, M ; Frank Griffin, S.

PLACER COUNTY.

LINCOLN: M. Waldron, M.; J. S. Marriner, S.
ROSEVILLE, Roseville, A. D. Neher, M.; I. N. Nehr, S.
SHERIDAN, Sheridan: D. H. Long, M.; S. J. Lewis, S.

SACRAMENTO COUNTY.

AMERICAN RIVER, Patterson: E. G. Morton, Sr., M.; Cyrus Wilson, S.
COSUMNES, Sheldon: J. A. Elder, M.; J. H. Atkins, S.
ELK GROVE: Obadiah S. Freeman, M.; Delos Gage, S.
ENTERPRISE, Brighton: J. M. Bell, M.; M. Toomey, S.
FLORIN: Caleb Arnold, M.; Wm Scholefield, S.
FRANKLIN: Amos Adams, M.; P. R. Beckley, S.
GALT, Galt: J. C. Sawyer, M.; J. L. Fifield, S.
GEORGIANA, Rio Vista: F. M. Kittrell-G. A. Knott.
SACRAMENTO: W. S. Manlove, M.; A. S. Greenlaw, S.
SHERMAN ISLAND, Emmaton: J. M, Upham, M.; W. M. Robbins, S.
WALNUT GROVE: Solomon Runyon-J. V. Prather

SAN BENITO COUNTY.

MOUNTAIN, San Benito: G. Butterfield-J. W. Mathewe

SAN BERNARDINO COUNTY.

RINCON, Rincon: F. M. Slaughter-John Taylor.
RIVERSIDE, Riverside: E. G. Brown-G. W. Gancelon.
SAN BERNARDINO, San Bernardino: R. Shelton, M.; J. Brodhurst, S.

SAN JOAQUIN COUNTY.

ATLANTA, Morano: W. J. Campbell-Mrs. J. W. Moore.
CASTORIA, Stockton P. O.: H. W. Cowell, M.; Miss Salona Reynolds, S.
COLLEGEVILLE, Collville: A. Mayberry-J C. McIntosh.
ELL OT, Elliot: Henry H. West, M.; N. S. Misiner, S
FARMINGTON, Farmington: J. M. Groves-E. O Long.
LIBERTY, Acampo: Justus Schomp, M ; J. J. Emslie, S.
LINDEN, Linden: John Wasley, M.; James Wasley, S.
LOCKEFORD, Lockeford: G. C. Holman-S. S. Stewart.
LODI, Lodi: J. W. Kearny, M.; Mrs. N. Crouch, S.
RUSTIC, Lathrop: J A. Shepherd, M.; H. Moore, S
STOCKTON, Stockton: W. L. Overhiser-W. G. Phelps.
WASHINGTON: W. B. Stamper, M., Comanche, Calaveras Co.; M L. Cook, S.
WEST SAN JOAQUIN, Ellis: M. Lammers-G. E. McStay.
WILDWOOD, Wildwood School House: Jos. Leighton, M.; A. B. Munson, S.
WOODBRIDGE, Woodbridge: J. L. Hutson-A. S. Thomas.

SAN LUIS OBISPO COUNTY.

ARROYO GRANDE, Arroyo Grande: W. H. Nelson, M.; D. F Newsom, S.
CAMBRIA, Cambria: C. H. Ivins, M.; H. Olmstead, S.
MORO CITY, Moro: A. J. Mothershead-H. Y. Stanley.
OLD CREEK, Old Creek: Isaac Flood-R. M. Preston.
PASO ROBLES, Paso Robles: H. W. Rhyne-J. P. Moody.

SAN LUIS OBISPO, San Luis Obispo: Wm. Jackson, M.; E. L. Reed, S.
SUMMIT, San Marcos: J. V. N. Young-A. T. Foster.

SAN MATEO COUNTY.

CRESCENT: H. M. Jewell, M.; James Compton, S. Half Moon Bay.
LA HONDA, La Honda: M. Woodhams, M.; W. A. Saundebs, S.
OCEAN VIEW, Ocean View: I. G. Knowles-E. Robson.
PESCADERO, Pescadero: B. V Weeks-H. B. Sprague.
SAN MATEO: A. F. Green, M.; W. H. Lawrence, S.

SANTA BARBARA COUNTY.

CARPENTERIA, Carpenteria; O. N. Cadwell, M.; G. E. Thurmand, S.
CONFIDENCE, Guadaloupe, A. Copeland-J. T. Austin.
SANTA BARBARA, S'ta Barb'a: O.L. Abbott, M.; Virginia F. Russell, S
SANTA MARIA, Suey Station: J. Miller-M. D. Miller.

SANTA CLARA COUNTY.

GILROY, Gilroy: W. Z. Angeney, M.; H. Coffin, S.
MAYFIELD, Mayfield: F. W. Weisshaar-J. W. Pitman.
SAN JOSE, San Jose: Wm. Erkson, M.; Miss Jettora Watkins, S.
SANTA CLARA: H. M Leonard, M.; I. A. Wilcox, S.
SARATOGA: F. Dresser, M.; Mies Jennie Farwell, S.

SANTA CRUZ COUNTY.

BEN LOMOND, S'ta Cruz: H. H. Buckles-C. Craghill.
SANTA CRUZ: G. C. Wardwell, M.; J. W. Morgan, S.
WATSONVILLE: J. McCollin-A. F. Richardson.

SHASTA COUNTY

COTTONWOOD: G. G. Kimball, M.; John Barry, S
MILLVILLE, Millville: E. Wagoner-G. W. Welch.
READING: J. F. Dinsmore, M.; S. J. R. Gilbert, S.

SISKIYOU COUNTY.

ÆTNA: John McBride-J. McConaughty.
FORT JONES, Fort Jones: J. S. Matthews-J. W. Tuttle.
MOUNT BOLIVAR, Callahan's Ranch: R. M. Hayden-J. A. Cole.

SOLANO COUNTY.

BINGHAMPTON: A. Bennett, M.; E. A. Beardsley, S.
DENVERTON: J. B. Carrington M.; G. O. Arnold, S.
DIXON: J. C. Merryfield, M.; B. F. Kelly, S.
ELMIRA: J. A. Clark, M.; M. D. Coofer, S.
MONTEZUMA, Collinsville: T. Hooper, M.; C. K. Marshall, S.
RIO VISTA: A B. Alsip, M.; J. H. Gardner, S.
ROCKVILLE, Cordelia: W. A. Lattin-J. R. Morris.
SUISUN VALLEY: R. C. Haile, M.; A. T. Hatch, S.
VACAVILLE: E. R. Thurbur, M.; Oscar Dobbins, S.
VALLEJO: G. C. Pearson, M.; Chas. B. Deming, S.

SONOMA COUNTY.

BENNETT VALLEY, S'ta Rosa: I. De Turk-J. H. Plank.
BLOOMFIELD: Wm H. White, M.; A. B. Glover, S.
BODEGA, Bodega: E. S. Pune, M.; J. Wilkinson, S.
CLOVERDALE: Chas. H. Cooley, M.; J. B. Cooley, S.
GEYSERVILLE: C. M. Bosworth, M.; R. R. Leigh, S.
HEALDSBURG: C. Alexander, M.; W. N. Gladden, S.
PETALUMA: L. W. Walker, M.; D. G. Heald, S.
SANTA ROSA: Geo. W. Davis, M.; J. A. Obreen, S.
SEBASTOPOL: M. C. Hicks, M.; W. J Hunt. S.
SONOMA: Wm. McP. Hill, M.; W. A. Berry, S.
TWO ROCK: S. Q. Barlow, M.; Howard Andrews, S.
WINDSOR: A. B. Nalley, M.; J. H. McClelland, S.

STANISLAUS COUNTY.

BONITA, Crow's Ldg.: J W. Treadwell-A. B. Crook.
CERES: W. B. Harp, M ; C. N. Whitmore, S.
GRAYSON, Grayson: T C. Brown, M.; A. C. Lander, S.
OAKDALE: A. S. Emery, M.; C. B. Ingalls, S.
ORISTIMBA, Hill's Ferry: W. J. Miller-E. H. Rorison.
SALIDA, Modesto: B. F. Parkes, M ; A. H. Elmore, S.
STANISLAUS, Modesto: J. D. Spencer-V. E. Banos, S.
TURLOCK: A. S. Fulkerth, M.; W. S. Robinson, S.
WATERFORD: R. R. Warder, M.; W. C. Colline, S.

SUTTER COUNTY.

NORTH BUTTE: B. R. Spillman, M.; J. D. Dow, S., Yuba City.
SOUTH SUTTER, Pleasant Grove: Thos. Boyd, M.; Alex. Donaldson, S.
SUTTER, Meridian: W. O. Smith, M.; J M. Gladden, S.
YUBA CITY: Geo. Ohlever M.: S. R. Chandler, S.

TEHAMA COUNTY

FARMINGTON: Addison J. Loomis, M.; S H. Loomis, S
NEW SALEM, Paskento: O. Harris-J. R. Whitlock.
RED BLUFF: R. H. Blossom, M.; E. Fonda, S.

TULARE COUNTY.

CHRISTMAS, Visalia: A. B. Corey, M.; W. H. Stuart, S.
DEEP CREEK, Farmersville: W. G. Pennebaker, M.; F. G. Jefferds.
FRANKLIN, Kingston: F. Wyruck-P. A. Kanawyer.
LAKE, Kingston: M. S. Babcock, M.; J. S. Robinson, S.
MOUNT WHITNEY: G. W. Duncan, M.; A. Thompson, S. Portersville.
TULARE: D. E Wilson, M.; Victoria Wright, S.
TULE RIVER, Porterville: G. A. Williamson, M.; N. T. Blair, S.
VISALIA, Visalia: T. Fowler, M.; J. O. Blakeley, S.
WOODVILLE: J. A. Slover, M.; J. Stewart, S.

TUOLUMNE COUNTY.

SONORA, Sonora: S. S. Turner, M.; R. F. Williams, S

VENTURA COUNTY.

OJAI, San Buenaventura: C. E. Soule, M.; J. Hobart, S.
PLEASANT VALLEY: D. Rondebush-P. Browning.
SAN PEDRO, San Buenaventura: J. Y. Saviers, M.; D D Denure, S
SATICOY: Milton Wason, M.; E. A. Duval, S.
SESPE, San Buenaventura: S. A. Guiberson, M.; Thos. Marple, S.
VENTURA, San Buenaventura: J. Willett, M.; Chas. Prebble, S.

YOLO COUNTY.

ANTELOPE: W. J. Clark, M; C. L. N. Vaughn, S.
BUCKEYE, Buckeye: Wm. Sims, M.; L. Moody, S.
CACHE CREEK: D. B. Herlburt, M.; L. D. Stephens, S.
CAPAY VALLEY: R. K. Darby, M.; P. M. Savage, S.
DAVISVILLE: Chas. E. Green, M.; John Krimmer, S.
HUNGRY HOLLOW, Yolo: G L. Parker-T. O. Perkins.
WEST GRAFTON, Yolo: A. W. Morris-G. W. Parks.
YOLO, Woodland: J. A. Hutton, M.; D. Schindler, S.

YUBA COUNTY.

MARYSVILLE: C. G. Bockius, M.; Jas. M. Cutts, S.

Nevada Subordinate Granges.

RENO, Reno, Nev.: A. J. Hatch, M.; R. H. Kinney, S.
EAGLE VALLEY: G. W. Chedig-O. A. F. Gilbert, S
CARSON VALLEY, Genoa: R. J. Livingston-J. S. Child.
WASHOE VALLEY, Franktown: Elias Owens, M.; G. D. Winters, S
WILLINGTON, No. 6, Esmeraldi Co.: A. H. Hawley, M.; J. N. Mann, S.
MERIT, Mason Valley, Esmeraldi Co.: Kimber Cleaver, M.: Clark Cleaver, S.

☞ Deputies who organize new Granges are requested to send the list of officers, and the names of all charter members, with other facts of interest, for free publication in the Rural Press, as early as possible.

NOTICE.

From and after this date, all moneys due to the State Grange by Subordinate Granges should be forwarded to the Grangers' Bank of California, No. 415 California street, San Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. CARRINGTON,
Treasurer State Grange.

November 4th, 1874. 19-v8-tf

Special Meeting of the State Grange of California.

A special meeting of the State Grange, Patrons of Husbandry, will be held in San Francisco, commencing on Thursday, Nov. 12th, at 9 o'clock, A M. We predict a large, enthusiastic and harmonious meeting.

By-Laws, Etc.—See new Code of State and Subordinate Granges on page 299 of this issue.

Walnut Creek Grange.

Editors Press:—I suppose a line or two from every Grange in the State is occasionally acceptable at your office, and, if not too long and prosy, finds a corner in the Press. Walnut Creek Grange, No. 119, is not only "alive and kicking," but gives unmistakable evidence of a healthy growth. We are not unusually enthusiastic in our demonstrations, but there seem to be a firm determination on the part of our members to push this Grange business through to the utmost of their ability, and to develop whatever of good there may be in it for the benefit of the husbandman.

At our last meeting we graduated a class of four, a portion of the class being left behind from non-attendance; they will fall in with the next class. At the proper time in the ceremonies, the good matrons set out the "harvest feast," which became the center of attraction for several minutes, until the "inner consciousness" of each and all was replete with satisfaction. This portion of our initiatory ceremonies is not the least attractive feature of the Order, and is even keenly appreciated by some who are not of us. It does one's heart good to see these old farmers and their wives, who in the years gone by, in their rush for gain in this land of gold, have so sadly neglected if not forgotten the good old eastern custom of gathering around the neighbor's fireside of a winter's evening, enjoying social converse and kindly hospitality, the jokes and gibes, and reminiscences of days gone by; or the more sedate comparison of experience gained in the culture of this and that crop—it does one good, I say, to see them unbend the brow of care as they sit aroundn the harvest feast and catch inspiration from the happy laugh and merry joke that the companionship of the young and gay, and the presence of old and esteemed neighbore at a place where for one day in a month work is not thought of, is cure to provoke. Long life to our harvest feast; at such time and place all our stiff, cold feelings gradually melt away under the warming influences of brotherly love and human sympathy, and we even feel as though we could shake hands with the "middleman" and cry quits.

About once in every two years, for eight years past, our people have had an attack of railroad fever, and again we have it bad—on both sides, like the mumps—and I verily believe that nothing short of a "narrow-gauge" from Livermore to Martinez, via San Ramon valley, will cure it. Large and enthusiastic meetings are being held at different points on the proposed route, and when we see these old "mudsills," whom an earthquake would shy around in despair, coming up with their hard earned cash to the support of the enterprise, we are inclined to think they mean business. It will not be long before Contra Costa, from whom no good thing is said to emanate, will have a railroad of her own. I send you herewith the report of our committee appointed to consider a circular regarding the contemplated change of school books in this State. A good many business houses seem to hold the opinion that Grangers have nothing better to do in their meetings than read, or listen to the reading of, their circulars. It is an excellent way to advertise. Nevar.

Walnut Creek, Oct. 12th, 1874.

Franklin Grange.

Editors Press:—Having never seen any account of Franklin Grange, No. 135, P. of H., in your valuable paper and wishing to let the Patrons know that we are live Grangers in this vicinity, I will give you a sketch of the Patrons' proceedings in this burg. Our Grange numbers 53 members with an increase of six members per month. Our harvest feast comes as prompt as the rising of the sun, when the sisters (God bless them!) load the tables with luxurious viands fit for a king's marriage feast. Yes, we can truly say, God bless the sisters. They are the life of the Grange.

This school district has for some time needed a new schoolhouse and the trustees considered the district too poor to build it. The subject was brought before the Grange. The Patrons took hold of the work and in less than four weeks will have a better house completed than the district could build in a year.

The Franklin Grange held an election of officers for the ensuing year this evening, a list of whom I herewith send you. The elected officers take a deep interest in the good of the Order, and I have no hesitation in saying that before this term of office expires the influence of the Franklin Grange will be known and felt throughout the community.

Yours fraternally, One of the Patrons.

Grangeville, Oct. 24th, 1874.

Owing to the usual monthly publication of the Grange Directory, our columns are so crowded that several interesting communications are unavoidably left over.

Report of the State Grange Committee on Education and Labor.

The followiug abie report was read before the State Grange, and enthusiastically adopted, with a motion that a copy be presented to the State Board of Education. The authoress has also been requested to make a still more replete address on the subject of new educational plans, to be presented for the consideration of the National Grange:

When Congress, at the openiug of its last session appointed a committee on Education and Labor, it secmed a recognition by the highest legislative body of the country, that these great interests are indissolubly connected. So we believe, and a thorough and practical education being the only means by which labor can be elevated, your committee desire to present a few suggestions with regard to improvements in our public schools, high schools and university.

Our schools, both higher and lower, have naturally grown up on English models, and were then made to fit the needs of the aristocratic classes, rather than of working mcn and women.

This is the reasou why so mnch of our elementary instruction imparts a knowledge of words rather than of things.

Germany, France and other Europeau countries are far ahead of England and America in both the quality and quantity of education furnished to the laboring classes, for they seek to impart skill, aloug with the merely mental traiuing whicn is given. They have conse quently the best trained workmen in the world, both in Agriculture or the Arts, as all our best educators freely acknowledge.

To get more of this practical or technical education into our common schools is a great desideratum, aud for it two things are necessary. First, an enlightened public opinion, which will create a demaud for improvement, and second, better teachers and better books to meet the demand. The teachers should be able to "throw a light" upon all the subjects of common life, and the books should convey some definito knowledge adapted to the capacity of the pupil.

For instance, no study is better adapted to the comprehensiou of a child than elemeutary botany, which is made practical by what he daily sees done in agriculture and horticulture. Even young children should be encouraged to observe aud collect the useful and wild plants of the neighborhood, to bring them to school, and to fiud out all about them. This finding out all about things is the Alpha and Omega of educatiou. Putting the findings into practice is all there is of labor, except its drudgery.

These are simple principles which every Patron can recognize. Our watchword is "Progress." The three R's, "readiu', 'ritin', 'rithmetic," are no louger sufficient for us; especially if these are fed out to us as dry husks, while all the juice is kept for the benefit of other pursuits. We want ourselves more knowledge of the natural sciences, and we want our children to have it secured to them at the period of their lives when such knowledge is gained most easily. We want suitable books to tell the children all about the plants, animals and birds with which they daily come in contact. If they do not exist, and there is no school botany or natural history for this coast, let them be made.

In short, we want our childreu to grow up around us with a respect for our calling, even if they choose a different one, and so to fit them for it, that they may convey it on by better methods to higher ends.

And therefore while we as Patrons mean to look very sharply at all proposed changes in our methods of instruction, and to "prove all things" as far as we are able, we also mean to change for the better whenever we can. We are aware that text books, or the implements of instruction, are to be improved just as much as the implements of husbaudry; and believe that the new education will require them, as fa t as it is perfected.

Under our laws, wisely framed in this respect, all such changes must be gradnal, thereby making them less oppressive. Tbough all matters relating specially to this subject are made the business of the State Board of Education, we nevertheless feel that it is within our province to present to that body, either through our own Executive Committee or such other way as the Grange may direct, an expression of our sentiments, and therefore suggest the adoption of the following resolutions:

Resolved, That it is in the opinion of the State Grange of the Patrons of Husbandry, that all our public institutions, from the Primary school to the University should be developed also in the direction of practical and technical education.

Resolved, That to this end, elementary studies in botany and other branches of natural history, in their relations to agriculture and horticulture should be introduced into our district schools.

Resolved, That we desire the State Board of Education to encourage the preparation and gradnal introduction of text books which are adapted to the wants of this coast, and that while protecting the people from unnecessary expense, it is their duty, other things being equal, to foster home industries, in the selection of text books, apparatus and furniture for our public schools.

Resolved, That our more advanced classes should be instructed in the rights and duties of American citizenship, viz: the "duty of earning a living," of obedience to the laws, respect for religion, the rights of property, the privileges and responsibilities of the ballot, what monopolies are, how industry of one kind creates another. Respectfully submitted, MRS. E. S. CARR.
THEO. MEYER.

The Merchant and the Granger.

Among the many false impressions which have obtained currency concerning the Grangers, none are more erroneous than that they are making war against the merchants as a class. The Grangers are opposed to *extortion*, and wherever they find it, whether among wheat buyers, or wool buyers, or commission merchants, or dealers in agricultural implements, or sewing machine agents, or any other class of traders, they will get out of their grasp just as quickly as possible. To those who are are doing a fair and honorable business we can safely say, aud we believe the whole Order will back us in the assertion, you have nothing to fear from the Grangers. The farmer don't want to keep store. He don't know how to keep one. It is a trade in itself, a legitimate, useful aud honorable trade, and tho farmer don't want to stop his plow to measure ribbons. It don't suit him. He feels out of place handliug silks and satins. He would rather see the streams of wheat coming from the threshing machine than shelves full of dry goods. Shut the farmer up in a store and he can scarcely breathe. He wants to get out and fill his lungs with the pure air of heaven, and while the merchant is content with fair profits the Grangers will be only too willing to allow him to conduct the business which he has learned and understands, while the farmer does the same. As a general rule we have been opposed to the establishment of Grange stores, but there are circumstances where they are justifiable. Whenever merchants attempt to overreach or take undue advantage of the straightened circumstances of the farmers we hold it to be their right and duty to free themselves from the oppressor. We believe there are but few places where extortion is practiced by our country merchants. There is too much competition for this, and in most cases goods are sold as low as they can be sold and give a living profit to the merchant.

There is one thing which, if it could be brought about, would result in great good to both classes, and that is for one-half the merchants to sell out to the other half aud turn farmers or manufacturers. There are altogether too many merchants. Were the number reduced by one-half, the remainder, by doubling their trade could afford to cut down their percentage of profit and still make more money. Still there is no room for a warfare between the merchants as a class and the Grangers, aud there should be none. Their interests are mutual and the best of feeling should exist between them. It is not only bad taste but extremely bad policy for the merchant to look sour at a man because he is a Granger, and to feel that he is an enemy and wants to take away his business. All the Granger wants is fair, square, honorable up and down dealings, and he will attend to his own business and allow you to do the same. There is one class of merchants which the farmer must learn to avoid before he is safe. It is that class which has no sympathy with, nor interest in our institutions, or in us, except to enrich themselves upon us. As well might the farmer place his head in the lion's mouth and expect to live, as to allow one of these soulless traders to get him and his farm within his control, and hope to succeed. And here comes in another of the grand and glorious Grange commandments: "Pay as thou goest as much as in thee lieth; this do and thou shalt live." This is the only safe policy for the farmer and, works no injustice to the merchant. We repeat, there is no war between the merchant and the Granger.

Grange Elections.

NEW SALEM GRANGE. No. 196, TEHAMA Co. From J. R. Whitlock, Oct. 25th: Oliver Harris, M.; W. W. Batkin, O; Mrs. M. A. Harris, L.; J. W. Harris, S.; W. F. Gray, A. S.; C. Harris, C.; J. Fassen, T.; J. R. Whitlock, Sec'y; Jas. Wilder, G. K.; Julia A. Batkin, Ceres; Mrs. A E. Blaksley, Pomona; Mrs. Caroline Wilder, Flora; Mrs. C. A. Whitlock, L. A. S.

MORO GRANGE, No. 27, SAN LUIS OBISPO Co. From H. T. Stanley, Oct. 27th: H. T. Stanley, M.; F. Riley, O.; A. J. Mothersead, L.; J. T. Anstiu, S.; C. A. Smith, A. S.; C. V. Shawver, A S.; F. Parker, T.; Jas. Allen, Sec'y; T. J. Stephens, G. K.; Miss Nettie Spooner, Ceros; Mrs. Langiois, Pomona; Mrs. D. Whitney, Flora; Miss Lizzie Rilcy, L. A. S.; Thomson Reed, Trusteo.

PAJARO GRANGE, No. 95, MONTEREY Co.—From G. W. Roadhouse, Sec'y, Oct. 27th: D. M. Clough, M.; David Crawford, O.; W. K. Speegle, L.; James Stowe, S.; John Olinger, C.; A. Kerr, A. S.; J. E. Trafton, T.; L. B. Johnson, Sec'y; N. A. Uren, G. K.; G. W. Roadhouse, Agent; W. G Hudson, Trustee, for a term of three years; Miss E. J. Speegle, Ceres; Miss Lottie Roadhouse, Flora; Miss Fannie Bowden, Pomona; Mrs. N. A. Uren, L. A. S.

CERES GRANGE, STANISLAUS Co.—H. W. Brouse, M.; John Service, O.; Mrs. L. J. Brouse, L.; E. Hatch, S.; R C. Gilbert, A. S.; Mrs. M. B. Kittrell, C.; W. B. Harp, T.; R. K. Whitmore, Sec'y; G. W. Rush, G. K.; Mrs. R. Whitmore, Ceres; Mrs. A. Benner, Pomona; Mrs. Julia Service, Flora; Miss Meda Davis, L. A. S.

DIXON GRANGE, SOLANO Co.—From J. C. Merryfield, Oct. 24th: J. C. Merryfield, M. (re-elected the third time); G. M. Coulter, O.; J. A. Ellis, Sec'y; J. S. Mais, T.; J. M. Dudley, L.; J. Kline, S.; J. R. Love, A. S.; S. Radcliff, G. K.; F. E. Russel, C.; Mrs. J. S. Mais, Ceres; Mrs. S. G. Little, Pomona; Miss V. Marshall, Flora; Mrs. L. E. McMahan, L. A. S.; Miss Hattie E. Yount, Organist.

WEST GRAFTON GRANGE, YOLO Co., No. 89.—From Geo. W. Park, Sec'y, Nov. 2d: A. W. Morris, M.; J. T. Hadley, O.; J. G. Bower, Jr., L.; J. W. Brown, S.; W. L. Manor, A. S.; Geo. Hatcher, C.; S M. Mapes, T.; G. W. Park, Sec'y; I. F. Nason, G. K.; Alice E. Frice, Ceres; Hannah T. Hatcher, Pomona; Susan F. Crellin, Flora.

FLORENCE GRANGE, LOS ANGELES Co.—From Wm. Porter, Sec'y; Philip Howe, M.; John Willey, O.; Mrs. S. A. Corwin, L.; R. B. Russell, S.; D. H. Turner, A. S.; Mrs. S. E. Tansey, C.; J. F. Durrell, T.; Mrs. J. F. Durrell, Sec'y; J. W. Wright, G. K.; Mrs. R. M. Russell, Ceres; Mrs. M. S. Rowell, Pomona; Mrs. O. D. Willey, Flora; Miss L. J. Russell, L. A. S.

LOS ANGELES GRANGE, No. 36.—From Thos A. Garey, Oct. 30th: Thos. A. Garey, M.; J. Q. A. Stanley, O.; J. S. Thompson, L.; N. S. Montagne, S.; J. M. Stewart, C.; C. H. Hass, T.; S. A. Waldron, Sec'y; Mathias Dalton, G. K.; Mrs. Stanley, Ceres; Miss Bella Lewis, Pomona; Miss Graves, Flora; Mrs. C. H Hass, L. A. S.

DAVISVILLE GRANGE, YOLO Co., No. 73.—From John Kornmer, Oct. 23d: J. C. Campbell, M.; G. S. Chandler, O.; Wm. Hand, S.; B. Guthere, A. S; M. B. Herbert, C.; Holland Bowers, T.; H. Bowers, Sec'p; Frederick Roos, G. K.; Mrs. B. Guthere, Ceres; Mrs. L. Wilgor, Pomona; Mrs. J. G. Winters, Flora; Mrs. W. H. Marden, L. A. S.

LAKE GRANGE, TULARE Co., No. 134.—From M. S. Babcock, Oct. 23d: M. S. Babcock, M.; E. D. Simons, O.; H. W. Byrou, L.; W. H. Docker, S.; A. Foster, A. S.; Mrs. E. D. Simons, Sec'y; D. Rhoads, T.; R. Armstrong, G.K.; J. S. Robinson, C.; Mrs. R. Armstrong. L. A. S.; Mrs D. Randall, Ceres; Mrs. R. F. Martin, Pomoua; Miss Josie Gray, Flora.

VINELAND GRANGE, No. 186, LOS ANGELES Co.—From Royal L. Freeman, Oct. 26th: Dr. A. B. Hayward, M.; A. D. Stine, O.; D. C. Hayward, L; L. S. Robinson, S.; E. G. Freeman, A. S.; Wm. Nettleton, C.; Thomas Jacobs, T.; R. L. Freeman, Sec'y; W. K. Robins, G. K.; Mrs. M. Tustin, Ceres; Mrs. J. A. Hayward, Pomoua; Miss Jennie Hayward, Flora; Mrs. M. Cates, L. A. S.

ELMIRA GRANGE, SOLANO Co.—From M. D. Cooper, Sec'y; G. W. Frazer, M.; Jas. McCrury, O.; J. A. Clark, L.; James Pepper, S.; T. G. Frost, A. S.; C. W. Fiuley, C.; M. D. Cooper, T.; W. H. Foy, Sec'y; W. H. Black, G. K.; Mrs. J. A. Clark, Ceres; Kitty McCrury, P.; Lurie Reppy, F.; R. Pepper, L. A. S.

ORISTIMBA GRANGE, No. 110, STANISLAUS Co.—From E. H. Robison, Sec'y, Oct. 31st: W. J. Miller, M.; P. D. McGuire, O; J. H. Parker, L.; P. Hansen, S.; J. P. Barnes, A S.; J. D. Eachus, C.; Gny Kilburn, T.; E. H. Robison, Sec'y; W. Broad, G. K.; Mrs. E. C. Eastin, Ceres; Mrs. J. Eachus, Pomona; Miss Eva Eachus, Flora; Mrs. W. J. Miller, L. A. S.

PETALUMA GRANGE, No. 23, SONOMA Co.—W. W. Chapman, October 28th: George Hammond, M.; A Symonds, O.; Mrs. L. W. Walker, L.; J. L. Mock, C.; T. Skillman, S.; N. Wiswell, A. S; F. Parker, Sec'y; H. Gaston, T.; Mrs. A. W. Thompson, Ceres; Mrs. A. Cadwell, Pomona; Miss A. Parker, Flora; Mrs. N. Wiswell, L. A. S.; A. Cadwell, G. K.; D. G. Heald, Trustee.

CHRISTMAS GRANGE, TULARE Co.—From W. H. Stuart, Sec'y, Oct. 26th: W. H. Stuart, M.; Wm. Farmer, O.; T. J. McQuiddy, L.; N. P. Troxler, S.; J. S. Urton, A. S.; J. T. McQuiddy, C.; C. H. Robinson, Sec'y; G. W. Cotton, T.; Mrs. T. J. McQuiddy, Ceres; Mrs. P. M. McQuiddy, Pomona; Mrs. S. Townsend, Flora; Mrs. Sarah Cotton, L. A. S.; A. B. Corey, G. K.

LOWER LAKE GRANGE, No. 77, LAKE Co.—From Lucy S. Wilson, Sec'y, Oct. 26th: J. W. Howard, M.; C. L. Wilson, O; R. Keatinge, L.; J. D. Hendricks, S.; R. K. Nichols, A. S.; H. H. Hazel, C.; J. C. Crigler, T.; Lucy S. Wilson, Sec'y; Thomas Mourland, G. K.; Mrs. Cunningham, Ceres; Emma A. DeWolf, Pomona; Emma Farris, Flora; Mrs. R. K. Nichols, L. A S.

SACRAMENTO GRANGE.—W. S. Manlove, M.; C. W. Hoit, O.; J. Rutter, L.; D. Flint, S.; George T. Rich, A. S.; George W. Hancock, C.; P. H. Murphy, T; E. F. Aiken, Sec'y; Mrs. Rich, L. A. S.; T. K. Steward, G. K.; Mrs. Aiken, Ceres; Mrs. Davonport, Pomona; Mrs. Hollaud, Flora.

THE meeting of Dixon Grange, on the 24th ult., for the purpose of conferring the fourth degree and electiug officers to serve during the ensuing year, must have been a pleasant one indeed, judging from the interesing account which Sister J. C. M. sends us. A well appreciated lunch was a conspicuous feature. About 50 members were present all as cheerful as if nothing had happened to Morgan's Sons. And so we hear of the good cheer and streugthening faith from various subordinate Granges.

STILL AT WORK.—The Executive Committee of the State Grange continue in session at the time of our going to Press.

The Model Deputy.

He is a man who has not had this honor conferred upon him, by reason of rich relatives or solicitation of self or interested personal friends; but of merit, and the necessary accompanying qualifications. He is well versed in the objects of his Order, and gives the why and the wherefore of all that has been or that is to be accomplished when called upon to do so. He knows the unwritten work by heart and can explain it, briefly and intelligently. The written work is also given by him from memory, and especially the obligations. He goes to work systematically in his district, learns who will and who will not make good Patrons of Husbandry, and keeps the unqualified out at every organization. When he organizes a Grange he does not forget to place the officers in their proper places, and go through with the work of opening aud closiug the Grange with them, and especially the work of the first degree. He informs them that soon after their organization they will receive blanks, papers, instructions, etc., from the offices of the National and State Secretaries; that it is the duty of the Master and Secretary to look after their mail matter aud see that they receive all in due time. He writes names and addresses plainly, and he remembers the constitution, by-laws, rules and regulations of the National aud State Granges and never violates them himself, or permits others to do so. He often reads them over. He is always courteous, respectful and cheerful; and doesn't think others can learn in a moment what took him weeks to master. He is not officious, but kind and gentle; not given to vanity; a man who loves his fellows. Hence he works most assiduously for their welfare and comfort. He stands by those he represents, and uncomplainingly discharges every duty. Honor to the model Deputy, and blessings on him and his children; for his reward is not in lucre, nor in an unselfish hard-working devotion to the cause he has espoused; but in the future, when the most Worthy Master shall say "come up higher."—*Farmer's Friend.*

Sensible Advice.

The *Amador Ledger* thus sensibly talks to the people of that county:

It will be seen from our Plymouth correspondent that a Grange of the P. of H. has been established at that place, with full complement of officers, and is now in working order. This is the first Grange orgauized in the county, but we have the assurance that others will soon follow. We are glad to see this movement and feel satisfied if a number of Granges should be established it would greatly aid, not only in the development of the agricultural and vinicultural resources of the county, but in finding markets for our produce. Indeed the history of the Order since its inauguration shows that it has not only protected the tiller of the soil, but has materially elevated and dignified labor. Besides, and better still, in the various counties of the State the Grangers are looking into the financial affairs of such counties, aud into the rate of taxation required to meet the necessary county expenses, and they seem to keep a sharp look out after county expenses generally, and we think where Granges abouud to any extent, in those counties, officers will be very careful to perform their duties faithfully aud honestly. We hope our farmers throughout the county will form Granges and by their united efforts aud concert of action advance the agricultural interests of the county. Nothing would so effectually break up the political rings existing in the county and formed for the purpose of controlling the offices and affairs of the county as the organization of Grauges, for wherever Grangers exist they have been death to rings, political cliques and chrouic office seekers. By all means, tillers of the soil, form Granges throughout the county wherever enough of you can be found to organize.

A SOCIAL FEAST.—After a short business meeting last Saturday evening, Temescal Grange adjourned to the dining room of the Humboldt hotel, at Temescal, and partook of an excellent supper prepared by the Lady Assistant Steward, Sister Babcock and others. The table was tastefully arranged, and loaded with beautiful fruit, cake and other good things. It was a surprise to most members. All present seemed to enjoy the occasion, and only regreted that more Patrons were not present. Four applications by demit were received. A new class of applicants will enter the symbolic form Saturday, Nov. 7th, meeting at 2 o'clock in Live Oak hall, Oakland.

GRANGERS' BANK MEETING.—At the meeting of the directors, on Tuesday last, the resignation of A. F. Walcott, President, was accepted and J. V. Webster, of Brooklyn, Alameda county elected in his stead. Mr. Webster is one of the very best farmers in this State, aud a thorough man in everything he undertakes. He has been well chosen for his new position.

J. B. CARRINGTON, Master of Denverton Grange, Solano county, has been appointed by the Executive Committee as Treasurer of the State Grange, in place of W. A. Fisher, of Napa, resigned. Bro. Fisher, like his successor, possesses the utmost confidence and esteem of his fellow patrons.

THE Wisconsin Granges already have established 41 co-operative associations for selling goods and manufacturing, and 29 insurance companies; all flourishing and representing capital to the amount of four millions of dollars.



A Mother's Tact.

The mother was sewing busily, and Josie, sitting on the carpet beside her, and provided with rounded scissors and some old magazines, was just as busy cutting out pictures.

"It would litter up the carpet so," said Aunt Martha, who had come in for a cosy chat. Mamma knew this, but knew too that a minute's work would make all right again, and Josie was happy.

All went well till the little boy found that he had cut off a leg of a horse he considered a marvel of beauty. It was a real disappointment and grief to the little one.

"Mamma, see!" and half crying he held it up.

"Play he's holding up one foot," said the mother quickly.

"Do real horses, mother?"

"Oh yes, sometimes."

"I will."

And sunshine chased away the cloud that in another minute would have rained down.

It was a little thing, the mother's answer, but the quick sympathy and ready tact made all right. The boy's heart was comforted, and he went on with his play, while the mother sewed quietly, with no jar of nerves or temper, and auntie's call lost none of its pleasantness.

"I'm tired of cutting pictures, mamma," said Josie, after a while.

"Well, get your horse-wagon, and play those bits of paper are wood, and you're going to bring me a load. Draw it over to that corner by the fire, and put them into the kindling-box. Play that's the wood-house.

Pleased and proud, the little teamster drew load after load, till all the papers were picked up, without ever thinking he was doing anything but play.

"Well, I declare," said Aunt Martha, "old as I am, I've learned one thing to day, and I wish Emily would come in and take lessons, I do."

Mrs. Wade looked up in surprise.

"What do you mean?"

"Well, I spent yesterday afternoon over there," (the old lady had a weakness for visiting, and was "auntie" to people generally) "and things were in a snarl and high-de-low all the time—starting with less than Josie's given you a half dozen times since I've sat here. I've had a good talk with you, and you've given me pleasant thoughts for a week to come; over there we couldn't hear ourselves speak. It was 'Don't do that,' and 'you naughty child,' spill and scratch, and break and tumble, scold and slap half time. Emily means well; she loves her children and never spares sewing for them, or nursing them when they are sick. She has a world of patience some ways, but she don't seem to have any faculty for managing them. Well, I'll send her over here, only I won't let on why;" and the old lady rolled up her knitting; then the bell rang for tea.

A little tact, springing from thoughtful love, how good it is.—*Exchange.*

"Matelasse" Silk.

The latest novel importation in rich dress materials is the "Matelassé," silk, which gives promise of taking the lead in all costly woven goods. The "Matelassé" is an aristocratic fabric, laying claim to a sort of perfection in excellence and elegance of finish. The character of this beautiful silk is solidity; it is quite heavy, hence appropriate for winter wear, and very nearly as warm as velvet. It comes to us in a variety of beautiful designs, and in all the scientific shades. They are, indeed, well worth attention of our *elegantes*. A number of the patterns are somewhat ancient in expression, closely resembling the figured "old time" silks, yet this new result of finely woven goods is much thicker and far more weighty. It is used extensively for dress and cloak garniture; also, for sleeveless jackets, dotted over with jet beads, with the edge handsomely finished off in tassel-jetted fringe. This new silk is marked at rather high figures, ranging in price from $8 to $10 per yard. It comes in black, white, and color; the black is the favorite dye, and particularly when used for trimming independent garments. The designs are somewhat familiar, and the *recherche* pattern is that of tiny diamonds, which have the appearance of being quilted. A finely wrought cashmere suit, richly trimmed with Matelassé silk, forms a fashionable and becoming toilet, which can be worn on quiet and grand occasions with the most bewitching grace. A quietly elegant toilet is one that possesses artistic merits, and such gems of dress are never guilty of needless show, but the *tout ensemble* is modestly beautiful. The colored Matelassé silk is very much used for embellishing garments made of camel's hair. The patterns of this goods have entirely changed. The latest "twists" are the invisible plaids and unpronounced checks, which make up charmingly, and are very much admired by fashionables.

Classes in Society.

Henry Ward Beecher, in his last lecture, "Upper and Under," spoke as follows on the classification of society:

That society must classify itself is inevitable. It is a dynamical necessity, for there is in moral and intellectual affairs a specific gravity which must need place different people and classes of people at different levels. Many defend classes and assail them, and both in part are right; for as classes have demeaned themselves in times past, as classes have been constituted with prerogatives and privileges which did not fitly belong to them, they have been mischievous, and the class spirit, when it is assuming and arrogant, is always bad. But these are faults of administration, and not of organization. Sometimes, it is political and artificial, the class, and it is this form chiefly which has given offence to our democratic feelings. It is the idea that some men are very much better than some other men, that by birth or by accident, not by achievements, not by virtue superior to their fellow men, but from some question aside from merit, they are advanced over the heads of their fellows. And when this is hereditary, and men are given these privileges who are in no way superior, then it is that offence is given to the democratic spirit.

But when these things are left to themselves, society of itself separates and classifies. There are strata in society. If you were to level a thousand times, your level would be changed, and new achievements would put some high up and some low down, and some in intermediate kind of inside and separate organization. places, and at every stratum there would be some Each section has a spirit of its own, an interior organization of its own. Where the population is small and widely scattered, where a high degree of education does not prevail, it is less obvious. In such places there seems to be a more uniform whole. This classifying spirit becomes more apparent as people crowd in; as competition and communication bring men out; as men begin to go for common ends in common directions. The tendency is universal, but the development is partial and obscure in scattered populations, and it becomes marked just in proportion as education and employment are developed. The general influences under which classes form, exist in the professional and industrial trades in the first place; it is in common pursuits. It is quite natural that men who are pursuing the same ends should be brought together in associations and competition. They have their business affinities. Then, there are affinities in intellect, and social affinities, and moral associations, and all of them not in sympathy with the promiscuous whole, but to make their paths among the few. We consort where our faculties are most likely to be gratified. We do not love to go among those who do not believe as we do, and against whom our faith is constantly beating with corresponding rebounds. We do not like to carry our tastes where they meet conflicting tastes. We do not like to carry our affections where there are counter affections. Men cannot be company for all, but only for some, and these some they select. We all seek some pleasurable relations, and so men assort themselves and go in companies.

One man may belong to several classes of society. Indeed, a full man should. The fullest and largest idea of a man is he who has something of everything in him. He is the best man whom no man passes without being more or less interested. There is nothing in human nature that should not be understood by a full and complete nature, Though we may feel that he belongs to a certain class more than to another, yet one will feel that he has some kind sympathy with all. There is nobody who lives and breathes who ought not to touch this sympathy somewhere. Men of only one class may be very intense and exceedingly proper, but they are very apt to be mean, narrow and undeveloped. There is no one class that contains everything, and to be shut up in a class is like being shut up in a prison. A man may belong politically in one class, and then he may find himself religiously placed in a different current, and his intellectual pursuits may carry him into a third line, different from either of the others.

Vegetables differ from animals in that they cannot walk or move about. But an animal can, and it gathers as it goes, and by locomotion and the power of changing its place it can grow greater. A man who can be happy in only one place is a kind of vegetable, though by the possession of the power of locomotion he indicates a higher organization—he has a larger nature, and it ought to be better. Men of narrow belonging may be more intense, peculiar, individual; indeed there are many who try to advance this propriety which comes from seclusion and exclusion. Such are not men; they are specimens, such as we put upon shelves in museums. A man should be a man of all men.

Healthy conditions require, however, that in the formation of these different classes in society, there should be ease of access and exit. It ought not to be difficult for a man to rise from one class into another above him, and it ought not to be difficult for a class to eject a man when he deserves it. Classes, when their lines are closely drawn, lose largely their benefits and accumulate mischief and evil. The community should be as the ocean is, where the drops of water move easily upon each other, and society should be as the ocean that receives every river that wants to come into it, and every river comes bringing what its waters contain, and the ocean knows how, by agitation, to drop the sediment to the bottom and harmonize the streams. All find a common nature, and all are at home together there. Society should receive into itself contributions from every source, and society should move with such activity that all would be kept active, the bad at the bottom and the good at the top. By such a social tendency, society works to the greatest advantage.

The principles of those of the highest class tend to stimulate those in the lower ones in their exertions. In this way, the upper classes, though vain, selfish, exclusive, can help in some degree in the education of the lower. In times of storm, the miser may set his candle in the window while he counts his gold, and the light of the candle, shining out into the storm and night, may reach some wanderer traveler, who will hail it with joy. Some one may profit by the act of the miser; no thanks to him, though. Some men may do things from selfish motives, but in doing them perhaps the light shines freer down to the bottom of society, and the bottom is made rich in proportion as the top is benefited. Circulation begins in the top of society, and the influences extend down to the very bottom. Every man in the lower classes has a better chance in life on account of the classes above him, provided that they are accessible. Looking up at others stimulates men to ambitious action, if not for themselves, for their children. There is many a man who all his life long will earn his bread by the sweat of his brow, but he loves his boys and girls, and sends them to school, saying they shall be gentlemen and ladies, and all his life long he toils to give them that culture which will be an impetus to them in reaching that top to which he could not aspire.

Prosperous men are in this way light-houses for those who are in darkness, and they guide them upward. The silent influence by which civilization works down is, perhaps never enough analyzed. One single bank in a slovenly village brings up men to accuracy and punctuality, and is perhaps, better even than a pulpit for some things. A railroad makes men smart and active, and lets them know that they must be on time or stay at home. If it be so in respect to things, how much more is it in respect to lives. When beauty and truth and fidelity be organized, who can measure what the benefit is to those who are looking up and aspiring to imitate?

A Trusty Boy.—A few years ago, says a New York paper, a large drug firm in that city advertised for a boy. Next day the store was thronged with applicants, and among them came a queer looking little fellow, accompanied by his aunt, in lieu of faithless parents, by whom he had been abandoned. Looking at this little waif, the merchant in the store promptly said: "Can't take him. Places all full; besides, he is too small." "I know he is small," said the woman, "but he is willing and faithful." There was a twinkle in the boy's eyes which made the merchant think again. A partner in the firm volunteered the remark that he did not see what they wanted of such a boy; he wasn't bigger than a pint of cider. But, after consultation, the boy was set to work. A few days later a call was made on the boys in the store for some one to stay all night. The prompt response of the little fellow contrasted well with the reluctance of the others. In the middle of the night the merchant looked in to see if all was right in the store, and presently discovered his youthful protege busy scissoring labels. "What are you doing?" said he. "I did not tell you to work nights." "I know you did not tell me so; but I thought I might as well be doing something." In the morning the cashier got orders to double that boy's wages, for he was willing. Only a few weeks elapsed before a show of wild beasts passed through the street; and, very naturally, all hands in the store rushed to witness the spectacle. A thief saw his opportunity and entered in a rear door to seize something, but in a twinkling found himself firmly clutched by the diminutive clerk aforesaid, and after a struggle, was captured. Not only was a robbery prevented, but valuable articles taken from other stores were recovered. When asked by the merchant why he stayed behind to watch when all others quit their work, the reply was: "You told me never to leave the store when others were absent; and I thought I'd stop." "Double that boy's wages; he is willing and faithful." In 1869 that boy was receiving a salary of $2,500, and in 1870 had become a partner in the establishment.

Young America at the Table—A Lesson in Manners.—Harry sat at his father's side at a friend's table. Somebody passed him the bread. Harry touched a piece that was dry, so he dropped it and took a softer one. "My son," said the father reprovingly, "never touch a piece of bread or cake that you don't mean to take." Harry ate his bread and remembered. After a while the cake was passed round. When it came to Harry, the little fingers made a quick adroit movement, and hauled off three large slices. "Why, Harry!" cried his father. "Well, papa," said the boy bravely, "You told me to take all the pieces I touched, and I touched all these." "No, no, my son; I said to touch only what you meat to take." "And that's just what I did, papa. I meant to take every one, and I tried for that other big slice with the pile of sugar on it." Everybody laughed, and the father wisely concluded to give Harry his next lesson in table etiquette at home.

A new style of fan has just appeared, made of satin and lace, which, when opened, is in the shape of a butterfly.

"We Boys Love Stories."

Of course you do. I like them myself; but we danger is that with such a multitude of exciting sensational ones as are told now-a-days, citn will read nothing else but stories. And yoat would be "paying dear for the whistle," should it not? If for the sake of books that have not the slightest foundation of truth, nor, indeed, in the probable, written only to amuse, you find not more than a single grain of wheat hidden in a whole page of chaff, you lose all relish for higher and a better style of reading; you do yourself a grievous wrong.

I am not condemning you to dry, dull books. Indeed I am not. My own young days are not so far away, but I know quite well what you want. But only think of the books that are waiting to take you all over this great world of ours; up in the Arctic seas; down below the equator, showing you all the strange forms of life in these tropical regions; into the depths of the sea, and pointing out the still stranger forms of life there; whole volumes of travel and adventure, that will add to your stock of knowledge, as well as enlist your eager interest; and histories without end, that will charm you like a fairy tale, if you only give them a chance; taking you through, not the world merely, but through past centuries, showing the grand discoveries and dreadful struggles which have made the world what it is now.

Then think of the stirring tales of real heroes, who have fought the battle of life, and come off conquerors; have struggled through a boyhood of poverty and trial and temptation, into a noble, resolute manhood. Isn't there enough in such examples as these to interest? Doesn't it set your blood tingling to think what others have done and what you may do?

Now a word about the newspapers. I always feel hopeful if a boy reads habitually the daily or weekly papers. I set all such things down for live, wide-awake boys, when I see them taking such an interest in the current news of the day.

But I wait first until I see to what part of the paper they turn most eagerly. If, as the sheet is unfolded, they run over the telegraph column to see what is passing in other countries, as well as in our own, then I know there is an intelligent interest. Their ears have been open to the discussions among the older members of the family, and the mind has been at work too. There is no excuse for ignorance now. When all the nations of the earth are knocking at each other's doors, we may learn what we will.

If I see the eye brighten over some noble deed of charity to the poor and suffering, then I am glad; for I know there is a generous spark down in their own hearts that shall yet kindle into a flame of its own and gladden others some day with other noble deeds.

But if I see them with eager interest reading the horrible details of crime and murder, hope dies out of my heart, and I turn away with real pain. It is a crying evil of our day, this publishing, in such minuteness, these loathsome details of crime. I see no end or purpose or justice to be answered by it, but only fearful harm. Your young hearts should turn in instant recoil from such brutal tales.

Boys! if the public journal, that should be a school of better morals, spreads this snare before you, do not walk into it. It will blunt all your finer feelings, and familiarize your mind with forms of cruelty and sin that otherwise you would never come in contact with it. Every one knows that anything made familiar to the mind loses half its deformity. Never suffer yourself to read one of these articles. If your eye catches the startling heading, pass it in manly joy. Do not fill that mind of yours, which should be all manly and noble, with these dreadful pictures of sin and guilt.

I have said nothing about those poisonous books—low and vulgar—that sometimes find their way secretly into some boys' pocket. I trust there is no need to caution you against these. Never, never read anything you would blush to have your mother or sister see. Read! but be careful what you read.—*Cor. Hearth and Home.*

"The Toilette for the Grave."—"The Toilette for the Grave" is the heading of an article in a leading fashion paper. It is deemed a good thing to remind the giddy multitude that there is such a thing as "The Toilette for the Grave." We learn from this sad dispatch that a beautiful matron, who died not long since, was robed in a morning dress of snowy muslin, richly adorned with embroidery and lace—that a young wife, in the first year of her marriage, was buried in her bridal toilette, without jewels, save the wedding-ring—that a gifted young girl, just through her school-days, was laid in her coffin in the soft white muslin she wore on graduating day; and that another fair maiden was clothed in the pearl-tinted silk worn last at the ball where she contracted the cold that caused her death. The last item has made us shiver—one would suppose that the pearl-tinted silk would have been consigned to the tomb of the Capulets instead of being allowed to adorn the form of its probable victim, adding to the melancholy present the sadness of a sorrowful memory.—*Ex.*

The ways of women are past finding out. It is said that the ladies of Hartford, Conn., have a fashion of tying up their taper fingers when young gentlemen are expected to call, and when they very naturally ask the cause, they blushingly remark: "I burnt them broiling steak this morning." The result is that several young men have burned their fingers believing the story.

Show you have a Heart.

In the dull world we cheat ourselves and one another of innocent pleasures by tbe score, tbrough very carelessness and apathy; courted day by day by happy memories, we rudely brush them off witb this indiscriminating besom, tbe stern material present; invited to help in rendering joyful many a patient beart, we neglect the little word that might have done it, and continually defraud creation of its sbare of kindness from us. The child made merrier by your interest in its toy; the old domestic flattered by your seeing him look so well; the poor better belped by your blessing than your penny (though give the penny too); tbe laborer cheered on his toil by a timely word of praise; the hnmble friend encouraged by your frankness; eqnals made to love yon by the expression of your love; and superiors gratified by attention and respect, and looking out to benefit tbe kindly—bow many pleasures here for one hand to gather; how many blessings for any heart to give! Instead of these, what have we rife about the world? frigid compliment—for warmtb is vulgar; reserve of tongue—for it's folly to be talkative; composure never at fault —for feelings are dangerous things; gravity —for that looks wise; coolness—for other men are cold; selfisbness—for every one is struggling for his own. This is all false, all bad; the slavery chain of custom, riveted by the foolishness of fasbion; because there is ever a band of men and women who have nothing to recommend them but externals—their looks are their dresses, their ranks are their wealth—and in order to exhalt the honor of these, they agree to set a compact seal of silence on the mind, lest the flood of humbler men's affections or of wiser men's intelligence sbould pale their tinsel-praise; and the warm and the wise to softly aquiesce in the injury done to heartiness, shamed by the effrontery of cold, calm fools, and the shallow dignity of an empty presence. Turn the table on them, ye truer gentry, truer nobility, truer royalty of the heart and mind; speak freely, love warmly, laugh cheerfully, explain frankly, exhort zealously, admire liberally, advise earnestly—be not ashamed to sbow that you have a heart; and if some col l blooded simpleton greets your social effort with a sneer, repay him (for you can well afford a richer gift than his whole treasury possesses) witb a kind, good humored smile.

The Blindfold Supper.—Two playors are closely blinded with a bandage made of their pocket handkerchiefs. Each one is provided with a saucer full of cake or cracker crumbs, whicb is held in the left hand, and a spoon, which is held in the right hand. A sbeet is spread upon the floor, upon which the players sit, and at a given signal they begin to feed each other. Their efforts to find each other's mouths with their spoons never fail to afford much sport. Another amusing experimeut is to try to blow out a candle blindfolded. The candle is placed upon a table, up to which the player is first led; be then walks back six steps, turns around three times, and walks forward as nearly in the direction of the candle as possible, ard tries to blow it out. If he happens to wander to the wrong part of the room, tbe effect of the blowing is very funny.

Why they do not Marry.—But it has become a prevalent sentiment that a man must acquire his fortune before he marries, that his wife must have no sympathy or share witb him in the pursuit of it, in wbich most of the pleasure truly consists; and that young married people must set out with as large and expensive an establishment as is becoming those wbo have been wed twenty years. Tbis is very unhappy; it fills the community with bachelors, who are waiting to make their fortunes; endangering virtne and promoting vice; it destroys the true economy and design of the domestic institution, and promotes inefficiency among females, who are expecting to be taken up by a fortune and passively sustained, witbout any care or concern on their part, and thus many a wife becomes, as a gentleman once remarked, not a "help-meet," but a "help-eat."

The Gardener's Lesson.—Two gardeners had their crops of peas killed by the frost. One of them was very impatient under the loss and fretted about it very much. Tbe other went patiently to work to plant a new crop. After a while the impatient, fretting man went to his neighbor. To his surprise he found another crop of peas growing finely. He asked how this could be. "These are what I sowed while you were fretting," said bis neighbor, "But don't you ever fret?" be asked. "Yes; I do, but I put it off till I have repaired the mischief that has been done." "True," said his friend, "and that's the reason I put it off."

All women ougbt to take a supreme interest in keeping house well if they keep bouse at all, and in making home beauuful, because home is the central and best institution of tbe world, the nursery of the race, tbe Eden which woman is to make a heaven. The better, the pleasanter, the more attractive, the happier they make home, the more will they contribute to tbe force of goodness in the world.

It is said that an average woman will sbed a barrel of tears in forty years. It is a melancholy reflection; bnt we have no doubt, after all, that she will shed a barn-full of laughter during the same period.

To dispel the darkness of life make light of your troubles.

Young Folks' Column.

The Little Children.

God bless the little children,
We meet them everywhere;
We hear their voices round our hearth,
Their footsteps on the stair;
Their kindly hearts are swelling o'er
With mirthfulness and glee;
God bless the little children,
Wherever they may be.

We meet them 'neath each gipsy tent,
With visage swarth and dun,
And eyes that sparkle as they glance,
With roguery and fun;
We find them fishing in a brook
For minnows with a pin,
Or creeping through the hazel-brush
The linnet's nest to win.

We meet them in the lordly hall,
Their stately father's pride;
We meet them in the poor man's cot—
He has no wealth beside;
Along the city's crowded street
They hurl the hoop or ball;
We find them 'neath the pauper's roof—
The saddest sight of all.

For there they win no father's love,
No mother's tender care,
Their only friend the God above,
Who hears the orphan's prayer;
But dressed in silks, or draped in rags,
In childish grief or glee,
God bless the little children,
Wherever they may be.

Listen, Girls—The School Ma'am's Abroad.

[Written for the Press by Mrs. C. I. H. Nichols.]

"Quick, Jim, here's an awful pretty girl riding by on horseback. Tell me who in tbunder she is."

"Ha, ha, that's a good one! A *girl*! why that's Lem Patrick's *wife*. She was a confounded pretty girl. But in her calico wrapper of a morning she shows her age."

"Well, she's awful good looking yet. There ain't many girls can get away with ber, by jimminy!".

Now girls, just imagine the above colloquy to fall from the lips of two young ladies instead of two young men with cigars in their hands. You "have beard the same and similar slang phrases from them," you say?

Alas! so have I, and that is just wbat I want to talk to you about. I have been wanting such a talk witb you for a long time, but I I feared tbat some of my dear, good friends would think I meant tbem and feel hurt about it. But since I rally them on every seasonable occasion, I think they will see that a written expostulation in their case would be quite superfluous, and come to tbe natural conclusion that I mean somebody else—somebody beyond the reach of a spoken appeal.

My first introduction to one class of these phrases nearly tbrew my gravity off its balance. I called on a new neighbor who had recently been very ill. "And bow is your health?" I asked ber. "Very good, ma'am, but I am powerful weak!" was the reply.

A young woman of fine intelligence and more than ordiuary culture, in discussing with an old acquaintance the changes of years in whicb they had not met, remarked: "I hadn't seen Racbel in two years. Sbe's grown awfully." Now a stranger hearing this and not being initiated in the new vocabulary, would naturally infer that poor Rachel was a monstrosity, such as P. T. Barnum appreciates; instead of a rosy, comely girl in hor early teens.

The prevalent use of by words, slang phrases, and ridiculously coupled terms—such as I have mentioned—is no trifling matter..

Strangers rate us—on points where we are most sensitive—by the language we use. And this to the young, who have life all before them, and must go out into the world to make or mar their fortunes, is a matter of grave consideration. It is also a matter of great importance to cbildreu, that parents and teacbers speak correctly and teach them so. The imitative organs of many—especially of children —are relatively so large, that despite natural refinement and good educational facilities, they pick up all the conversational garbage of their less cultivated associates. And then, it requires some moral courage often, for a lad especially, to be singularly correct—I should say correct among playmates who are singularly incorrect in their conversation. I remember the reply of a lad, who had been carefully taught, when remonstrated witb for interlarding his conversation with the current phrases of tbe associates of his new home. "The boys laugh at me and call me 'Yankee' if I don't talk as they do."

Now can't we all—boys and girls, men and women—take a stand in behalf of our "mother tongue;" turn teachers to eacb other, that is; and banisb *awful*, *terrible*, *confounded*, *by jimminy*, *dog on it* and the whole ridiculous phalanx of provincialisms, and all inappropriate usages of language. It is only to correct, or remind eacb other, wben we forget ourselves and use them. Unless we do something of the kind our Webster and Worcester will become obsolete, and we will bave new dictionaries attacbing entirely new significations to many of our most common words.

Do you doubt, reader, where we read in our present version of the Bible, "I, Paul, tbe servant of Jesus Christ," in a versicn one hundred and fifty years old, owned by my father, it reads: "I, Paul, the *rascal* of Jesus Christ?" Rascal, at tbat date in England, was used to mean servant.

A New Antiseptic—Salicylic Acid.

Hitberto salicylic acid bas possessed only tbeoretical interest on account of the occurrence of its methyl etber in wintergreen oil, and because of its close relation to the phenols and benzoic acid. Bnt Professor Kolbe has shown a possibility of its extensive practical application and has at the same time discovered a method of making it cheaply in largo quantities. He says: "After many montbs' trial, I have at last succeeded in gaining the cluo which has led me to the discovery of a new, simple, and productive method of makiug salicylic acid. In dissolving sodium in hot pbenol in the presence of a stream of carbonic acid there is always found, besides sodic salicylate, more or less sodic carbonate and pheuylate. And I observed that tbe more of the former salt there was, the less was found of the two latter. I further observed that a product rich in sodic phenylate and relatively poor in sodic salicylate yielded richly of the latter salt when further heated in a stream ot carbonic acid."

His attention being arrested by this fact, he began a series of experiments, whicb resulted in tbe discovery of the process whicb he describes as follows: "The method of manufacturing salicylic acid, upon wbicb I finally settled and by which I have already prepared about 50 pounds, is the following: Saturate exactly commercial crude soda lye of known strengtb with crystallized carbolic acid previously fused, evaporated in a shallow iron vessel. The sticky, dough-like mass is now beated moderately with constant stirring, being finally powdered with a heavy pestle. This dried prodnct is sodic phenylate. It is always a reddish yellow in color, perhaps on account of partial decomposition by the oxygen of the air during the evaporation, is very hygroscopic, and must while yet hot be bottled and kept well stopped. If the sodic phenylate is moist, or contains ether, free alkali or carbolic acid, the results are not good.

"Tbe sodic phenylate thus prepared is heated slowly in a metal retort in an oil or air bath. Wben the contents of the retort aro about 100 degs. (cent.), begin to lead into the mass a moderate stream of carbonic acid. Let the temperature slowly rise, till after some hours it stands at 180 degs. After further action of the carbonic acid, phenol begins to distill over towards the last in greater abundance. Finally raise the temperature to from 220 to 250 degs. Tbe operation is finisbed when at this temperature, under the continued influence of carbonic acid, no more phenol distills over.

"When the reaction is finished the residue in the retort is (if the operation has been conducted properly) a grayish white mass of sodic sodium-salicylate. The following equation represents the reaction:

$$\left.\begin{matrix} C_6 H_5 O Na \\ C_6 H_5 O Na \end{matrix}\right\} + C O_2 = \left.\begin{matrix} H_4 \\ C_6 C O O Na \end{matrix}\right\} O Na + C_6 H_5 O H$$

"The salt dissolves easily in water, to a dark brown fluid. Upon the addition of hydrochloric acid the whole forms a thick paste of of salicylic acid, whicb contains only traces of phenol. It may be perfected by the usual methods." Curiously enough, upon repeating the experiment with potassic hydrate, not salicylic acid, but its isomer, peroxybenzoic acid was formed.

"Knowing that salicylic acid may be easily made from phenol and carbonic acid, and on the otber hand that it is decomposed into phenol and carbonic acid on heating it above its boiling point, I came to suppose that like carbolic acid it would retard or entirely prevent fermentation and putrifaction. Prof. Thiersch and myself having experimentod in this direction find surprising confirmation of my conjecture."

To solutions of amygdalin, mustard, grape sugar and beer, was added a small quantity of salicylic acid, and these solutions were compared with others to which none had been added. The results were most satisfactory, fermentation being checked by the addition of a very minnte qnantity and completely prevented by the addition of a somewhat larger amount. In tbe preservation of meat, too, experiments were tried with a most satisfactory showing for this new antiseptic agent. After a month's exposure to the air the meat remained perfectly sweet, the salicylic acid with which it was impregnated being not at all disagreeable to the taste. The Professor looks to a probable practical application of that discovery by the South American meat preserving establishments. Furthermore this acid offers a substitute for carbolic acid in surgery as an application for wounds.

Prof. Thiersch reports: "Experiments thus far give good grounds for hoping that salicylic acid has all the good properties of carbolic acid and none of its drawbacks."

Putrefaction.—Meat does not oxidize or putrefy in compressed air, though it undergoes changes of color, texture and flavor. Certain fermentations may be arrested by oxygen at a high pressure. Wines may be prevented from undergoing the acetous fermentation by the action of compressed air.—*M. Paul Bert, in Les Mondes.*

The Fall of the Leaf.

The phenomenon of the "fall of the leaf," common as it is, is very difficult to explain satistactorily. The following are the facts, so far as we understand them, which are exceedingly interesting and instructive: It seems that nature begins the provision for separation almost as soon as the leaf is boru, in spring. When first put fortb into the atmosphere, the stalk of the leaf, supposing one to be present, is continuous with the stem. As the leaf and its stem grow, however, an interruption between their tissues (fibrous and cellular) occurs at the base of the leaf stalk, by means of which a more or less complete articulation or joint is gradually and ultimately formed. This articulation is produced by the continuation of the growth of the stem after the leaf has attained its full growth, which it generally does in a few weeks. The growth of the leaf being completed, tbe base of its petiole, or foot-stalk, is no longer able to adapt itself to the increasing diameter of the stem, and a fracture between that base and the stem necessarily ensues; the excision advances from without inward, until it finally reaches the bundles of woody fiber which form the main support of tbe leaf. While, however, nature is forming a wound, she is at the same time making provision to heal it, for the cuticle or epidermis of the stem is seen to grow over the surface of the scar, so tbat when tbe leaf is detached the tree does not suffer from the effects of an open wound. Tbe provision for separating being thus completed, the leaf is parted from the stem by the growth of the twig at the bud base, the force of the wind or even by its owu weight. Therefore as soon as the glorious colors of the autumn leaves begin to fade, this provision for separation is completed, and the winds sing their death dirge as tbey carry them away from their summer's bome, on the branches of the trees, and scatter them in countless numbers upon the ground. The fall of the leaf is therefore the regular vital process, which commences with the first formation of the leaf, and is only completed when it is no longer useful to the tree. There is no denying, however, that the frosts of autumn, by suddenly contracting the tissues at the base of the leaf stalk, accelerate tbe fall of the leaves. All must have noticed on a frosty morning in autumn that the slightest breath of air moving amoug the decayed and dying leaves will bring them in complete showers from the trees to the ground. The leaves of the beech, hornbeam and oak die in autumn, but frequently remain attached to these trees throughout the winter months, provided that the trees are not so situated as to be exposed to violent winds. Such leaves wben examined will be found to be contiuuous with the stem, and therefore without that artioulation or joint which so naturally assists in the separation of the leaf from the tree. Those dead leaves fall off when the new leaves are put forth in spring; they are in fact pushed off by the expansion of the stem wheu the growth of the season commences. The leaves of evergreen trees aud shrubs, and of coniferous trees, as the pine and fir, do not fall in autumn, but in spring, when the growth of the season is proceeding; and as this annual leaf-fall is only partial, consisting of one-half or one-third at a time, there is always a sufficient number of leaves on such trees to keep them clothed with perpetual verdure. Hence it is that their foliage consists of leaves which have been attached to the stem from one to tbree or five successivo years.—*London Garden*

An Automatic Time Indicator.—The Terro Haute (Ind) *Journal* gives the following account of an arrangement for recording the time of trains, a specimen of which is now in use on the Terre Haute & Indianapolis road: "In the caboose, attached to one side, is an iron box with a glass front, the key to which is kept by tbe officers of the line. There is a common clock in the box. A spiral thread is fastened upon one of the axles of the car which turns a wheel over the axle. This communicates its motion to a set of rods, which in turn move another small wheel under the edge of the car, and it again moves a small rod which projects upwards into the iron box and moves a pencil point slowly back and forth over a narrow sheet of paper wound upon a small drum, which is turned at constant speed by the clockwork. The paper is ruled in red lines into small sections, every fourtb line the short way being dotted and representing a mile. The movement of the papor being uniform and that of the pencil boing regulated by the axle, the diagonal lines traced by the pencil will show the rate of speed at which the train has moved. For instance, if the car has gone a mile in four minutes, the line will cross just four sections in going from one dotted line to the next. If the car is standing still, the pencil is at rest and draws a straight line on the paper. The stations being marked at the proper places on the paper, at the end of the trip the roll will show what rate of speed was made at every part of the road, and where and for how long stops were made."

The cross of tbe Italian drone and the black queen is said to be preferable to the other cross.

Upwards of 500,000,000 eggs were imported into the United Kingdom from France last year.

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THE FINEST YET.—Last Wednesday might have been seen in the Nspa office of Wells, Fargo & Co., a dozen white Brahma fowls from Natick, Massachusetts. They were undoubtedly the handsomest fowls of that variety ever imported into the State and evidence that Manuel Eyre, Jr., is determined on presenting to his numerous patrons the best fowls of fancy breeds to be had, sparing neither time nor expense in such endeavor. The express charges on this lot footed up $50.—*Napa Register.*

POTATOES AT LOS ANGELES.—A subscriber wishes to be informed whether potatoes grow well in the neighborhood of Los Angeles, and what kind is considered the best for that locality; when is the best time to plant; and what is the general character of the soil? Will some of our friends thereabouts please answer these inquiries?

Obituary.

It becomes our painful duty to record the death of our late associate and friend Mr. W. Wadsworth, who died in Sacramento city on Sunday last, after a long and most painful illness of several months' duration. His disease was bone cancer at the outlet valve of the stomach, by which that organ was gradually closed to all possibilities of performing its appropriate functions, and our friend was literally starved to death by inches.

Mr. Wadsworth was well known throughout the State as a sterling, energetic business man, and he has passed away at the ripe age of sixty-three. He was a native of Durham, Conn., and although never a politician he was elected, when but twenty-one years of age, a member of the Legislature of his native State, in which capacity he served two years. His principal record there was the authorship of what has since become famous as "Wadsworth's Bird Bill." This bill has never yet been erased from the statute book of that State, and was, we believe, the first ever framed in America for the protection of small birds; and of all the acts of his long and useful life none seemed to be reviewed by him with more satisfaction than this. It has formed the basis of nearly all the similar bills which have been passed in other States. Immediately after the expiration of his second term, he removed to Monroe, Michigan, where he entered upon the active duties of farming. In going West he took with him all the improved systems of farming, and was the first to introduce into that, then a new country, improved varieties of fruit, suitable for that climate—none but seedlings having previously been known there. He also took with him improved farming tools, and soon had the best cultivated farm in all the "far West."

Just before leaving Michigan for California some twenty years ago, he took the State agricultural premium for having the best cultivated farm in Michigan. He reached California at too early a date for entering upon his favorite occupation, and soon after his arrival repaired to Placerville, where he took the editorial charge for a while of the Placerville *Herald*, and also acted as engineer in laying out some of the early mining canals in that county. After leaving that locality he returned to this city, where he continued his editorial career for a while on *Hutchings' Magazine*, but chiefly as editor and joint publisher, with Bacon & Co., of the *California Culturist*, a magazine of sterling merit, and one which did much to initiate the true spirit of farming among the people of California.

He subsequently went to Sacramento, where he was among the first to point out the possibilities and importance of sugar beet culture in this State. He was sent to Europe to purchase the machinery for the Sacramento sugar beet manufactory; and if the management of that institution had been permanently kept in his hands, the unfortunate mistakes which impaired the early history of this important industrial enterprise would never have become a matter of record.

In November, 1871, Mr. Wadsworth was invited to a chair in the editorial rooms of the RURAL PRESS, which he continued to fill most acceptably until he was compelled to retire by reason of the insidious disease which began to make itself seriously felt about seven months ago. He was one of the ablest writers on agricultural matters in the United States, and it is largely to his pen that the RURAL PRESS owes its popularity and usefulness. As a companion and associate, as well as a writer, his loss is most keenly felt in this office. He was a devoted husband and father, an honourable gentleman and a kind friend to all. He died the death of a Christian, and in his demise the State has lost a most valuable citizen. During the four or five years past he has made the beet sugar business a specialty, and his knowledge of it was beginning to be justly appreciated. He and his family were largely interested in the factory at Sacramento, and just previous to the last months of his life, some three or four different parties were applicants for his services in the establishment of beet sugaries in as many different portions of the State.

Words of ours will scarcely add to the regret which the friends of Mr. Wadsworth will feel on learning of his death, and we can only press our sentiments of sorrow for the loss of a kind and generous friend, an able writer and a useful citizen.

A BOX OF CURRANTS.—One of the fruit presents lately received at this office is a box of Zante currants, from I. A. Wilcox, of Santa Clara. They are about the size of the ordinary garden currant, but much more prolific. They are seedless, and are a sweet, clean, wholesome fruit. The present was accompanied by an interesting letter from the donor, which will appear in our next. Mr. Wilcox will please accept our thanks.

THE rainfall in Solano Co., as reported by a Dixon correspondent, on the 26th ult. was 1.65 in., with more coming.

The Sex Question.

The readers of agricultural papers have probably met with a good many items of late on the subject of "controlling the sexes." It will be well, perhaps, to explain here that this question is confined to the breeding of farm stock. No difficulty is experienced in regulating the proportion of the sexes in the human family; for when there is an excess of males, all we have to do is to get up a war, which can be done at any time, and in a year's time or less the male sex will be reduced to the minimum number. And when there are too many women, which is often the case, they very considerately take the matter in their own hands; and by tight lacing and other effective means, known only to themselves and third-class lecturers, they regulate the matter very nicely.

Various methods have been devised for accomplishing the same purpose among our domestic animals, chickens especially; among which is the following: When the eggs are laid—not before—and are to be carried to the house for temporary storage, those carried in a man's or boy's hat will, it is said, hatch out male chicks; while those that are conveyed thither in head-gear worn by the other sex, will be females. But here the difficulty arises of controlling the sex of hats. For supposing that on a peg in the house a hat is hanging which is worn by both the male and female members of the family; a common felt hat, which the son or father puts on at night, giving the brim and tip such contortions as correspond with the part he is playing—and wears it abroad achieving *his* conquests, and on the succeeding day the daughter takes the same hat and, stitching the brim upright to the crown, and attaching a turkey's wing thereto, goes forth to slay a thousand asses with the jaw-bone of a woman—is this, we would ask, a man's hat or a woman's hat? And if eggs are conveyed from the nest to the pantry in this hat, what sex should we expect to have incubation bring forth?

This egg and hat question is becoming rather mixed. Here is a case in which we have a right to expect some assistance from science. Meanwhile we must trust in nature doing the best she can under the circumstances.

Acknowledging the Corn.

Mr. W. R. Doty, of Sonoma valley, has brought to our office a box of the finest corn that we have seen in California. It is mostly of the white flint variety, with a few ears of the white dent, and some of both the above varieties amalgamated. He has favored this amalgamation, considering the result an improvement on both. The ears are remarkably large and long, and well filled out at the points. The kernels are bright and glossy, and crowded thick upon the cob, which is small in proportion to the size of the ear. Mr. Doty has brought this corn up to its present standard by a system of experiments continued through several seasons; carefully selecting the seed, and bestowing upon the crop the best possible cultivation. We are informed by himself and others who have eaten meal made from this corn, that it is of a superior quality. His system of cultivation is of the Eastern style; frequent plowing or cultivating, keeping it free from weeds, removing the suckers—which he carefully saves for feed—and hilling only slightly. He plants early, about the first of April, and tops the stalks when the corn commences glazing. He has also been very successful in growing sweet-corn of the "evergreen" variety. In answer to our inquiries concerning the presence of worms in the growing ears, Mr. Doty says that they were not frequent and he is confident that by the application of gypsum in the early stages of its growth and a sprinkling of sulphur when the ear is silking out, worms may be kept out altogether. Anything that indicates an improvement of corn culture in California is of interest.

The Grange Illustrated, or Patrons' Hand Book.

We have received a copy of the above, not however, in time to allow the careful perusal which a thorough review requires. But even the hurried glance which we have bestowed upon its contents gives assurance that it will accomplish the purpose for which it was intended, namely, to furnish the Order and the community at large a reliable history of the rise, progress and present condition of the Order of Patrons of Husbandry; and to supply a large amount of information available in the farmers' calling, with an extremely meritorious literary department. Agriculture, horticulture and domestic economy have their special departments, and outside of this the book contains a large amount of useful information given in a condensed and attractive form. The literary selections display taste and judgment; the domestic and social elements very properly predominating throughout—the general tone being pure, healthful and vigorous. The work is liberally and tastefully illustrated, and presenting as it does a very attractive outside appearance, it will form an ornament to any table; and coming to us close upon the holiday season, it may be recommended as an appropriate gift both within and outside the Order.

The readers of the PRESS will find the above advertised in its appropriate place in our paper.

Our Bay Nurseries.—No. 1.

Up Clay street hill half a mile by steam, and down hill on the other side by horse car to Lombard street, and you are at the

Metropolitan Nursery,

Miller & Sievers, proprietors. This is one of the finest nurseries on the coast, and in the variety of rare and foreign shrubs and flowers it stands particularly prominent, and in the collection of ferns and tropical plants it is perhaps equal to any in the United States. Miller and Sievers are among our most enterprising men and have done much for the improvement of horticulture on the coast.

The nursery is situated on a hillside overlooking the Golden Gate. The location is high and airy, but being protected from the rough winds by high fences is found to be excellent for the growing of shrubs and flowers, as it is free from frosts. The nursery is devoted to evergreens, shade trees, ferns and flowering plants, but the proprietors are making a specialty of ferns and rare imported plants and bulbs. They are also extensively engaged in collecting seeds from the interior, Europe and the Sandwich Islands. Their collection of ferns embraces 120 varieties, from the finest maiden hair to plants six feet high with leaves eight feet long. The maiden hair has become very popular for bouquets, and although much of the room in the green houses is devoted to them the supply is insufficient for the demand. They are very beautiful. The golden and silver ferns are very rare and exceedingly handsome. The climbing ferns are also very fine. Among the rare tropical

Decorative Plants

We may mention palms, dracænas, pandanus or screw palm, bananas and pine apples. The variegated leaf pine apple is very beautiful and extremely rare; also the orchid, which is becoming very popular as a house plant and is one of the grandest in the line of flowering shrubs. Single plants are worth $25. The nursery contains 30 varieties of orange, lemon and lime trees and also the guava and coffee plant, also 25 varieties of camellias. The firm are making the experiment of propagating the camellia, and have been very successful. Thousands of dollars are spent yearly in their importation which may now be saved. The finest thing in the line of

Ornamental Foliage

Is the caladium, imported from England, a magnificent plant. The rich coloring of the leaves is very effective. The nursery contains 30 varieties of this plant, also 10 varieties of crotons, very highly valued, and 25 varieties of begonias. The semi-tropical plants comprise the yucca, echeveria, aloes and agave. All of these varieties are known as succulent plants. They are becoming very popular, but are yet very expensive. The green-houses contain many varieties of new hybrid begonias, all shades and colors, some of them exquisite. The proprietors pride themselves on their

Tree Ferns,

Of which they have 15 varieties. Visitors at the pavilion during the fair can speak of their beauty, as their wide-spreading foliage added largely to the attractiveness of the horticultural department. One of the finest semi-tropical evergreens is the Norfolk Island pine. The variegated New Zealand flax is highly esteemed. The Grevilla robusta is among the handsomest hardy trees in the country.

The nursery is in two sections, and one of these is subdivided by high fences into three sub-sections. One of these divisions is devoted to bulbs and cut flowers; one to pinks, evergreens and tuberoses, and one to roses, cuttings and shrubs. This latter division contains three green-houses, one 30x80 feet, and two 15x80 feet. Two are supplied with artificial heat, and are well arranged for the purpose designed. The other main division is devoted wholly, outside of the green-houses, to roses, of which there are 220 varieties. Of the seven green-houses in this section, one is devoted to cut-flowers, two to ferns, and one to camellias; one to Chinese tuberoses, one to sinuaras, one to flowering begonias, and one to basket plants. The proprietors have one agent in the Sandwich Islands, one in Oregon and one in the interior of California collecting plants and seeds. Last year they exported 8,000 California lilies and other bulbs, and $3,000 worth of seeds to England, France, Germany, Holland, Australia and the Eastern States. They import from all of these countries, and also from Chili, Peru and Mexico. Their depot and store is at 27 Post street.

IMPORTANT TO WHEAT GROWERS.—The present is the most important period yet reached for our wheat growers. The transactions of the next thirty days will affect for better or worse not only the wheat on hand, but what you may raise in the future. It is not alone Patrons that are interested—it is every wheat grower; more than that, the result will tell for or against every farmer. Be alive to your interests. Be united for your common cause. Let not the vessels turn away empty when you have a large crop and can do your own shipping at such low freights.

EGG STEALING SQUIRREL.—After missing eggs for a long time, a poultry owner discovered a ground squirrel packing them off. Several dozen were found in the rodent's hole.

Improved Heater for Cheese Vats.

George Harris, of Petaluma, Sonoma county, California, recently applied through the Scientific Press Patent Agency for a patent on an improved heater for cheese vats and other purposes. The patent has been granted, and we herewith illustrate the invention. The principal feature is the method of distributing the water, heated so that it will give the same temperature at all portions of the vessel within which it is contained. For purposes of economy it is necessary to construct the vessel in which the water is heated of some substance which is a non-conductor of heat, and within which water can also be boiled. The vessel is in this instance made of wood. For the ordinary purposes of a water heater this vessel may be square, or with slightly tapering sides, and when employed to heat water for a cheese vat it may be sunk below the level of the main part of the tank.

To heat the water a metallic fire box is constructed, made probably in transverse section, like an ellipse, as shown in Fig. 2. Openings are made in each end of the box, the opening in one end being large enough for the fireplace to pass without touching the wood at all. At one end the fireplace is left its full diameter, and is provided with a flange which is securely fastened to the outside of the water vessel, so as to be watertight; thus leaving a narrow space all around the fireplace which prevents the latter from touching the wood. At the front end the firedoor and grate are placed. The opposite end of the fireplace may be reduced so as to form a flue, for the escape of smoke, and this flue passes through an opening at the other end, also provided with a flange, and so secured as to be watertight. By this arrangement the inventor gains all the advantages of a metallic fireplace, surrounded by water which will be quickly heated, while the containing vessel is of such material that the heat will be retained for a long time without radiation.

In its use for a heater for cheese vats the vessel forms a part of the whole tank, as shown in Fig. 1 of the engravings. Much difficulty is experienced in keeping all parts of the vat at the same temperature, but in this device this is accomplished by the use of a wooden cover, which fits over the heater portion of the tank and extends to almost the middle of the tank. This cover rests on narrow ledges or strips, which just allow the heated water to pass out toward the middle of the tank. The vat rests on longitudinal strips on top of this cover, and also upon the transverse strips secured to the remainder of the bottom. This bottom is in a line with the cover, so that the tank is really divided into a heating compartment and a distributing compartment.

Beneath the transverse strips are hollowed out so that the water as it comes from beneath the cover can pass freely to the opposite end of the tank, while the longitudinal strips offer no obstruction to its free flow to the end over the heating chamber above the cover. By this construction the inventor is enabled to produce a uniform temperature throughout the vat and at a small expenditure of fuel. When the work is finished, and the whey to be drawn off from the vat through the cock, it is desirable to cool off the vat as quickly as possible. This can be done by drawing off the hot water down to a point below the cover, by means of a cock, and then filling the space between the vat and the sides and bottom of the tank with cold water. But a small quantity of water will be needed for this cooling process, as the vat very nearly fills all the space close to the sides and bottom of the tank; and the water around the fireplace will be but little reduced in temperature, so that when necessary the whole can be speedily elevated to any desired temperature again.

Artificial Wine.

Complaints about the adulteration and dilution of foreign wines are not new, and their truthfulness has been generally conceded, but it now appears that the art of making wine has at length reached that point of perfection where the grape can be dispensed with altogether. A Strassbourg paper complains of the production of artificial wine at Kehl, where there is a large establishment, much patronized by Strassbourg wine-merchants, into which a grape has never entered. This colored and sweetened Rhine water is recognized by the excise as grape wine. In the Rheingau and the Palatinate there are hundreds of similar establisbments. The Rhenish and Alsatian wine-growers intend to urge the Reichstag to pass a stringent law against the falsification of wine and other drinks.

The American people have their faults; but this is not one of them; and among the "Yankee tricks" that have become famous, we find but few instances of the falsification and adulteration of articles of commerce. It is not an American vice; and we have faith that California wines will achieve and maintain a good reputation in the world's markets.

Flax.

A subscriber writes us from Grangeville, Tulare county, making the following inquiries: "When is the proper time to sow flax seed? Do our winter frosts kill or injure it while young? Any information concerning the culture of flax will be received with gratitude by a number of your subscribers."

The frost will injure the plants while young. Sow early in spring. The soil should be well worked, and freed from weeds before sowing. Try and procure seed that was grown and harvested especially for sowing, and not rely upon the ordinary flax seed of commerce.

By sowing early the plants will become hardy before the appearance of frosts. In the Eastern States flax thrives well on the drained swamp lands along the river valleys, and would undoubtedly do well on the reclaimed tule lands of California. Flax is a tap-root plant, and goes deep into the soil for its nutriment; and plants possessing this characteristic, such as flax, alfalfa, the grape vine, etc., should receive special encouragement here, for their own sakes and for the benefit which they confer upon the soil; for by entering the subsoil they not only derive from thence their own proper nutriment, but they become pioneers in opening up and utilizing the fertilizing wealth of these lower regions. In sending their roots down to these unusual depths they establish channels of communication between the sub and surface soils, which remain permanent, in a degree, thus conferring upon the land all, and more than all, the benefits derived from subsoiling proper. The amount of labor and money expended upon high priced land, in subsoiling with the plow, is immense; deep, blind ditching is also extensively practiced, even on dry land, for the same purpose, namely, to furnish avenues of escape for the inexhaustible fertilizing powers contained in the subsoil.

It will be a long time before the value of land and the general condition of farming will warrant similar outlays for subsoiling purposes; but by the agency of deep-growing tap-root plants, such as flax, alfalfa, grape vines, etc., we can accomplish all this, and have these plants more than pay their own way while they are performing this task. We wish we could thoroughly impress our farmers with the importance of this consideration; and in speaking more especially of flax in this connection, we assure our friends that it is not, as some have supposed, exhaustive to the soil. On the contrary, it will leave the soil in excellent condition for succeeding crops, as described above. One of the temporary results of the war of the rebellion was a remarkable impetus given to the production of flax in the Northern States, in order to bring this fiber into competition with that of cotton, the price of the latter ruling so high that the material was becoming scarcely available for manufacturing purposes. A strong feeling of patriotism and self-reliance was added to the pecuniary incentive for growing flax, and the government offered rewards for the production of machinery by which the fiber could be cheaply prepared for the hands of the manufacturers; this being the great want at that time, as it is evidently at present. The termination of the war, and the consequent fall in cotton, removed at once the temporary platform from flax culture and it fell to the ground, to the disappointment and loss of a good many farmers.

At present some of the papers of Utah are endeavoring to induce some of the farmers of that Territory to embark extensively in flax culture, principally for the fiber. Our neighbors have in this, as in all other industrial enterprises, our hearty wishes for their success; but it is to be feared that in entering largely upon flax culture for its fiber they are getting outside the present boundaries of healthy, systematic trade. Unfortunately some other of our industries, worthy in every respect of success, are now in the same predicament. It is not enough to know that we produce the raw material in abundance, and of a superior quality, and that the fabrics for which they are intended are in unlimited demand; the product is not a safe one to handle as long as there is a missing link in the enterprise with which it is connected. In the case of some of this class of products we yet lack the necessary machinery for preparing the material for the manufacture of the fabric; in others the manufacturer is in want of the machinery requisite to perform his part successfully. In some instances, undoubtedly, these missing links have already been supplied, in reality, but the fact is as yet only known to few; the machines and methods have still the somewhat tedious task before them of securing the confidence of the public in general, and the capitalist in particular. We would state in this connection that a spinner of Lisle, France, has just invented a method by which a thread of flax or hemp can be produced cheaper than from cotton.

We have no desire to throw cold water on any of these enterprises, but agricultural martyrdom is not a pleasant thing to contemplate, no matter how worthy the object for which it is endured, and we hope our friends will consider the manufacturing aspect of the subject before they risk much in growing flax as a fiber. But in growing flax for seed they not only have our best wishes, but our faith in the success of the undertaking also.

It costs but a trifle more to put in a crop of flax than one of wheat. In many cases twenty sacks of one hundred pounds each per acre have been grown, and those who have ample experience in the matter declare that it is safe to reckon upon fifteen sacks per acre. The producer can rely on an average market in San Francisco of 3¼ to 3½ cents per pound. If it sometimes fall a trifle below these figures it will as often go above them. It is not, however, fluctuating in price. A flax grower of Monterey county, who has had several years' experience in the matter, grows from one hundred to six hundred acres yearly, and says that he can harvest and thresh his crop at a cost of two dollars per acre, but to hire all the work done it would cost about four dollars. He uses a header and reaper, but would recommend the reaper. Threshing is the most difficult part of the business, as a large portion of the seed may be unconsciously lost where the work is not properly understood. Beginners in flax culture should endeavor to have some one about them who understands the details of threshing the crop.

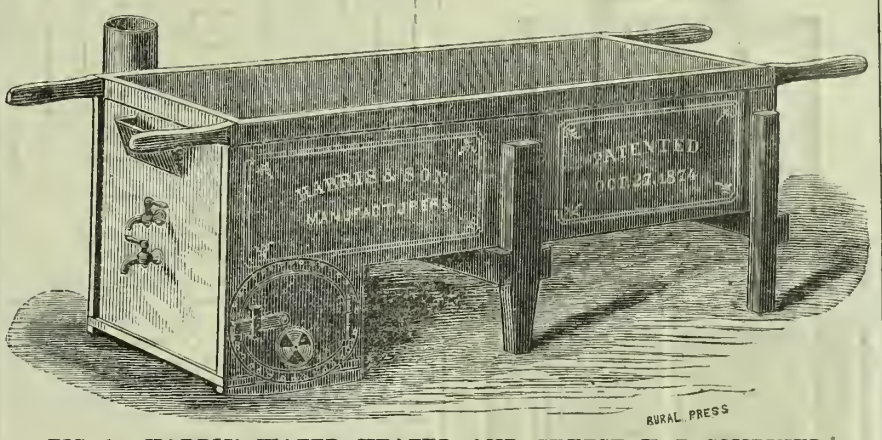


FIG. 1. HARRIS' WATER HEATER AND CHEESE VAT COMBINED.

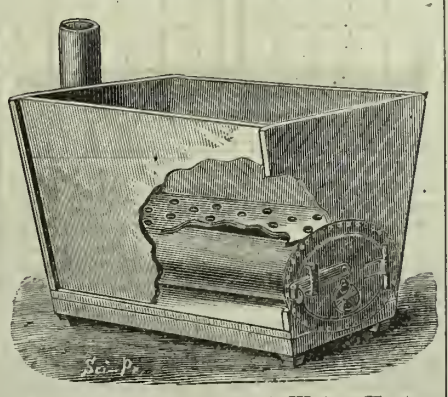


Fig. 2. Harris' Improved Water Heater.

Drying Machine.—In Judge Thompson's office, at the State Grange headquarters, we were recently shown the model of a very simple machine, for drying grain, malt, fruit, etc. Fancy the threaded portion of a common wood screw enlarged to six inches in diameter, encase it with wire gauze, incline the same on suitable bearings for being gradually turned, place a feed hopper at the elevated end, and you will have a picture of one of Mrs. Lloyd's patent machines. We consider this device well worth the attention of brewers, hop raisers and others. Probably the most important of Mrs. Lloyd's inventions is the patent fruit drying apparatus now in use in Napa county. Samples of dried apples and pears produced from it can hardly be beaten by any other process. It is a less expensive machine than some others which hardly accomplish as good results. We are told the inventor has had practical experience for years in fruit drying in the East. She certainly appears fully conversant with the subject of fruit drying, which is a very important one with Californians at this time.

The New Vegetable Market of San Francisco.

In the Rural Press of October 10th we gave a brief notice of the opening of the new vegetable market of San Francisco, promising to give our readers a more detailed account of the organization under whose auspices the market was erected, with a description of the structure. Although the vegetable business of San Francisco has been immense, it has until recently been transacted under difficulties to which such men as compose the bulk of our vegetable producers would not submit. Fate seems to have pitched their tents, or their vegetable wagons, on Sansome street, between Commercial and Pacific streets; sometimes extending beyond those boundaries, including four blocks. The location of the vegetable market at this place may be accounted for by the fact that the old Washington Market, once *the* market of San Francisco, was in this vicinity, on the corner of Washington and Sansome streets. This old market embraced nearly all the meat, vegetable and fruit trade of the city, and included various other products. But the expansion of the city in size and general prosperity, necessitated the erection of meat markets in other localities. The principal part of the fruit business, however, still remains in stores in this vicinity, and custom seems also to have kept the vegetable here, scattered along the street, as we have previously described. But the location was not satisfactory to any parties concerned. The merchants of the neighborhood were annoyed by the obstructions which the vegetable trade occasioned, and made strenuous efforts to accomplish its removal, but with little satisfaction. The several efforts that were made to transplant those mountains of vegetables were failures; for the interests and convenience of the majority seemed to demand that the trade should remain there until its removal could be effected in a more legitimate manner.

Meanwhile the market men and their customers were quite as desirous of a change as the business men in the neighborhood; for in the rainy season especially they were subjected to much discomfort and inconvenience; and during the past summer measures were adopted which resulted in the erection of the new vegetable market. This was opened under the most favorable auspices and with appropriate ceremonies, on Sunday, October 4th.

The market is owned by an incorporated company, of which P. Limi is President, and F. G. Piccaroli, Secretary. The building is located on the block bounded by Pacific street on the north, Clark street on the south, Front street on the west and Davis street on the east. The dimensions of the building are 275 feet by 120 feet. It has 76 stalls of uniform size, each being 9 feet by 23 feet. None but ranchers and gardeners are allowed to occupy a stall, and every occupant must be a stock owner. The stalls are not rented but all occupants are subject to a monthly assessment. Every stall is now taken. Of the occupants of the 76 stalls 71 are Italians, and 5 are Frenchmen; yet although the Italian nationality greatly predominates in numbers there is nothing clannish in the least about the establishment.

The entrances proper to the market are on Front and Davis streets. These are sufficiently wide to allow two wagons to go abreast. They are covered by high and tastefully constructed arches and closed by drop gates. On each side of this central passage the stalls are located; those on the north side opening on Pacific street, those on the south side opening on Clark street—these openings are also closed by drop gates the full width of the stalls. All these gates, including those of the regular entrances, are closed and locked during all but business hours. They are opened from 4 to 6 P. M. to admit such wagons as arrive over night, and from 3 to 10 A. M., they are opened for marketing. Many of the occupants vacate their stalls before the allotted time, and as each wagon departs the men who have charge of the premises sweep the vacated stalls; and when the hour of closing arrives, the well planked floor is swept clean of all vestiges of the hundred tons and over of vegetables that have been disposed of then and there. As was stated in our account of the outdoor market on Sansome street, the sales at this market are made almost exclusively to those who buy to sell again, owners of local markets in all parts of the city, and peddlers who dispose of their stock in the suburbs.

The building is high and roomy. It is painted inside and out with white, with the exception of the gates, which are of green. The ground upon which it is located was leased by the company for a term of ten years. Up to the present time $12,000 has been expended upon it, and further improvements are in prospective. The enterprise thus far has been quite as successful as anticipated, and the company is in a flourishing condition. A large portion of the vegetables sold here are, as stated in the Press a few weeks since, grown in gardens in the county of San Francisco; the balance is from ranches in San Mateo county. San Francisco's vegetable display has become renowned even as seen under the disadvantages of the old outdoor market on Sansome street. Now, thanks to our enterprising Italian vegetable growers, we have a place worthy of the splendid exhibit, and those who visit our city will now be able to see another of its sights with appropriate surroundings.

Improved Brick Hoisting Machine.

The accompanying illustration shows a machine for hoisting brick, mortar, etc., invented by Thomas Mann, and now in use in this city at Parkinson's building on Geary street above Kearny. Several of these hoists have been nsed in Portland, Oregon, for the past few years and have given general satisfaction. The method of operatiou is very simple as may be seen by the cut. Uprights are fixed in position to any desired hight in which frames for holding the hods, etc., slide. The uprights are 2x4 with a 2x4 cross piece bolted across the top, forming a support for the pulleys. The hoisting rope is made long enough to be extended to the top of the building as the different stories are completed.

The rope which runs through the ground pulleys is continued around an anchor pulley. The horse is attached to tbis rope, and walks back and forth just as far as it is necessary to hoist; that is, if the hoist is 40 feet, the horse walks 40 feet, to hoist the load. The horse raises a load in going both ways, one of the frames going up as the other comes down, so it is unnecessary to bring the horse back to the starting point to raise a new load.

A carpenter can make the whole apparatus easily and the lumber can be used up in the building after the hoist is done with. Lugs, or small sheets of iron, are fixed on the frames to keep them in position, and a small pulley is placed in a slot on the frame to reduce the friction against the uprights. A piece fo timber across the lower parts of the uprights keeps the lower pulleys down and in position.

Tbe advantage claimed for this apparatus over others of similar nature is that the bricks are taken up on the scaffold where they are needed without being broken up. The mortar is carried up in the same manner and delivered on boards, where wanted without further handling, after being once put in the hod. Steam, horse or water power can be used for hoisting. The stuff used in the construction of the hoist can be utilized for partitious, etc., in the building, so there is little expense in putting one up. In buildings in country places, where men are scarce, an apparatus of the kind would be invaluable, and in large buildings in the city, it saves time and labor, beside delivering the brick unbroken and very rapidly.

Purification of Water by Contact with Iron.

Almost all large water pipes are of iron, as tax payers well know when they are called upon to replace the old rusty mains with new ones every few years. But, according to good chemical authority, the iron has an advantage with its defects. Professor Medlock proved by analysis, several years ago, that iron by its action on nitrogenous organic matter produces nitrous acid, which Muspratt called "Nature's scavenger." The latter chemist found, as a general result, that, by allowing water to be in contact with a large surface of iron, in about 48 hours every trace of organic matter was either destroyed or rendered insoluble, in which state it could be purified effectually by filtration. Medlock found, on examining the water at Amsterdam, which smelt and tasted badly, that the sediment charred on ignition, and was almost consumed, showing that it consisted of organic matter. He also found that water, instead of taking iron from the service pipes, before entering them contained nearly half a grain of iron to the gallon; while in the water issuing from the pipes, there was only an unweighable trace. Before entering the reservoir, the water holding iron in solution formed no deposits; while the water coming from the pipes, and freed from iron gave organic sediment above mentioned. He then made analysis of water brought in contact with iron, and water not in contact, with the result that the water which had not touched iron contained 2.10 grains of organic matter, and 0.96 grain iron; the other gave only a slight trace of both. showing plainly that the organic matter in the water was either decomposed or thrown down by contact with iron; and this water, when filtered, was found to be clear, of good taste, with no smell, and free from organic matter. It is not stated in what shape the iron was held in solution, but it was probably in that of carbonate, the usual iron salt of springs, since carbonic acid is so common in water in general.

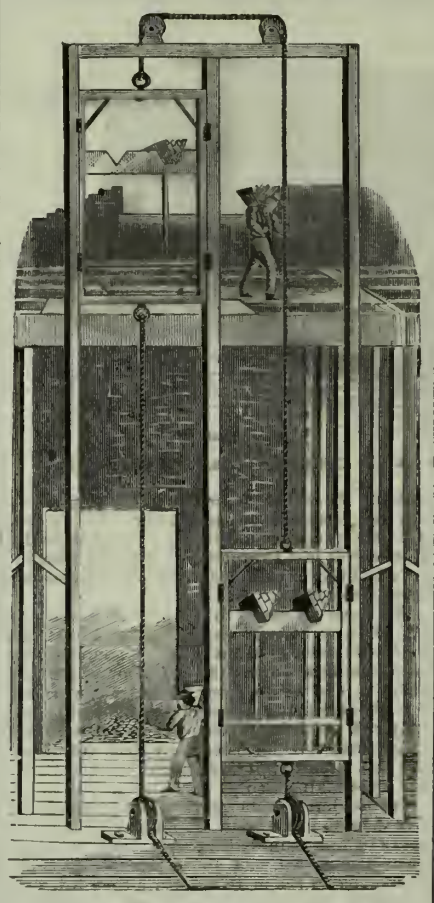
These facts may be made useful in certain places and ways in effecting the purification of water rendered injurious and offensive by the presence of organic substances. And if the interiors of iron mains could only be kept from rusting by a swabbing with nitric acid, or by a paint of charcoal and plumbago, so much the cheaper.—*Ex.*

Triumphs of Science.—A candle 13,000 ft. distant shines with a light 20,000 times more brilliant than do some nebulæ. Yet the constitution of these nebulæ have been determined; and are found to consist of hydrogen and nitrogen. We know the nature of worlds situated at distance inconceivable! And the relative ages of the stars we know. The white stars are the hottest and youngest. The yellow stars, including our sun, are older; while the colored stars are not so hot, and are still older.

Mechanical Drawing.

At the assembly of the students of the University of California on Friday of last week, John D. Hoffman gave a lecture on "Mechanical Drawing," from which we take some extracts: In speaking to-day about drawing, said the speaker, I shall take a strictly professional view of the subject. I shall tell you how you may become practical draughtsmen, and show that the surveyor engineer, either civil or mechanical, ought to be a practical draughtsman.

Drawing is the graphical representation of objects, either real or imagined—imagined in our case expressly for the purpose of being carried out in nature and becoming real. Now let me sketch the career of the draughtsman: His first practice will be free-hand drawing. All first practice is difficult and somewhat irksome. When you take your pencil in hand and find that you cannot do with it what you want to do, you are apt to feel discouraged and think that to do it requires *special talent*. Disabuse your mind of this idea. All that is required is the conviction that *real work* has begun, and must be carried on with earnest, thoughtful application. Without this application the most exalted talent will produce comparatively little. Let us look at some real work, executed for industrial purposes—for instance, the designs on calicoes, wall-paper, designs for carpets, etc.



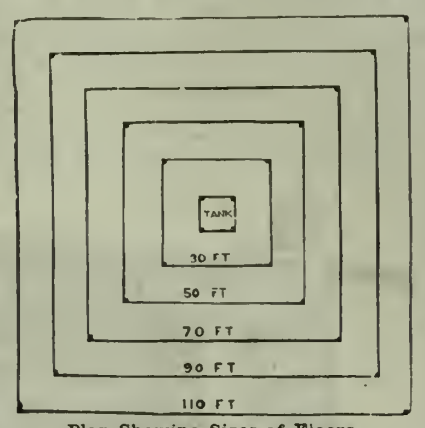
Improved Brick Hoisting Machine.

Try to copy them or invent some new ones and you will find that it requires a goodly amount of practice to produce anything as good. These designs are mostly produced in the factories by young men and women. By the by, girls make excellent draughtsmen. They have to work expeditiously, and are certainly not paid as artists. The necessity of supporting themselves has made them thoughtful and industrious, and their training rarely consists in more than the first practice I recommend to you, zealously carried through. To become efficient in your profession, you are required to go through Calculus. Now, I have never met the person who discovered at the outset that he had a special talent for it; still it must be learnt, and you learn it, and are glad of it afterwards. Drawing, in the same way, must be learnt.

After a little while of intelligent practice you will find that you had more talent than you supposed at first, and the good opinion of yourself will increase with your progress, and with it the enjoyment in your work. All of you can become good practical draughtsmen, getting more and more expert in proportion as your profession offers you opportunities to execute drawings. The object of free-hand drawing is to discipline hand and eye, the hand being the most teachable of the two. I will give a few instances to prove that the eye must be educated to see. When I for the first time came among the negroes of a Virginia plantation, never having seen a colored man, except, perhaps, an isolated specimen in a traveling circus, I could not tell one individual from the other, nor could I distinguish males from females by the features in their countenances. A boy brought up in the city finds it hard to make individual acquaintances, and has to be reintroduced many times to them before he knows them. A German lady told me when she first visited the United States she thought all the American ladies beautiful, very angels. She saw only the more delicate type of features. After her eye had become accustomed to the new type, educated, she began to perceive the differences in features, and had to acknowledge that there might be a few homely angels.

In your profession you want a keen, observing eye, that will take correct impressions at a glance. The surveyor passes rapidly over an unknown country, but he must see it and observe it. In running the boundary line between California and Nevada over a very rough, difficult country, I had two flag-men. The fore flag-man had to give sights ahead, in a straight line often distant a mile or more. He had to grope his way through gulches, timber, over rocks; but where he set up his flag he was seldom more than ten or fifteen feet off the line. He had an educated, keen eye. The hind flagman had to set up on the station just abandoned by the instrument. He had plenty of time to study the line before him; but still he would get lost on his way from one station to the other, and had sometimes to be hunted up by others of the party, who found him bewildered and exhausted in some place far away from the line.

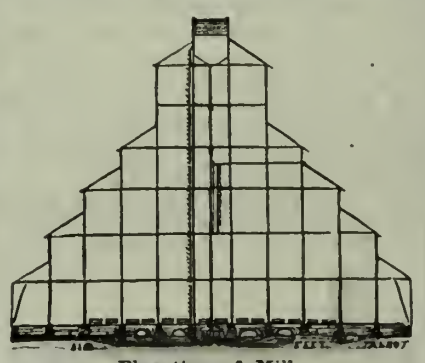
When you look now at some piece of machinery, especially if it be in motion, you will



Plan Showing Sizes of Floors.

find it very difficult to see everything; whereas, when your eye is educated you will perceive the purpose of the construction and understand the thoughtfulness of the arrangements of its parts. The education of the eye begins with that of the hand with your first practice, and therefore I wish to impress upon you that your real work begins therewith. I will now make a few remarks, how you ought to begin and continue your exercises of free-hand drawing. You will understand that I only consider free-hand drawing as the *first practice for the mechanical draughtsman;* at the same time you may rest assured that there is nothing in this practice which will not help you along, if you intend to continue your free-hand drawing into artistic regions.

You should begin with copying simple forms—contour lines from good drawings. I would



Elevation of Mill.

prefer the forms of nature—forms of leaves plants, flowers, going from the most simple to the most complicated ones. These will teach you a good deal beside drawing. Copy these forms; correct your copy patiently; and finally, when true, outline them with an even, deliberate line. Drawings of good architectural ornaments, and for advanced scholars, portions of the human frame, and, finally, figure drawing, is excellent practice.

With the brush you will have to practice laying on flat tints in India ink and color—next evenly, graduating from deepest shade to light. As soon as you have acquired some experience of hand and eye you ought to begin to draw from nature the same leaves and flowers you copy from drawings.

In shading take a cobble-stone or shell of uniform color, put it before you and try to reproduce on paper the delicate shading of nature. You will require all your patience and perseverance to vanquish that cobble-stone or shell, but when you have succeeded you will have made great progress in your career as a draughtsman, and your road will become more and more pleasant and enjoyable. Now, many may think that there is no use in drawing even so perfect a likeness of a cobble-stone. Will it do to have it framed and sent home to be hung up in the parlor? I, looking at these things professionally, think it will, and may show more real merit than many a dashing sketch; and I only hope that I may succeed in converting you to my way of thinking. As you will see, we use drawing only as a means to commit our industrial thoughts to paper, and to have them carried out in the shop. Your conceptions may be bold, your combinations may be new and startling, but your drawing must only be true, simple, neat and clear.

Mill Building.

A large flour mill is shortly to be built by the Astoria Milling Co. in Oregon, on the plan patented by Mr. D. Bequette some time since. Mr. Bequette's method of mill building is somewhat novel, and the general idea may be seen by the accompanying cut. It is necessary of course in building a flour mill, to gain altitude, as the machinery can be placed to better advantage and the expense of the same reduced.

In Mr. Bequette's plan the building is 110 feet square at the base, towering to a hight of 82 feet, is seven stories, each story being less in size than the preceding one, as follows: First floor, 110 feet square; second floor, 90 feet square; third floor, 70 feet square; fourth floor, 50 feet square; fifth floor, 30 feet square; sixth floor, 30 feet square; seventh floor, 10 feet square. Upon the top is placed a water tank. The roofing makes the four walls equal, leaving an offset at each story sufficient to afford light enough for each one of the rooms. Beginning with the foundation, on the first floor there are twelve rows of posts, twelve posts in each row, ten feet from centers. The outside row is placed as braces, toward the center, on top of which a plate is framed to receive the bottom of the first rafters. On the ten inside post are placed ten beams in two equal pieces—upon the first half of which beam is placed an equal number of ties, let into the lower and upper halves locking each beam on top of each post, making a rack, braced by the roof from the outside toward the center. The joists are spiked in the bottom of each post, and so each story is continued, in the same manner, with the exception of the size of the timber, which is reduced as each story is carried upwards.

To what advantage machinery can be placed in a building of this kind is apparent. It takes less room, and each part can be placed in proper position—that is to say, very near the first moving power, thus producing a constant tendency to equilibrium, an important matter in all machinery requiring great velocity, as the greater the distance from the first moving power, the greater the resistance to motion. For steam power it is necessary to have the first moving power—that is to say, the wheel that is hung on the fly wheel shaft—made large and heavy, as it will partly act as a fly-wheel and tend to keep the shaft steady. This is placed on the center line of the first floor, and the fly wheel runs parallel with the beams in Mr. Bequette's plans; its mate, or the leading wheel, being heavy, with an upright shaft to the first bearing, from which shaft the burrs are belted and also the upright shaft runs to the bolting reels, from which the lighter machinery above is geared and belted, including the elevator, conveyor and hopper boy, which performs nearly every necessary movement of the grain and flour from one part of the mill to another, or from one machine to another, through all its various operations, from the time the wheat is emptied from the wagoners' or cars' sack, or from the hold of barge or steamer, until it is manufactured into flour.

The wheat is received and elevated to the top floor. From thence through the various cleaning machines it is conveyed to the stock-hopper on the third floor, above the mill stones. The bolting chest is also placed on third, running parallel with the beams. The burrs are placed on the second floor, and upon this floor the packing is done, and the flour finds its way through shutes to the vessel, ready for any part of the world, as has been tested by Oregon flour now on the Middlesex, which was taken from Oregon thirteen months ago on that vessel, has passed several times through the tropics in sacks, been to Liverpool, back to Australia, and is still as sweet and pure as when it left Astoria in 1873.

The company that is to build this mill at Astoria have 2000 feet water frontage and will carry on the flour and timber business both. They will commence the building on the 1st of next April.

A new Mechanical Separator.—A new form of mechanical separator for the removal of fine particles of iron that become mixed with turnings and filings of copper and brass from workshops, has recently been devised by M. Varin, of Paris. Two superposed hollow cylinders turn in the same direction, and upon them the material to be separated is scattered through a hopper. The surface of the cylinders consists in bands of soft iron which are kept in a magnetic state. The particles of iron are attracted to these cylinders, and at a certain period of revolution are brushed therefrom into a receptacle, while the scraps or other metal fall to the bottom of the apparatus. The machine is said to be capable of separating 1,100 pounds of material per hour. It has also recently been employed by M. Mangon, for detecting titanic iron in arable earth with remarkable precision, the iron, in such small quantities as 15 or even 7 grains in 22 pounds of earth, having been readily separated.

A 6,000-Ton Steamer for the Mississippi.—Parties in New Orleans are proposing to build a new style of boat, of iron, three hundred feet long, of six thousand tons capacity, able to run twelve miles an hour either way, with a consumption of less than one hundred tons of coal in a round trip from St. Louis.

Copies of the following By-Laws of the State Grange, together with the Declaration of Purposes of the National and State Granges, Constitution of the State Grange, and blank form of Constitution and By-Laws for Subordinate Granges, and Rules of Order will be furnished to Granges at 5 cents per copy or $4 per hundred from this office.

By-Laws of the State Grange of California.

ARTICLE I.—DUTIES OF OFFICERS.

SECTION 1. It shall be the duty of the Master to preside at all meetings of the Grange; to see that all officers and members of Committees properly perform their respective duties; to see that the Constitution of the National Grange, the By-Laws of this State Grange, and the usages of the Order are observed and obeyed; to sign all drafts upon the Treasury, and to perform all other duties usually pertaining to such office.

SEC. 2. It shall be the duty of Masters of Subordinate Granges to take charge of all books and papers containing the work of the order, private instructions, etc., and he shall not allow the same out of his possession except for use in the Grange.

SEC. 3. It shall be the duty of the Overseer to assist the Master in preserving order; to preside over the Grange in the absence of the Master, and in case of the vacancy of the office of Master he shall fill the same until the next annual meeting.

SEC. 4. The duties of Lecturer shall be such as usually devolve upon that officer in a Subordinate Grange. He shall also visit Subordinate Granges throughout the State when requested to do so by the Executive Committee.

SEC. 5. It shall he the duty of the Steward to have charge of the inner Gate, and perform such other duties as are required by the Ritual.

SEC. 6. The Assistant Steward shall assist the Steward in the performance of his duties.

SEC. 7. The Secretary shall keep an accurate record of all proceedings of the Grange, make out all necessary returns to the National Grange, keep the accounts of the Subordinate Granges with the State Grange, and pay over quarterly to the Treasurer all moneys coming into his hands and take his receipt for the same. He shall also keep a complete register of the names and numbers of all Subordinate Granges, and the names and addresses of Masters and Secretaries.

SEC. 8. It shall be the duty of the Treasurer to receive all moneys, giving his receipt for the same; to keep an accurate account thereof, and pay all orders of the Grange signed by the Master and Secretary; to render a full account of his office at each annual meeting, and deliver to his successor in office all moneys, books and papers pertaining to his office; and he shall give bonds in a sufficient amount to secure the money that may be placed in his hands—said bonds to he approved by the Executive Committee.

SEC. 9. The Treasurers of subordinate Granges shall report quarterly, and shall pay to the Treasurer of the State Grange the sum of one dollar for each man, and fifty cents for each woman initiated during the quarter; also a quarterly due of six cents for each member. He shall send at the same time a duplicate of his report to the Secretary of the State Grange. The Treasurer of the State Grange shall send a receipt to Treasurers of subordinate Granges, and a duplicate of his receipt to the Secretary of the State Grange.

SEC. 10. The Treasurer of the State Grange shall keep his balances at the Grangers' Bank of California.

SEC. 11. The Treasurers and Secretaries of subordinate Granges shall file copies of their quarterly reports certified by the Master.

SEC. 12. The Gate Keeper shall see that the Gates are properly guarded, and shall have charge of all property committed to his keeping.

ARTICLE II.—COMMITTEES.

SECTION 1. All Committees, unless otherwise ordered shall consist of three members, and shall he appointed—two by the Master and one by the Overseer. All Committees shall be composed of both brothers and sisters, unless otherwise specially provided.

SEC. 2. At the regular annual meeting a Committee on Finance shall he appointed, whose duty it shall be to audit all accounts previous to their being paid. To them shall he referred the reports of the Secretary and Treasurer for examination.

SEC. 3. The Executive Committee shall consist of the Master, who shall he Chairman, and six members elected by ballot, who shall hold office for two years, three being elected each year. But no two members shall be elected who reside in the same county. If, in balloting, more than one member residing in a certain county shall receive a majority of votes, the one receiving the highest number of votes shall he the only one duly elected from said county. They shall have authority to act on all matters of interest to the Order, when the State Grange is not in session; shall provide for the welfare of the Order in business matters, and shall report their acts in detail to the State Grange on the first day of its annual meeting. They shall also make such report at special meetings of the State Grange as the good of the Order may demand.

SEC. 4. The Executive Committee shall hold its regular meetings quarterly on the first Tuesday of January, April, July and October.

ARTICLE III.—QUARTERLY DUES.

The Secretary shall see that the quarterly dues of the Subordinate Granges are promptly paid, and in case the dues remain delinquent two quarters, the delinquent Grange shall he reported to the Master of the State Grange. On receiving such notice it shall be the duty of the Master to warn the delinquent Grange, and if the dues are not forwarded in thirty days, the Master shall advise the Master of the National Grange of such delinquency, and recommend the revocal of the charter of the delinquent Grange; and any Grange whose charter has been thus revoked may petition the State Grange for re-instatement.

ARTICLE IV.—EXPENSES OF DELEGATES.

Subordinate Granges shall defray the expenses of their delegates to the State Grange.

ARTICLE V.—DEPUTIES.

The Master of the State Grange shall appoint at least one deputy in each county, where a proper person can he found, who is a Master or Past-Master, whose duty it shall be to organize new Granges, upon application being made to him by proper persons residing in his district; to install officers of Granges when the same have been elected; and to be vigilant that no disorder shall obtain in the Granges under his jurisdiction, and to promptly report any such disorder to the Master. They shall have exclusive jurisdiction in their respective districts, and their rulings on questions of law and points of order shall be respected, until overruled by the Master of the State Grange. They shall receive for organizing new Granges their necessary expenses. They shall he appointed for one year, subject to removal for cause by the Master. No other Granges shall hereafter be recognized except those organized by Deputies as herein specified, excepting only those organized by the Master of the State Grange, or one especially deputized by him.

ARTICLE VI.—APPEALS.

SECTION 1. An appeal may be taken from the decision of the Master of a Subordinate Grange to the District Deputy, and from thence to the Master of the State Grange.

SEC. 2. On trials on appeal from the judgment of a Subordinate Grange lies to the State Grange, and must be presented to the Executive Committee at least ten days prior to the meeting of the State Grange.

ARTICLE VII.—FORFEITURE OF MEMBERSHIP OR CHARTER.

SECTION 1.—Any member of a Subordinate Grange who may wish to change his pursuit or enter into new business relations which may bring him in conflict with the interests of the Grange, must first obtain consent of his Grange.

SEC. 2. Persons holding a membership in any Subordinate Grange within this jurisdiction, who may so change their pursuit, or become so associated in business relationships that their pecuniary interests are in conflict with the interests of the Order, or with the attainment of any of the objects of this Order, shall be deemed to have forfeited their membership in the Grange. And it shall be the duty of any Subordinate Grange in which such person may hold membership, upon written complaint and charge being made by ten members of the Order, to institute an investigation of such charge; and if upon investigation it shall appear that they are founded upon facts, said Subordinate Grange shall without delay expel such unworthy person from its fellowship, giving thereof the notice required by law.

SEC. 3. An accused party shall have one week's notice of the time at which a Committee of Investigation will be raised, and all such Committees shall be elected by ballot.

SEC. 4. It is further provided that if any member of our Order shall reflect disgrace upon the same by grossly immoral or improper conduct, or if his acts shall show that he is in sympathy with our enemies, and is disposed to obstruct or defeat the work of our Order, rather than aid in the attainment of its objects, such person shall be adjudged to have forfeited his membership, and upon proof being made of his guilt he shall be expelled from the Grange.

SEC. 5. Upon the filing with the Master of any Subordinate Grange the complaint of ten mebers of our Order, specifically charging that any member of his Grange is guilty of a violation of any of the provisions of Sections 1 and 2 of this article, it shall be his duty to investigate without delay the ground upon which such charges are made, using reasonable diligence to bring the offender to trial thereon, and notifying said complainants and defendants of the time and place at which said investigation will be had.

SEC. 6. It is further provided that should any Subordinate Grange with which a complaint is filed, as provided in Section 3 of this Article, refuse to entertain said complaint, or neglect to bring its accused member to a speedy trial thereon, it shall thereby forfeit its membership in this body, with all benefits accruing therefrom; and it shall be the duty of the Master of the State Grange to recommend to the Master of the National Grange the revocation of the charter of said offending Grange.

SEC. 7. Secretaries of Subordinates Granges shall report to the Secretary of this Grange the names of all persons expelled from their respective Granges, and he shall report the same quarterly to all Subordinate Granges in the State.

ARTICLE VIII.

A ballot on application for membership in a Subordinate Grange may be reconsidered at any time prior to initiation immediately upon application of three members, or after one week's notice by one member.

ARTICLE IX—AMENDMENTS.

These By-Laws may be amended at any regular meeting of this Grange by a vote of two-thirds of the members present.

[The State Grange Committee rejected the following form of Constitution and By-Laws for recommendation to Subordinate Granges. It was referred to the Executive Committee, and we now publish it as amended by them.]

Blank Form for Subordinate Granges.

Constitution.*

ARTICLE I.—NAME.

SECTION 1. This Grange shall be known and designated as Grange, No. of

OFFICERS.

SEC. 2. The officers shall consist of and rank as follows: Master, Overseer, Lecturer, Steward, Assistant Steward, Chaplain, Treasurer, Secretary, Gate Keeper, Ceres, Pomona, Flora and Lady Assistant Steward. It is their duty to see that the laws of the Order are carried out.

SEC. 3. The officers of this Grange shall be chosen annually, and elected by ballot. Vacancies by death, resignation or otherwise to be filled at a special election at the next regular meeting thereof. Officers so chosen to serve until the annual meeting.

SEC. 4. All officers shall be addressed as "WORTHY."

SEC. 5. Election of officers shall take place at the last regular meeting in October, and may be installed at the first regular meeting in January.

SEC. 6. Officers absenting themselves at three successive regular meetings, shall be fined the sum of one dollar each; said fine may be excused by the Grange if a reasonable excuse be given.

SEC. 7. There shall be a Board of Trustees consisting of three members, whose term of office shall he three years, one of whom shall be elected each year.

ARTICLE II.—APPLICATIONS.

SECTION 1. All applications for membership must be made in the form prescribed by National Grange. Three black balls shall reject, and one shall cause the application to lay over one week.

SEC. 2. When a candidate has been rejected, notice thereof shall be sent by the Secretary of this Grange to all the Granges in this county and district.

SEC. 3. A proposition may be withdrawn at any time before a ballot is had, by consent of the Grange.

ARTICLE III.—TREASURER'S BONDS, BILLS, ETC.

SECTION 1. The Treasurer shall give bonds, to be approved by the Board of Trustees of this Grange.

SEC. 2. All bills must be audited by the Finance Committee and all drafts must be approved by the Master and countersigned by the Secretary, before the Treasurer can pay the same.

ARTICLE IV.—DELINQUENCY, TRIALS, ETC.

SECTION 1. Any member six months in arrears shall be suspended, the Secretary having given him 30 days' notice of such delinquency; but may by a majority vote of the Grange be re-instated. But no member shall be expelled for non payment of dues without action of the Grange.

SEC. 2. Any member who shall violate any of the principles of the Order, or offend against the Constitution, By-Laws or Rules of Order of this Grange, or Officer or Member of Committee, for non-performance of duty, shall be fined a sum not exceeding ten dollars ($10.00), and be reprimanded, suspended or expelled as as the By-Laws may direct, or the Grange determine.

SEC. 3. Every member shall be entitled to a fair trial, and no member shall be put on trial, unless charges, duly specifying the offense, shall be submitted to the Grange in writing, and signed by a member of the Order, and a copy under seal of the Grange be served upon the member accused.

SEC. 4. Such charges shall be referred to a committee of five members, peers of the accused, who shall summon the parties and try the case. They shall keep full minutes of the proceedings and report the same to the Grange with their verdict; the witnesses shall give their testimony on the honor of a Patron, and no testimony shall be taken without an opportunity for cross-examination by the accused. Upon judgment being rendered, an appeal may be taken, at any time within one month, to the State Grange in the persons of its Executive Committee, subject to ruling of the State Grange. If no appeal he taken, the verdict, being ratified by the Grange, shall be final. If exceptions to the report of the Committee be filed, the Grange may determine upon their merits, and either sustain the report, or refer the same back, or to another Committee, or grant a new trial. If the Grange deem the exceptions ill-founded, it shall proceed to pronounce the judgment and affix the penalty.

SEC. 5. If the accused refuse or neglect to stand trial when duly summoned, the Committee shall report such refusal or neglect as contempt of the Grange, which report shall be conclusive, and the punishment shall be expulsion.

ARTICLE V.—FUNDS.

The funds and property of this Grange shall be held exclusively as a trust fund, to be devoted to the uses of the Grange as may be required from time to time, under and by the direction of such action as may be taken in the Grange by a majority of its members present at any regular meeting.

ARTICLE VI.—ASSESSMENTS.

An assessment may be levied when deemed necessary by a majority vote of the members of the Grange.

ARTICLE VII.—AMENDMENTS.

This Constitution may he amended or revised at any regular meeting of the Grange by a vote of two-thirds of the members present, upon notification having been given in open Grange at two regular meetings preceding such proposed change.

By-Laws.

ARTICLE I.—MEETINGS.

SECTION 1. There shall be at least one regular meeting each month, and all intermediate meetings, unless called as special meetings by the Master, shall be deemed regular meetings of this Grange.

SEC. 2. Seven members shall constitute a quorum for the transaction of business.

ARTICLE II.—MEMBERSHIP.

SECTION 1. The members of this Grange are all who have been initiated in or affiliated with it, who have subscribed their names on the Roll-Book, and who have not withdrawn, or been expelled for unworthy conduct or non-payment of dues.

ARTICLE III.—OFFICERS.

SECTION 1. The officers of this Grange shall correspond with those of the National and State Granges.

SEC. 2. The officers of this Grange shall be elected at the first regular meeting in December, and be installed if practicable at the first regular meeting in January.

ARTICLE IV.—DUTIES OF OFFICERS.

SECTION 1. *Master.*—It shall he the duty of the Master to preside at all meetings of the Grange; to see that all officers and members of committees perform their respective duties, as enjoined by the several charges and these By-Laws; to represent the Grange in all communications with the State Grange; to inspect and announce the result of all ballotings and other votes of the Grange; to see that the laws and usages of the Order are duly understood and obeyed; to sign all orders drawn on the Treasurer with the consent and approbation of the Grange, and perform such other duties as may be required by the Ritual or State Grange, and properly devolving upon that office.

SEC. 2. *Overseer.*—It shall be the duty of the Overseer to assist the Master in preserving order and decorum in the Grange, and he shall preside over the Grange in the absence of the Master, and perform all other duties devolving upon that office. It shall also be his duty to see that the field is in every respect prepared and furnished for labor

SEC. 3. *Lecturer.*—It shall be the duty of the Lecturer to he always prepared with some useful information to read, or cause to be read, when no regular business is before the meeting; to preside in the absence of the Master and Overseer, and to see particularly that all addresses, lectures and other information for the good of the Order, and to the members of this Grange, are distributed to them.

SEC. 4. *Steward.*—It shall be the duty of the Steward to preside in the absence of the Master, Overseer, Lecturer or Past-Master; to have charge of the inner gate; to see that the field is properly arranged for labor, the working tools in their places, and to provide for the introduction of candidates and accommodation of visitors.

SEC. 5. *Assistant Steward.*—It shall be the duty of the Assistant Steward to have charge of the candidates during initiation, and to see that the regalias are properly distributed and cared for; also to give all due assistance to the Steward.

SEC. 6. *Treasurer.*—It shall be the duty of the Treasurer to receive all moneys from the hands of the Secretary, giving his receipt for the same; to keep accurate account of said moneys, and pay them out by order of the Master, with the consent of the Grange; to render his books and a statement of his accounts with the Grange to the Finance Committee when called upon so to do, and to deliver to his successor all moneys, books, vouchers, etc., having reference to the finances of the Grange. Prior to his installation he shall give bonds in such amount as may be deemed requisite by the Executive Committee.—[See State Grange By-Laws, Art. I, Sec. 8.

SEC. 7. *Secretary.*—It shall be the duty of the Secretary to record accurately all the proceedings of the Grange; to make out all necessary returns for the State and National Granges; to keep the accounts of members with the Grange; to receive and pay over to the Treasurer all moneys, taking his receipt therefor; to draw and countersign all orders voted by the Grange, and to perform such other duties as may devolve upon that office.

SEC. 8. *Gate Keeper.*—It shall be the duty of the Gate Keeper to see that the Gates are properly guarded, and to perform such other duties as may be required.

SEC. 9. *Board of Trustees.*—It shall be the duty of the Board of Trustees to exercise a general supervision over the business of the Grange; to take charge of all matters referred to them; to receive all reports of officers, and to address the Grange by message whenever they deem such communication necessary; and to act as the Executive head of the body They shall be elected separately by ballot. Before them shall all matters of difference between members of the Grange he brought for adjustment before they shall enter into litigation.

ARTICLE V.—APPLICATIONS FOR MEMBERSHIP.

SECTION 1. Applications for membership must be made in the form prescribed by the National Grange, and when made shall be made in open Grange, and referred to a Committee of Investigation, consisting of three members of the Grange, which shall take the application in charge and report at the next regular meeting.

SEC. 2. Candidates may be initiated on the day of election, provided no objections be made for so doing.

SEC. 3. All persons, upon being admitted to membership, shall sign the Roll-Book containing the Constitution and By-Laws of this Grange, thereby pledging himself to support, maintain and abide by the same.

SEC. 4. When a candidate has been rejected, it shall be the duty of the member proposing him to inform him of such rejection, and to return the fee—without disclosing any other circumstance in the matter. If a candidate be elected and fail to come forward for initiation for the space of six weeks thereafter, such election shall be null, and the fee shall be retained. Further time may he granted upon a reasonable excuse being given.

ARTICLE VI.—FEES AND DUES.

SECTION 1. The fees for conferring the four Degrees for males in this Grange shall be five dollars, and for conferring the four Degrees on females shall be two dollars, which fees shall accompany the application.

SEC. 2. The regular dues of this Grange shall be

For Brothers, per month,.....Cents,

For Sisters, per month,.....Cents,

payable quarterly.

SEC. 3. Any member absenting himself for three regular-meetings, shall be fined the sum of one dollar; the fine may he remitted provided a reasonable excuse be given.

ARTICLE VII.—DIVULGING SECRETS.

If any member shall divulge, by printing or in any other manner, to any one not a member of the Order any of the proceedings of this Grange, required of him to be kept secret, or shall reveal any of the secrets of the Order, he shall be expelled.

ARTICLE VIII.—BALLOTING AND ELECTION.

All elections shall be by ballot, and shall be conducted without any nominations whatever. Each member shall vote for the person preferred for the office to be filled; and if there be no election on the first ballot then the two highest only shall be voted for on the second ballot, and the one receiving the highest number of votes shall he declared elected.

ARTICLE IX.—FUNDS.

The funds of this Grange shall be under the control of the Board of Trustees, subject to instruction by the Grange.

ARTICLE X.—COMMITTEES.

SECTION 1. All committees, unless otherwise ordered, shall consist of three members, as provided in Art. II, Sec. 1 of the State By-Laws.

SEC. 2. The Master, on the day of his installation, shall appoint the following standing committees: A Committee on Finance and a Committee on Relief. Committee on Relief to consist of six members—three brothers and three sisters.

SEC. 3. It shall be the duty of the Committee on Finance to inspect and report on all bills and accounts presented to the Grange, and they shall examine the books and accounts of any officer or member of any committee whenever they think proper, and shall report as speedily as possible on all matters they may have in hand.

SEC. 4. It shall be the duty of Relief Committee to visit the sick within twenty-four hours subsequent to report of such sickness being received, and render them, during their illness, such assistance as may he necessary.

ARTICLE XI.—CHARGES.

If at any time it shall appear that a member shall be working against the best interest of the Order, charges may be preferred against the offending member, in conformity with the provisions of the Constitution, and he may be expelled or subjected to such penalties as a majority of the Grange may direct.

ARTICLE XII.—EXPULSION—WITHDRAWAL.

SECTION 1. No member of this Grange shall be expelled unless charges be preferred in writing d ly specifying the offence, prescuted by a member of the Order in good standing, and the accused being allowed full opportunity to make defense, as provided in article VII of the Constitution of this Subordinate Grange.

SEC. 2. Any member in good standing desirous of withdrawing from this Grange must pay all indebtedness thereto and pay one dollar for a withdrawal card. [See Art. 14, State Grange Constitution.]

ARTICLE XIII.—AMENDMENTS.

All propositions for amending or repealing these By-Laws, or any part of them, shall be presented in writing at a regular meeting, and shall lie over until the next regular meeting, when they may be adopted by a two-thirds vote of all the members present.

VARIABILITY OF THE SUN'S DIAMETER.—The disagreement in the observations of the diameter of the sun, made by different astronomers, has thus far been ascribed to faults in the instruments or errors by the observers; but P. Rosa, assistant at the observatory of the Roman College, after having corrected those discrepancies which were the results of errors, finds that different observations with instruments which give for the diameter of the moon a constant quantity, give different diameters for the sun at different times, while the errors of observers or instruments are easily determined by comparing the simultaneous observations made in different localities. When comparing the observations made from 1750 to 1870, it becomes evident that the sun's diameter is really variable, and the question arises: Is it the photosphere which changes its size or form, or is it the influence of the solar heat in the instruments? The last supposition P. Rosa thinks highly improbable, and he adheres to the first—the reality of a variation in the sun itself. Even as our little moon exerts an influence on our ocean, by producing the tides, and thus changes the shape of the liquid of our terrestrial surface, so the large planets Jupiter and Saturn cause a kind of tidal wave in the gaseous photosphere, and probably even on the liquid nucleus of the sun, and in altering the form may contribute somewhat in elongating and shortening some of its diameters.—*Ex.*

SIMPLE AND INGENIOUS DEVICE.—The liability of water-pipes to burst from the effect of frost is one of the most prolific sources of discomfort and expense both in households and in manufacturing establishments, and no effectual safeguard from the evil has hitherto been found. An English inventor now proposes a method which has certainly the merit of ingenuity, and seems well adapted to attain the object aimed at. The increase in bulk of water, in freezing, is about one-twelfth, and the expansive force thus exerted is so powerful that no pipe or vessel yet made can resist it.

But this inventor adroitly avoids the difficulty by passing through the water pipe an India rubber tube of such dimensions that the space inside of it is a little more than the increase in the volume of water in freezing. The rubber tube is kept full of air, its supply being acted upon by the water pressure in such a way that the equality of tension is automatically preserved. When the water in the pipe freezes and expands, the rubber tube simply yields to it and thus gives space for the necessary expansion.

IT is not alone in the United States that steel rails are growing in favor to the exclusion of iron. All of the contracts lately given out by the Belgian government for the State lines are for steel. These amount to no less than 29,000 tons.

Agricultural Notes.

ALAMEDA.

Winter.—*Enterprise*, Oct. 31: Our regular winter rains hsve made their appearance, and last Sunday it came down iu gennine '62 style. Cousiderablo damage will be done to hay aud grain lying out.

Sunol.—The rain storm at this poiut was very heavy, doing much damage to hay and grain iu stacks.

AMADOR.

Snow.—*Dispatch*, Oct. 31: An nuusually large amount of snow tor this time of the year has fallen on the mountains above this place during the past week. At Ham's Station it was three feet deep last Mouday morning, aud at Silver lake it was four or five feet deep. A number of persons who had taken their cattle to the mountains during the summer, wero taken by surprise at the storm, and experienced considerable trouble in getting their cattle out.

BUTTE.

Flour.—*Record*, Oct. 31: Quite a trade is springing up at Durham Station. The mill of Goss & Cochran is doing a fine business, and turning out large quantities of excellent flour. It is a fine grain-growing section, and is daily blockaded with teams.

COLUSA.

Heavy Storm.—*Independent*, Oct. 30: There is a great difference in op uion as to whether on the whole our farmers will gain or loose by the heavy rainfall. If it has rained sufficient to start the new feed, aud we get an occasional shower for the next few weeks, it may prove of great value and at the same time keep the ground in good condition for plowing.

CONTRA COSTA.

Damage by Rain.—*Gazette*, Oct. 31: With all the warning of early rains, a great deal of hay and grain was caught uncovered iu the late storm, and much of the hay is badly damaged: but the grain in sacks will not have suffered injury to any material extent, since it so soon after the storm cleared off cool, with breeze enough to promote the evaporatiou of moisture. We hear of here and there throughout the country more or less unthrashed grain in stacks, but not much of this is to be found in our immediate district.

Poisoning Squirrels. — *Ledger*, Oct. 31: Since the first of October, the time when the new squirrel law for Contra Costa and Alameda counties went into effect, the farmers and Inspectors have been busily engaged in riddiug the land of these expensively kept pests. The Inspectors in this portion of the county report that most of the farmers are willing to comply with the provisions of the law. A few, however, refuse to poisou, aud must be dealt with as the law provides.

KERN.

Immigration.—*Courier*, Oct. 31: Immigrants from the San Joaquin valley aud other wheat growing regions of the State are coming so rapidly that we are sometimes led to wonder where they all go to. They say they are tired, sick and disgusted with the uncertainties of wheat growing, and they now seek a spot where crops are certain, and instead of being compelled to base their hopes on ono thing, they can safely rely ou a dozen.

LOS ANGELES.

Oranges.—*Herald*, Oct. 29: The price of oranges in this city from October to May is about $2 per 1,000. Most of the oranges of this county are marketed in San Francisco, where they command a higher price than those brought from the Society and other islands of the Pacific. The oranges growu here bear transportation with less injury than those grown iu more southern and moist climates. Oranges gathered from the trees here in the middle of June, when in the most perfect state of ripeness, have been shipped to San Francisco in midsummer and arrived there iu perfectly good condition.

Tobacco.—*Express*, Oct. 29: At the fair was a stand of Azusa tobacco, consisting of plug, leaf and cigars. The Azusa tobacco is worthy of the utmost consideration. Mr. Perkins has five acres, from which he has raised one crop this year, and another is nearly ready for the knife. It is very substantial tobacco, of a dark color and good flavor.

MARIN.

Farming Notes.—Plowing will go forward with celerity, aud those who still incline to early seeding for grain will no doubt have op portunity to put in all they wish. Early sowing has lost favor lately, however, aud even last year, which was considered favorable to it, the late sowu fields overtook aud outstripped the early, and we know of some fields which were seeded very late, merely for hay, that turned out very heavy crops of grain.

MERCED.

Cattle.—*Tribune*, Oct. 31: An additiou to the thoroughbred stock of Merced county arrived at this place Wednesday last. The addition consisted of seven head of cattle—two four-year old cows, two-year old heifers with calves, and one yearling heifer. The herd is the property of W. S. Chapman, and are a portion of the herd imported a year ago by Jesse D. Carr and W. S. Chapman from the herd of Col. King, Minnesota.

MENDOCINO.

Rain.—*Independent Dispatch*, Oct. 31: We have been blessed with an nnusnal amount of rain for this season of the year. It commenced raining between ten and eleven o'clock on Saturday night last, and continued almost steadily up to Tuesday evening. Should it stop now, ground that was plowed last year is sufficiently wet to plow, which will enable many of our farmers to commence work.

MONTEREY.

Rain.—*Enterprise*, Oct. 31: An unusually heavy rain fell iu this vicinity in the foro part of the week. According to Kerns' weather gauge, a little less than 2¼ inches have fallen thus far this season. This is iu excess of any season, except 1849 and 1858.

Early Bloom.—A three-year-old applo tree in the orchard of Daniel McCray, in the suburbs of town, is now literally covered with blo m.

NAPA.

Effect of the Rains.—*Register*, Oct. 31: The farmer will probably suffer less from the effects of the late heavy rains than the grape grower. His crop is nearly all secured and in a condition to be handled at will. If his piles of wheat are wet, he has only to handle it; turn it over and perhaps re-sack a little to avert the most of the threatened damage. But the grape men will not get off so easily. A very large share of the season's crop is still on the vines —indeed we hear of some who have not yet begun to pick. All have hurried forward their work as fast a possible, but the cellars could not receive all at once, and some had to wait. Others were late in ripening, and were, perhaps, only just ready to gather. Then, too, these rains have come so unusually early as not to have been reasonably apprehended. Opinions are varied as to the amount of damage tho crop still out will suffer, but it is hoped that it is not serious. The danger apprehended is from bursting and moulding. It is estimated that about one-quarter of the crop in this vicinity is still on the vines.

NEVADA.

Stock.—*Transcript*, Oct. 29: Stock men are succeeding in getting their herds out of the snow belt. We noticed in one of the herds a calf not more than three weeks old, but the driver said it had worked its way through the snow as well as the largest ox in the herd. The condition the cattle are in is good, showing that feed was still good when the storm came on.

PLACER.

Rain.—*Herald*, Oct. 31: The recent rains have wet the ground deep enough for plowing, and as a consequence the farmers are as busy as bees. Should the weather remain fine for a few weeks, there will be many acres of grain sown in the mean time. As early sown grain is considered always the safest crop, this opportunity may be taken as a favorable indication of good crops next year. Let them come. The farmers of Placer county need some such a result to compensate to some extent for last year's failures.

SACRAMENTO.

Yellow Jackets.—*Telegraph*, Oct. 51: This pest, which every year is becoming more and more troublesome in these parts, this season literally devonred all the raisin grapes gathered from the fine vineyard of the Natoma Water & Mining company, near this place, while undergoing the process of being dried—amounting to tons. The superintendent says that they appeared in such swarms as to battle every effort to protect the fruit from them.

SAN BENITO.

Plowing.—*Advance*, Oct. 31: The ground is now in a moist state for several inches below the surface and all the farmers will be vigorously engaged in plowing within the next few days.

The Rain.—The Hon. E. C. Tully has just returned from the Peach Tree country and reports that the recent heavy rains have penetrated the ground to the depth of ten inches and that the hills already present a green appearance.

SAN JOAQUIN.

Feed.—Stockton *Independent*, Oct. 29: Unless the weather for the next few weeks should be warm, there is likely to be a scarcity of feed for stock. The rain has rendered the old feed worthless, and the new grass just sprouting up will require warmth to be of any use. Some apprehension is felt among stock men about the matter.

SAN MATEO.

The Crops.—*Times*, Oct. 31: The crops all along the coast from Half Moon Bay to Pescadero received but slight injury during the recent storm, with the exception of the bean crop, which is almost totally destroyed. The grain which was unthreshed was mainly in stacks, and if the weather holds good for a short time longer, will suffer little or no damage; but another such rain as that of Sunday or Monday, and the damage would be very great. In other portions of the county where the grain was properly stacked and cared for, the owners suffered some, but to no great extent.

SANTA CLARA.

Orange Trees.—*Mercury*, Oct. 29: The orange trees, 800 in number, planted out last season by Mr. Babb in the warm belt near Fieldstadt's place, have all died for want of irrigation. We understand that Mr. Babb will improve his water facilities and then try the orange experiment again.

Shiftlessness.—*Advocate*, Oct. 31: There is a too prevalent spirit of shiftlessness among farmers in this country, and to this, more than to anything else, may be attributed the amount of poverty among that class, when tho contrary should be the case. We find farmers who cultivate from 200 to 2,000 acres of land, buying hay, flour, vegetables, and even beef and pork. All their land is occupied in raising the one product—wheat; and year in and year out this cereal is sowed and reaped, each year the yield growing lighter and lighter, as the land becomes more and more exhausted. And this they call farming. What a misnomer.

Damage to Feed, etc.—The farmers were not expecting so heavy a rainfall, and many of them were consequently unprepared for it. The grain in this immediate vicinity was all under cover, but at San Felipe we understand some of the grain was exposed, one farmer having his entire crop yet unthreshed. The greatest damage has been done to hay and the dry feed. A great deal of the former, not being under cover, was more or less damaged, and the loss in that direction will be quite heavy. The previous rain had not been beneficial to the feed, and now it may be considered as about ruined. It will be some little time yet before the grass will be sufficiently high for grazing purposes, and stock must suffer severely.

SANTA CRUZ.

The Storm.—*Pajaronian*, Oct. 29: The late heavy storm has in some degree injured the grape crop, and probably some damage has been done to beans, but we do not hear any very serious complaints. The roads are very muddy, and the Pajaro river rose considerably.

SIERRA.

The Storm.—*Mountain Democrat*, Oct. 31: During the past week we have had a storm which, so early in the season, has been unprecedented since '49. Considerable damage has probably been done to the ungathered grape crop and the dry feed for cattle, but it is believed that with a month of clear and sunny weather, which we seem likely to have, these damages will be fully offset by a growth of green feed and the facilities for early plowing. The storm sent a good many dairymen down from the higher ranges, but it is believed that most of them will return with the clear weather.

SISKIYOU.

Exporting Butter.—*Union*, Oct. 31: Butter is becoming an important article of export from this county. In addition to the supply of the demand for home consumptiou, there has been made in the county this year not less than 30,000 pounds, which will be shipped to markets in the adjoining counties.

SONOMA.

Thorough Tillage. — *Democrat*, Oct. 30: Adam Fickas, of Analy township, has a farm of 100 acres, divided into six fields. He has cultivated in the past six years, each year, 75 acres of this land in corn, wheat, barley or potatoes, and kept upon it all the time 100 head of sheep. He takes now more tons of produce from the place than when he went upon it. The land is richer and will produce more than it did six years ago.

Grapes Injured by Rain.—Capt. Charles V. Stuart writes: I fear the crop has been seriously affected. The grape has become soft and without flavor; all tho fine acids are neutralized; decomposition has already taken place. Wines will lack sprightliness and bouquet on account of the destruction of the ethers, and will consequently be flat. This has been my observatiou for the past two days. A few hot days will test my suspicions. You would do well to advise all viuters to finish their crops immediately without regard to extra expense.

STANISLAUS.

Getting Ready.—*News*, Oct. 30: The recent rains have had the tendency to hasten the farmers, and cause them to make ready for ploughing. In another week farmers will be rushing work with great rapidity.

SUTTER.

Broom Corn.—*Banner*, Oct. 31: Dr. Allen, just in from Meridian, informs us that the broom corn growers in that vicinity and on Butte Slough will be damaged to a considerable extent from the rain. Mr. Doty will loose heavily. The sudden change of the weather and the prevailing north wind will be of great benefit to our broom corn men.

TRINITY.

Apples —*Journal*, Oct. 31: Picking winter apples is the prevailing occupstiou. The crop is large.

TULARE.

Improvement.—*Delta*, Oct. 29: It seems but a brief season since we first visited the Mussel Slough country, and saw the first struggle of the settlers to lead in a ditch. They were few in number but resolute in determination, poor in pocket but full of energy, and not afraid of hard work. They ditched by day, and stood guard by night over their little crops to protect them from the relentless assaults of the wild herds of the plains. What changes do we see? Cosy cottages, surrounded by pleasant grounds and flourishing gardens; smiling faces where so very recently rested the lineaments of want and care; and the worn tracks of devastating herds that led from these virgin fields to Creek are fast disappearing before the plowshare of the pioneer.

TUOLUMNE.

Farming.—*Independent*, Oct. 31: The late rain has made the earth moist enough for the plow; and we expect the farmer will take advantage of the early season. Those who were fortunate enough to have plenty of summer fallow and harrowed in their seed after the first rain, will soon be greeted with green fields. The warm weather to come will furnish good pasture in addition to a good crop next spring.

Apples.—At Armitage's place on Shaw's Flat, they raised apples this year weighing one and a half pounds apiece. Last year the orchard turned out two-pounders.

YOLO.

The Rain.—*Mail*, Oct. 29: The rain has had a very disastrous effect upn the wheat any hay of this county. Several farmers have neglected to house or secure their hay by stacking, and we hear of much damage being done in that direction; but the probabilities are that thousands of tons of wheat in sack have suffered from the rain, and will have to be rehandled before being shipped. The destruction of feed is not so bad, as the grass will spring up from the warm, damp earth, and it will be but a short time until stock will be better off than it would have been otherwise. The large amount of water that has fallen will moisten the earth so far beneath the surface that there is no probability that the sun or north winds will dry it out again. Within a few days the farmers can go to plowing the hardest kind of ground, and the new crop can be put in before the regular winter rain sets in; and we have been informed by the most experienced farmers that early sown wheat most generally yields a good return.

Honor to Whom Honor is Due.

It will probably be remembered by our readers that during the Mechanics' Institute Exposition the Rural Press complimented liberally the exhibit of fruit by D. C. Young of Sonoma county. Subsequently one of our city papers went out of its way considerably to strip the exhibit of all merit as far as Mr. Young was concerned, stating that he did not produce the fruit; that he was only a fruit peddler; and that he obtained the samples from various sources for the purpose of exhibiting it at the State fair, Sacramento; but was induced by pecuniary motives to transfer it to the Institute fair. It is farther stated that "it cost the Mechanics' Institute $150; whereas they could have gone into the market and gathered as splendid a display for $50."

The Mendocino *Democrat* very properly comes forward and disproves these charges as follows:

"Now for the facts. Mr. Young has 1,100 apple trees in bearing, 1,200 pear trees, 400 cherry trees, 350 peach trees, 250 plum trees, 12,000 grape vines. In varieties of fruit he has in various stages of growth the apple, pear, peach, plum, in number as above stated. He has also the nectarine, fig, pomegranate, passion or granadilla apple, medlar, guava, jujube, persimmon, orange, lemon, citron, lime, pine apple, date, tamarind, banana, olive and quince. Of nut trees he has five kinds of almonds, three kinds of chestnuts, two of walnuts, filberts and pecans. Of berries he has the strawberry, blackberry, gooseberry and currants. In the Mechanics' fair exhibit he gathered 56 kinds of apples from his own orchard, of the early kind, and of others not bearing he has from 15 to 20 varieties more. Of pears he has 40 varieties; peaches, 21 varieties; plums, 24 kinds; grapes, 34 varieties. He shipped from his own orchard last year, 4,000 boxes of fruit, and is now shipping from 100 to 200 boxes each trip of the steamer 'Sonoma.' In addition to this, his place is one of the most beautiful and best kept farms in Sonoma county."

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Nov. 3rd, 1874.

For Week Ending Oct. 20th, 1874."

Ventilating Blank for Illuminating Tiles. —Wm. Lynch, S. F., Cal.

Car Axle Box.—Josiah C. Tuck, Oakland, Cal.

Carriage and Wagon Wheel.—Wm. H. Keep, Stockton, Cal.

Sewing Machine.—Eugene Moreau, S. F., Cal.

Trademark.

For Teas.—Albert Mau & Co., S. F., Cal.

———"The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

Our Agents.

Our Friends can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

L. P. McCarty—General Agent.
W. H. Rattenberry—California.
Chas. W. Otis—Contra Costa County.
Chas. T. Bell—Alameda, Santa Clara and Santa Cruz Counties.
J. W. Anderson—Orange and Santa Ana, In Los Angeles County, Cal.
Hood Alston—San Luis Obispo, San Bernardino and San Diego Counties.
Jas. Kearney—Amador, Calaveras, Tuolumne and Mariposa Counties.
B. Goodwin—Sacramento County.
S. G. Crawford—Nevada, Sierra and Plumas Counties.
J. G. Kelley—For Washington Territory.
B. W. Crowell—California.
F. B. Alderson—Nevada.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Nov. 4th, 1874.

The most important feature of the Produce market is, of course, the present condition of Wheat. Operators and producers are busily engaged in close figuring, in the effort to solve the question as to the practicability of shipping under the existing state of things. The conclusion reached seems to be favorable to the holder.

With Wheat selling at an average of say $1.50, however low this may appear to those who looked for inflated prices, the inducements to ship are strong. Vessels may now be chartered for from £2 10s to £3 ₱ ton; as the tonnage which has accumulated at this port under charter and on speculation is simply immense. Owners therefore now have the option of accepting lower rates of freight than were anticipated, or to go without. By way of compromise, a few have taken charters for guano.

The Wheat subject, however, is touched upon elsewhere in our columns. Suffice it to say here that the outlook for the trade during the winter is not nearly so bad as some of the less sanguine had been led to expect.

Receipts of State Produce for the week have averaged about the same as usual. Those of Flour, Barley, Wine and Wool were especially large. Less Wheat and Oats came in.

Beeswax—Quotations unchanged. Trade dull.

Barley—Eastern demand has advanced the price.

Beans—Market quiet, with a fair trade doing.

Broom Corn—Coming forward slowly. Dull.

Buckwheat—No sales by which to establish quotations. Our figures are for the last sales made.

Corn—Market weak, with a still further decline.

Cotton—Rather shaky at 18c. A large sale on private termy was effected during the week.

Feed—Strong in price, owing to the damage by rains.

Fresh Meat—Market steady.

Flour—Last week 3,325 bbls. were exported. No change in quotations.

Hide—Buoyant.

Honey—Business light.

Hops—The market is momentarily weak, but better rates are looked for.

Nuts—Prices unchanged except in Cocosnuts, which are lower.

Oats—Market quiet.

Onions—Very firm, with no advance yet.

Potatoes—Sweet have declined. Prices for all kinds of Irish Potatoes are from 10 to 20 per cent. higher than last noted.

Poultry—Turkeys are 1c ₱ lb cheaper. Chickens and Ducks have advanced.

Provisions—Firm.

Seeds—Chili Alfalfa is a shade higher. Our quotations for Mustard Seed are seedsman's rates for strictly clean and choice samples. Common Mustard is selling at from 1c to 2½c ₱ lb., with the difference in favor of the dark variety.

Wheat—Is somewhat firmer, though telegraphic advices from New York are discouraging, and the Liverpool market shows no signs of improvement.

Wool—Has not sold as well as holders expected. Considerable amounts changed hands at average figures.

FRUITS AND VEGETABLES.

WEDNESDAY M., Nov. 4, 1874.

FRUIT MARKET.			
Tahati, Or. ₱ M	—	@	—
Lorita, do	—	@	—
Cal. do	—	@	—
Limes, ₱ M	—	@	20 00
Cal. Lemons, ₱ M	—	@	—
Australian do	—	@	40 00
do Sicily ₱ b'x	—	@	—
Bananas, ₱ bnch	—	@	—
Cocoanuts, ₱ 100	6 00	@	8 00
Pineapples, ₱ dz	5 00	@	7 50
Apples, ₱ box	40	@	1 25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries ₱ lb	—	@	30
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	5	@	6
Peaches, bskt.	—	@	—
do, ₱ box	—	@	—
do ext Mountain, lb	—	@	—
Pears, Bart't, bx.	—	@	—
do Cooking	40	@	50
Crab Apples	—	@	—
Nectarines	—	@	—
Watermel's ₱ 100	—	@	—
Muskmel's ₱ 100	5 00	@	10 00
Pomegran's ₱ 100	6 00	@	7 00
Figs	—	@	8
Grapes, Bl'k H'g	75	@	1 00
do Muscat	1 00	@	1 50
do Malvoe'a	—	@	—
do Sweetw'r.	—	@	75
do Mission	75	@	1 00
do Rose of Peru	75	@	1 00
do Tokay	75	@	1 25
do Morocco	2 00	@	2 50
do St. Peter	—	@	—

DRIED FRUIT.			
Apples, ₱ lb	7	@	8½
Pears, ₱ lb	10	@	11
Peaches, ₱ lb	8	@	13
Apricots, ₱ lb	10	@	12½
Plums, ₱ lb	8	@	10
Pitted, do ₱ lb		@	15
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	5	@	—
White, do	10	@	15
Prunes	6	@	8
do German	14	@	—
Citron	@27½	@	32½
Zante Currants	8	@	—
Dates	12½	@	—

VEGETABLES.			
Asparagus	—	@	—
Beets	—	@	1
Cabbage, ₱ 100 lbs	.50	@	75
Carrots, ₱ 100 lbs	.60	@	87½
Cauliflower, doz	.50	@	60
Celery, doz	50	@	65
Garlic, ₱ lb	—	@	10
Green Peas	3	@	3½
Green Corn ₱ doz	.15	@	20
Sum'rSquash, box	—	@	1 25
Marrow'at Sq'sh, ₱ 100	—	@	10 00
Artichokes, ₱ doz	.40	@	75
String Beans, ₱ lb	.5	@	6
Lima Beans	—	@	—
Parsnips	—	@	12½
Shell Beans	—	@	10
Peppers, green ₱ lb	.6	@	7
Okra ₱ lb	—	@	12½
Okra, Green	—	@	6
Cucumbers, box	—	@	50
Tomatoes, box	—	@	2 50
Egg Plant, box	—	@	1 00
Rhubarb	—	@	8
Lettuce	—	@	10

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ₱ lb	*	..	35
do unpared, ₱ lb	†	..	32
Peaches, do, ₱ lb	†	..	16
do pared, ₱ lb	*	..	33½
do do ₱ lb	†	..	30
Bartlett Pears, pared, lb	*		45
Pears, pared (sliced) lb	*		30
Pears, in lb boxes, family use, extra			35
Currants, atemmed, lb	*		30
Royal Ann Cherries pitted, ₱ lb	*		25
Kentish Cherries, pitted, ₱ lb			55
Apples, pared (ring) lb	†		12½
do do (whole,) ₱ lb	†		12½
Apples, 10-lb boxes family use, extra			18
Plums, pitted, ₱ lb	†	..	25
do do ₱ lb	*	..	40
Rhubarb, ₱ lb	†	..	35
Corn, ₱ lb	†	..	32½
Beans, ₱ lb	†	..	60
Potatoes, ₱ lb	†	..	14
Sweet Potatoes, ₱ lb	†	..	15
Onions, ₱ lb	†	..	40
Beet, ₱ lb	*	..	40
Tomatoes, ₱ lb	†	..	75
Squash, ₱ lb	†	..	20

*In caddies. †In bulk.

DOMESTIC PRODUCE.

WEDNESDAY M., Nov. 4, 1874.

BEANS.			
Beans, sm'l wh. lb	3¼	@	—
do, butter	4½	@	—
do, bayo	2¼	@	—
do, pink	2	@	—
do, pea	—	@	—
BROOM CORN.			
Per lb	5	@	8
COTTON.			
Cal. 1874, ₱ lb	—	@	18
DAIRY PRODUCE.			
Butter, Cal. choice	lb 45	@	52½
do, good	40	@	45
do, inferior	30	@	40
do, firkin	30	@	35
do, pickled	35	@	40
Cheese, Cal new	12½	@	17
do, Eastern	12	@	17
EGGS.			
Eggs, Cal. fresh	45	@	50
do, Oregon	30	@	35
do, Eastern	15	@	25
do, Duck's	40	@	45
FEED.			
Bran, per ton	—	@	17 00
Middlings	—	@	7 00
Hay	9 00	@	14 00
Straw, ₱ bale	—50	@	— 55
Oil cake meal	—	@	30 00
Corn Meal	—	@	32 00
FLOUR.			
Extra	4 25	@	5 62½
Superfine	3 90	@	4 30
FRESH MEAT.			
Beef, fr quality	lb 7	@	8
oo, second do	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed	6¾	@	6½
do, dressed	8¾	@	9
GRAIN, ETC.			
Wheat, coast	1 45	@	1 50
do shipping	1 40	@	1 45
do milling	1 50	@	1 55
Barley, coast	1 10	@	1 15
do brewing	1 20	@	1 30
Oats, ch ice	1 50	@	1 65
do common	1 35	@	1 55
Corn, White	—	@	1 20
do, Yellow	—	@	1 20
Buckwheat	2 75	@	3 00
Rye	—	@	1 02½
HOPS.			
California, 1874	32½	@	37½
East'n, '73 ch'ice	—	@	—
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey in comb	18	@	22½
do Strained	5	@	10
Pulu	9	@	10½
Onions	60	@	90
NUTS—JOBBING.			
Cal. Walnuts	10½	@	12½
Peanuts per lb	7	@	9
Chile Walnuts	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds h'd shell	10	@	12½
do, soft	20	@	25
Filberts	17	@	18
Cocoanuts, 1000	—50 00	@	—
POTATOES.			
Sweet, per cwt	90	@	1 00
Chiffee Covel	15	@	1 30
H. M. Bay	1 00	@	1 15
Pigeon Pt	1 15	@	1 30
Humboldt	1 10	@	1 32½
Petaluma	1 00	@	1 15
Mission	1 00	@	1 10
Salinas	90	@	1 00
Bodega	1 10	@	1 30
St Barbara	—	@	—
Sac. River	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per lb	15	@	16
do gobblers	15	@	16
Hens, per dz	5 50	@	7 00
Roosters, young, large	5 50	@	7 00
Broilers, small	2 50	@	4 00
do large	3 50	@	5 00
Ducks, tame, doz	5 50	@	6 50
Geese, per pair	2 00	@	2 50
Hare, per doz	3 00	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	1 75
Mallard Ducks	3 00	@	4 00
do small	—	@	2 00
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	50	@	75
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 25	@	1 50
do tame	5 00	@	6 00
Venison, per lb	6	@	8
PROVISIONS.			
Cal. Bacon, Light	—	@	16½
do Medium	—	@	15½
do Heavy	—	@	13½
Eastern do	14	@	16
Hams, Cal	14	@	14½
do Whittakers	—	@	17
do Duffield, ch	—	@	15½
do Plankton & Arm ur	—	@	15
do Boyd's	15	@	16½
do Stewart's	—	@	16½
Eastern Should's	9	@	9½
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	14½	@	17
SEEDS.			
Alfalfa, Chili	—	@	12
do California	—	@	15
Canary	4	@	4½
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	2	@	3
do. Brown	1¾	@	2
Italian Rye	30	@	40
Perennial do	30	@	40
Rape		@	11
Timothy	11	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Mesquit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Alsike	—	@	60
WOOL, ETC.			
FALL—			
Good to choice	19	@	22
Fair grade	16	@	18
Heavy free	14	@	16
Defective	12	@	15
Hides, dry	19	@	20
do wet salted	8½	@	9
Tallow, Crude	5	@	6
do Refined	6½	@	7½

GENERAL MERCHANDISE.

WEDNESDAY M., Nov. 4, 1874.

BAGS.			
Eng. Stand Wht	—	@	12
Detrick's Machine Sewed, 22x36 E	12	@	12½
do 22x36, do E W	—	@	13¾
do 20x40, do A	—	@	13½
Flour Sacks ½s	9½	@	11½
" ¼s	6	@	7
Stand. Gunnies, double seam	15	@	15½
single seam	13¾	@	14
" Wool Sacks	60	@	67½
Barley Bags 24x36	—	@	14
do 23x40	—	@	11½
do 24x40	—	@	15
do 24x36	—	@	16
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in. gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ lb cans	2 75	@	—
do Table do	3 50	@	4 00
Jams & Jellies	3 75	@	4 00
Pickles ½ gl	—	@	3 50
Sardines, qr hox	1 85	@	—
do hf boxes	3 25	@	—
COAL—Jobbing.			
Australian, ₱ ton	10 50	@	11 00
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11 —
Cumberl'd, cks	—	@	18 00
do bulk	16 00	@	17 00
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	17 00
Liverpool	10 50	@	11 —
West Hartley	9 50	@	10 00
Scotch	10 00	@	11 00
Scranton	—	@	13 00
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central America'n	19	@	20
Costa Rica per lb	19	@	21½
Guatemala	19	@	20½
Java	—	@	27
Manilla	19	@	20
Ground in cs	—	@	27
Chicory	9	@	10
FISH.			
Pac. Dry Cod, new	5	@	—
cases	—	@	—
do boneless	11	@	12
Eastern Cod	—	@	—
Salmon in bbls	.9 00	@	9 25
do ½ bbls	4 50	@	4 75
do 2½ lb cans	—	@	3 00
do 2 lb cans	.2 65	@	2 75
do 1 lb cans	.1 75	@	—
Do Col. R. ½ lb	—	@	—
Pick. Cod, bbls	.22 00	@	—
do ½ bbls	11 00	@	1 25
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@	8 50
" Extra	—	@	9 00
" in kits	.2 00	@	2 50
" Ex mess	.3 00	@	3 50
" Ex mess, ½ bs	—	@	12 00
Sm'k Herr'g, bx	50	@	60
NAILS.			
Assorted size, lb	4 37½	@	7 50
OILS.			
Pacific Glue Co. Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No. 1	—	@	1 75
do do No. 2	—	@	1 60
Cocoanut	60	@	65
Olive Flagniol	.5 00	@	—
do Possel	.4 75	@	—
Palm lb	9	@	—
Linseed, raw	—	@	1 05
do boiled	—	@	1 10
China nut in cs	82½	@	88
Sperm, crude	—	@	1 40
do bleached	—	@	2 20
Coast Whales	60	@	—
Polar, refined	50	@	55
Lard	1 15	@	1 30
Coal, refined Pet	37½	@	—
Oleophine	20	@	23
Devoe's Bril't	25	@	28
Long Island	20	@	23
Eureka	—	@	—
Devoe's Petro'm	20	@	23
Barrel kerosene	20	@	23
Olive	4 00	@	9 50
Downer Kerose'e	—	@	37½
Gas Light Oil	—	@	26
PAINTS.			
Atlan. W. Lead	6	@	10¾
Whiting	—	@	2
Putty	4	@	5
Chalk	—	@	2½
Paris White	2¾	@	—
Ochre	2	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@	2 10
RICE.			
China No. 1, ₱ lb	6¾	@	6¾
do 2, do	5½	@	5¾
Japan	—	@	6½
Siam Cleaned	5½	@	—
Patna	5¾	@	5¾
Hawaiian	7¼	@	8
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	—	@	22 00
do coarse	6 00	@	—
SOAP.			
Castile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Cloves	45	@	50
Cassia	26	@	27
Citron	—	@	30
Nutmeg	1 20	@	1 25
Whole Pepper	18	@	19
Pimento	—	@	15½
Gr'nd Allspice	12	@	12½
do Cassia do	—	@	1 50
do Cloves do	—	@	1 50
do Mustard do	—	@	1 20
do Ginger do	—	@	1 00
do Pepper do	—	@	1 00
do Mace do	—	@	2 00
SUGAR, ETC.			
Cal. Cube per lb	11½	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12¼
Circle A crushed	—	@	11¾
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	—
Golden C	—	@	—
do Rey'g grade	—	@	6¾
Cal. Syrup in cs	—	@	7½
do in ½ bls	—	@	6½
do in kegs	—	@	7
Hawaiian Molasses	25	@	27½
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@	1 00
Gunpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyuno	65	@	1 25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	55
Dark do	50	@	55
Dwa f Twist	65	@	70
12 inch do	60	@	70
Light Pressed	65	@	75
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Ohio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine cut chew'g, gr	8 50	@	9 25
Fine cut chewing, bug'ts, ₱ lb	.75	@	90
Banner fine cut	9 00	@	9 25
Eureka Cala	—	@	9 00
TURPENTINE.			
Eastern	65	@	70

LEATHER.

WEDNESDAY M., Nov. 4, 1874.

City Tanned Leather, ₱ lb			26@29
Santa Cruz Leather, ₱ lb			26@29
Country Leather, ₱ lb			24@28
Stockton Leather, ₱ lb			25@28
Jodot, 8 Kil., per doz			$50 00@54 00
Jodot, 11 to 19 Kil., per doz			68 00@90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz.			55 00@72 00
Cornellian, 12 to 16 Ko			57 00@67 00
Cornellian Females, 12 to 13			63 00@67 00
Cornellian Females, 14 to 16 Kil			71 00@76 50
Simon Ullmo Females, 12 to 13, Kil			60 00@64 00
Simon Ullmo Females, 14 to 15, Kil			70 00@72 00
Simon Ullmo Females, 16 to 17, Kil			73 00@75 00
Simon, 18 Kil., ₱ doz			61 00@63 00
Simon, 20 Kil. ₱ doz			65 00@67 00
Simon, 24 Kil. ₱ doz			72 00@74 00
Robert Calf, 7 and 9 Kil			35 00@40 00
French Kips, ₱ lb			1 00@1 15
California Kip, ₱ doz			40 00@— —
French Sheep, all colors, ₱ doz			8 00@15 00
Eastern Calf for Backs, ₱ lb			1 00@1 25
Sheep Roans for Topping, all colors, ₱ doz			9 00@13 00
Sheep Roans for Linings, ₱ doz			5 50@10 50
California Russett Sheep Linings			1 75@4 50
Best Jodot Calf Boot Legs, ₱ pair			5 00@5 25
Good French Calf Boot Legs, ₱ pair			4 00@4 75
French Calf Boot Legs, ₱ pair			4 00@— —
Harness Leather, ₱ lb			30@37½
Fair Bridle Leather, ₱ doz			48 00@72 00
Skirting Leather, ₱ lb			33@37½
Welt Leather, ₱ doz			30 00@50 00
Buff Leather, ₱ foot			17@23
Wax Side Leather, ₱ foot			17@23
Eastern War Leather			—@— —

LUMBER.

WEDNESDAY M., Nov. 4, 1874.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00		
Rough refuse, ₱ M	12 00		
Rough clear, ₱ M	32 50		
Rough clear refuse, M	22 50		
Rustic, ₱ M	30 00		
Rustic, refuse, ₱ M	24 00		
Surfaced, ₱ M	26 00		
Surfaced refuse, ₱ M	16 00		
Flooring, ₱ M	30 00		
Flooring, refuse, ₱ M	20 00		
Beaded flooring, ₱ M	32 50		
Beaded floor, refuse, M	22 50		
Half-inch Siding, M	22 50		
Half-inch siding, ref, M	16 00		
Half-inch, Surfaced, M	25 00		
Half-inch Surf. ref., M	18 00		
Half-inch Battens, M	22 50		
Pickets, rough, ₱ M	13 00		
Pickets, rough, p'ntd	16 00		
Pickets, fancy, p'ntd	25 00		
Shingles, ₱ M	2 25		

Retail Price.

Rough, ₱ M	20 00		
Fencing and Stepping, ₱ M	37 50		
Fencing, 2d quality, ₱ M	30 00		
Fencing, ₱ lineal foot	1c		
Flooring and Step, ₱ M	30 00		
Flooring, narrow, ₱ M	32 50		
Flooring, 2d quality, M	25 00		
Laths, ₱ M	3 25		
Furring, ₱ lineal ft	¾		

REDWOOD—Retail.

Rough, ₱ M	20 00		
Rough refuse, ₱ M	16 00		
Rough Pickets, ₱ M	18 00		
Rough Pickets, p'd, M	20 00		
Fancy Pickets, ₱ M	30 00		
Siding, ₱ M	25 00		
Tongued and Grooved, surfaced, ₱ M	32 50		
Do do refuse, ₱ M	22 50		
Half-inch surfaced, M	40 00		
Rustic, ₱ M	35 00		
Battens, ₱ lineal foot	¾		
Shingles ₱ M	2 50		

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Nov. 4, 1874.

POULTRY, GAME.			
Spring Chickens	50	ea	@
Hens	75	@	1 00
Eggs	45	@	50
do Ducks'	45	@	50
do Farallones	30	@	35
Turkeys, ₱ lb	—	@	25
Ducks, large, pr	75	@	1 00
do small, pr	37½	@	50
Tame, do	1 50	@	2 00
Teal, ea	25	@	—
Geese, wild, pair	—	@	—
Tame, ₱ pair	3 00	@	4 00
Snipe, ₱ doz	1 00	@	1 25
do English	—	@	3 00
Quail, per dozen	2 00	@	2 50
Prairie Ch'k's, ea	—	@	—
Pigeons, per pr	50	@	75
Wild, doz	—	@	2 00
Squabs, doz	—	@	4 50
Hares, each	37½	@	50
Rabbits, tame, ea	50	@	75
Wild, do, ₱ dz	2 00	@	—
Squirrels ea	15	@	20
Beef, tend, ₱ lb	—	@	15
Corned, ₱ lb	8	@	—
Smoked, ₱ lb	10	@	12½
Porter House St'k	—	@	20
Sirloin do	15	@	20
Round do	8	@	10
Pork, rib, etc., lb	—	@	15
Chops, do, ₱ lb	15	@	—
Veal, ₱ lb	12½	@	15
Cutlet, do	15	@	20
Mutton-chops, lb	15	@	—
Leg Mutton, ₱ lb	12½	@	18¾
Lamb, ₱ lb	15	@	18
Venison	10	@	15
Tongues, beef	60	@	75
do, do, smoked	75	@	1 00
Tongues, pig, lb	12½	@	—
Bacon, Cal., ₱ lb	18	@	20
Hams, Cal, ₱ lb	16	@	18
Hams, Cross' s c	12½	@	15
Choice D'ffield	18	@	22

FISH, MEATS, ET C			
Flounder, ₱ lb	—	@	30
Salmon, ₱ lb	15	@	20
Smoked	—	@	12
Pickled, ₱ lb	5	@	6
do Spr'g p'kl'd	15	@	18
Salmon bellies	15	@	—
Rock Cod, ₱ lb	12½	@	15½
Cod Fish, dry, lb	—	@	10½
do fresh	—	@	12½
Perch, s water, lb	10	@	12½
Fresh water, lb	10	@	15
Lake Big. Trout	30	@	37
Smelts, large ₱ lb	12½	@	15
Small Smelts	12½	@	—
Herring, Sm'kd.	75	@	—
do fresh	15	@	—
Pilchards, ₱ lb	—	@	—
Tomcod, ₱ lb	12½	@	15
Terrapin, ₱ doz	4 00	@	5 00
Mackerel, p'k, ea	12½	@	—
Fresh, do lb	12½	@	—
Sea Bass, ₱ lb	—	@	25
Halibut	—	@	75
Sturgeon, ₱ lb	6	@	8
Oysters, ₱ 100	1 00	@	—
Chesp. ₱ doz	50	@	—
Clams ₱ 100	—	@	50
Mussels do	—	@	25
Turbot	—	@	75
Crabs ₱ doz	1 00	@	—
do Soft Shell	35	@	40
Shrimps	10	@	—
Sardines	10	@	—
Anchovies	10	@	12
Soles	37½	@	50
Young Trout, bay	75	@	1 50
Young Salmon	7	@	—
Salmon Trout ea	—	@	1 00
Skate, each	25	@	37½
Whitebait, ₱ lb	—	@	10
Crawfish ₱ lb	—	@	—
Green Turtle	—	@	—
do ₱ lb	—	@	—

FRUITS, VEGETABLES, ETC.

Lady Apples ₱ lb	—	@	—
Apples, pr lb	5	@	8
Pears, per lb	5	@	8
Apricots, lb	—	@	—
Peaches, lb	—	@	—
Plums	8	@	12½
Pine Apples, each	75	@	1 00
Crab Apples	—	@	—
Grapes	5	@	12½
Bananas, ₱ doz	50	@	62½
Muskmelons	20	@	25
Watermelons	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Cal. Walnuts, lb	—	@	25
Green Almonds	15	@	20
Cranber'es, Or., g	75	@	87½
do Eastern	75	@	85
Huckleberries	—	@	—
Strawberries, lb	—	@	35
Chili Stra'berries	—	@	—
Raspberries, lb	—	@	—
Gooseberries'	—	@	—
Currants	—	@	—
do Black	—	@	—
Cherries, ₱ lb	—	@	—
Nectarines	—	@	—
Oranges, ₱ doz	—	@	—
Quinces	5	@	8
Lemons	75	@	1 00
Limes, per doz	35	@	45
Figs, dried Cal	20	@	25
Figs, fresh	12½	@	—
Figs, Smyrna, lb	20	@	25
Asparagus, lb	40	@	50
Artichokes, doz	75	@	1 00
do Jerusalem	—	@	8
Beets, ₱ doz	15	@	20
Potatoes, ₱ lb	2	@	3
Potatoes, sweet	3	@

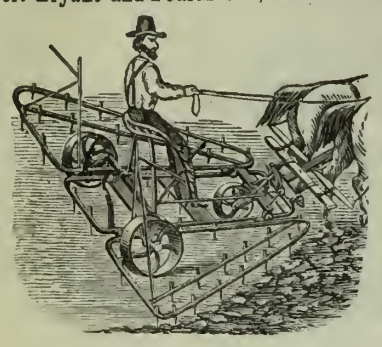
Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

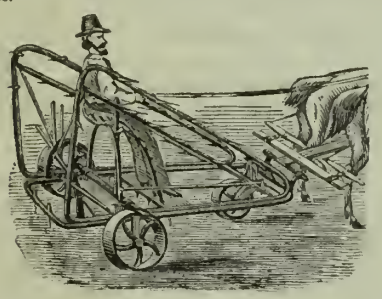
FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and ¾x1 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

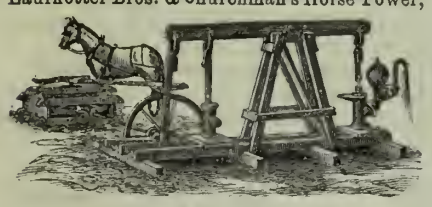
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

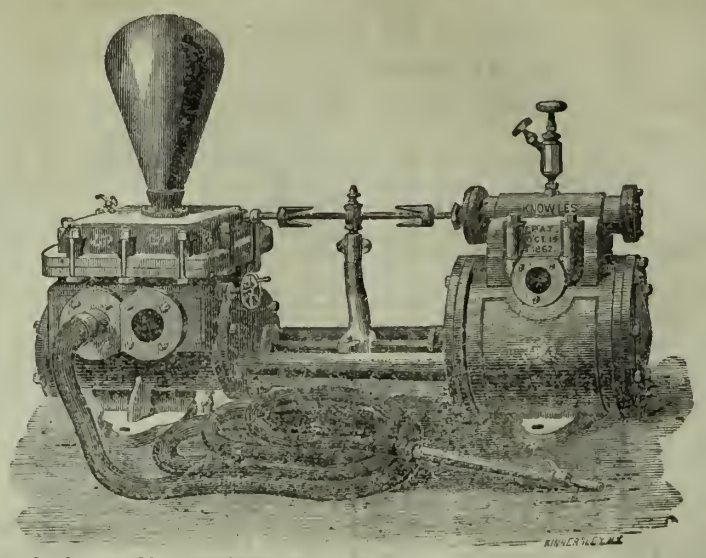
v7-2m-3m Cor. J and 10th Sts., Sacramento.

THE CELEBRATED MITCHELL WAGON



15v7-3m

KNOWLES' PATENT STEAM PUMP.



It has no Cranks or Fly-Wheel, and has no dead points where it will stop, consequently it is always ready to start without using a starting-bar, and does not require hand-work to get it past the center. Will always start when the steam cylinder is filed with cold water of condensation.

CENTRAL PACIFIC R. R., OFFICE OF THE GEN'L MASTER MECHANIC,
SACRAMENTO Cal., January 14, 1873.

A. L. FISH, Esq., Agent of the Knowles Steam Pump—Dear Sir: In reply to your inquiry as to the merits of the Knowles Steam Pump, in use upon this road, I will say that it gives me great pleasure to report that they have performed their work well whenever called upon. In no instance have they failed. We have now over 30 of them in use on this road as fire engines, and pumping water for shop and station use. I consider the Knowles Steam Pump the best in use, and prefer it to any other. Yours, truly, A. J. STEVENS, General Master Mechanic.

A. L. FISH, Agent Knowles' Steam Pump—Dear Sir: In answer to your inquiries, we state that the highest award for Steam Pumps at the Eighth or last Mechanics' Fair in San Francisco, was a FIRST PREMIUM and Diploma, awarded to Knowles' Patent Steam Pump, as published in the Official List September 23d 1871.

A. S. HALLIDIE, President Board of Managers.
W. H. WILLIAMS, Sec'y Board of Managers Eighth Industrial Exhibition, M. I.

WE BUILD AND HAVE CONSTANTLY ON HAND

The Largest Stock of Pumps in the World,

And for Every Conceivable Purpose.

SOLE AGENT ON THE PACIFIC COAST FOR THE

CLAPP & JONES SUPERIOR STEAM FIRE ENGINE,

Challenging the World!

THE CELEBRATED BOOMER PRESS,

For Wine, Cider, Lard, Paper, Wool, Hops, Hides, Tobacco, Rags, etc.—the Most Powerful in Use.

A. L. Fish, Agent,

Nos. 9 and 11 First Street, San Francisco, Cal.

P. S.—All kinds of new and second-hand Machines on hand. 4v29-1am-bp-3m

ALFRED S. MOORE. W. L. THWING

ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.

7v8-3m

THE TREADWELL SULKY



GANG PLOW.

Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

18v27-tf San Francisco.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

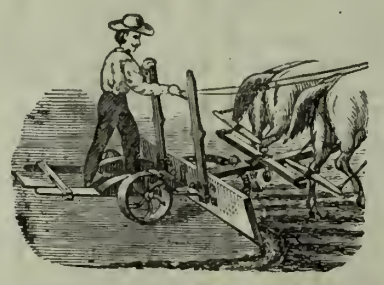
14v2-3m MATTESON & WILLIAMSON, Stockton, Cal.

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

Notice—To Tule Land Owners.

I am manufacturing a Gang Plow specially adapted to ploughing Tule Lands. Address

Vallejo Foundry, J. L. Heald, Prop.,

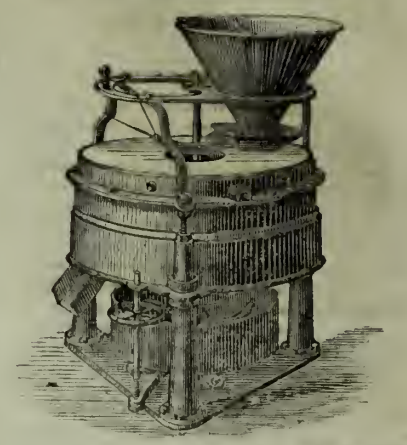
15v29-3m VALLEJO, CAL.

PURCHASERS please say advertised in Rural Press.

J. WAGNER,

MANUFACTURER OF

FRENCH BURR MILL STONES AND PORTABLE MILLS.



General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. 13v7-3m-2am

C. CREGO. S. C. BOWLEY.

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

O. Graham, New York; J. R. Hill, Concord; Pitkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,

No. 9 Merchants' Exchange, California street,
24v5-3m San Francisco.

Grange Notices.

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

California Farmers' Mutual Fire Insurance Association.

Office, 320 California Street, - - - San Francisco.

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J. D. BLANCHAR, Pres't. W. H. BAXTER, Sec'y.

This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

Office of the State Grange, P. of H., San Francisco, Oct. 27th, 1874.

To the Members of the Grangers Fruit Association of California:

Notice is hereby given that the regular semi-annual meeting of the said Association will be held on

Wednesday, the 11th day of November, 1874.

at 2 o'clock P. M., at the office No. 6 Leidesdorff street San Francisco.

A. W. THOMPSON, Secretary.

Live Stock Notices.



SULTAN SECOND.

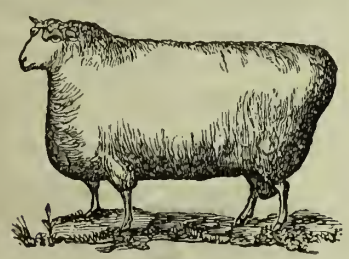
Angora or Cashmere Goats of pure blood and all grades for sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all part of the State. For particulars, address N. Gilmore, El Dorado, El Dorado County, Cal.



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,
13v7-eow-tf Watsonville, Cal.

B. W. Owens, San Francisco. | E. Moore, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m **THOS. BUTTERFIELD & SONS.**

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for batching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 45 Ca. Market, S.F

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIEROE & CO., 627 Sacramento St.,
14v7-3m bet. Montgomery and Kearny Sts., S. F

Patent, First Premium Windmills & Horse Powers,

W. I. TUSTIN, Patentee.

Pioneer and Largest Manufacturer of Machinery (in this line) on the Pacific Coast.

FACTORY, Corner Market and Beale Streets,
SAN FRANCISCO.

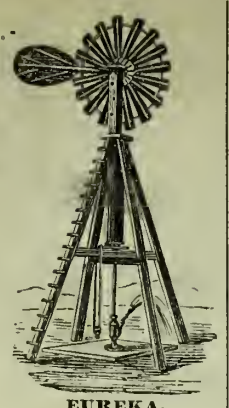
☞ Send for Circular and Price List. ☜



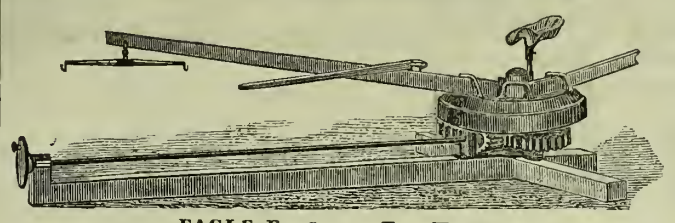
ECONOMY.



ECONOMY—For One or Two Horses.



EUREKA.



EAGLE—For One or Two Horses.

We have made the manufacture of Pumping Machinery a specialty for the past twenty-four years in California. Received all the First Premiums awarded by the Mechanics' Institute for the past seven years, in our line.

Our Windmills are preferred by the great Railroad Companies of this cast, and are in general use along their line, giving perfect satisfaction, which can be proved by reference.

9v7-1am

Nurseries and Seedsmen.

SHINN'S NURSERIES,

NILES' JUNCTION,

Alameda County, - - California.

The attention of persons intending to set out Trees is requested to the well grown and large variety offered for sale by the undersigned at the above Nurseries. An examination of our stock will satisfy any one of the quality, being all that can be asked, and when the low prices we have fixed are taken into consideration, we believe we are offering the very best inducements for buyers to deal with us. For full particulars we refer to our circular for the approaching season, which will be sent, as requested, on application to either of the undersigned.

SHINN & CO.,
Proprietors.

Address James Shinn, Niles, Alameda County, Cal., or, Dr. J. W. Clark, 418 California street. San Francisco, Cal. 8v17-4mo.

SUPERIOR FRUIT TREES

TRUE TO NAME.

A fine collection of **Evergreen and Deciduous Trees. Australian Gum Trees** in variety, by the hundred or thousand. **Monterey Cypress** in quantities and sizes to suit all. **Orange and Lemon Trees** at reduced prices. A general variety of Nursery stock.

Also, Rhubarb and Asparagus roots.

T. CORLEY,
18v29-tf 315 Washington Street, S. F.

SEEDS. PLANTS.

OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED CLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, Etc.

For Sale, wholesale or retail, by

B. F. WELLINGTON,
(Successor to E. E. Moore),
425 Washington St., San Francisco. 22v7-1y

PEPPER'S NURSERIES,

PETALUMA, CAL.

Having increased our facilities for growing Trees and Plants, and permanently located our Greenhouses and Tree Depot corner Washington and Liberty streets, we are prepared to furnish Fruit and Shade Trees, Small Fruits, Evergreen Trees and Shrubs, Flowering Shrubs, Greenhouse and Bedding Plants, etc. Send for Descriptive Catalogue and list of prices.

Address, W. H. & G. B. PEPPER,
21v6-1y Petaluma, Sonoma Co., Cal.

FREE to all applicants—my Nursery and Bulb Catalogues. F. K. PHŒNIX, Bloomington, Ill. 8v17-1m

FARMERS' LINE.

THE SPLENDID IRON SHIP,

CITY OF YORK,

1255 Tons. A 1.

AULD.....Master,

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co.

RODGERS, MEYER & CO.,
aug15-tf 212 Battery street.

Commission Merchants.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE, EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

H. K. CUMMINGS. 1858. H. H. HALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have no interests that will conflict with those of the producer.

4v23-1y

Davis & Sutton, Commission Merchants,

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3v8-1y

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11v7-6m

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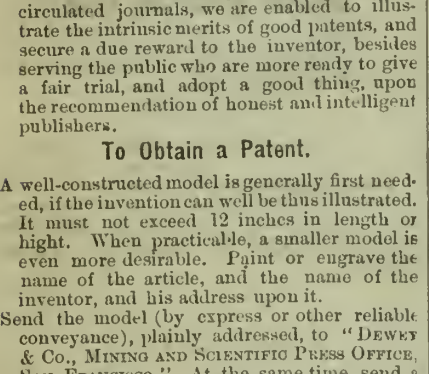
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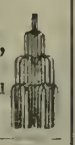
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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, NOVEMBER 14, 1874. [Number 20.

The Forests and Trees of Northern America.

The illustration which we give on this page of our paper, is a map of the distribution of North American forests. In studying this subject it seems most proper to commence with those regions which have few or no trees.

The Lacustrian Province.

Dr. Richardson, in his expedition in search of Sir John Franklin, tells us that at the mouth of the Mackenzies river, latitude 68°, the following trees occur, generally dwarfed, but many showing by their annual rings a very great age. *Betala paperacea* (Paper Birch); *Alnus incana* (Speckled alder); *A. viridis* (Green alder) *Salix lucida* (Northern willow) *Populus tremuloide* (Amer. aspen poplar); *P. balsamifera* (Balsam poplar); *Abies alba* (White spruce), and *Juniperus communs* (Northern Juniper). Furtber south on the Mackenzies river at the Arctic circle, 67° 30′, some less hardy trees were met with; among which are the *cerasus Virginiana* (Choke cherry); and the *Abies Nigra* (Black spruce).

Crossing the basin of the Mackenzies to that of the Saskatchewan, about latitude 54°, we find, in still increasing variety, the following: *Negundo accroides* (Box elder); *cerasus Pensylvanian* (Red wild cherry); *TraxinusAmericana* (White ash); *Ulmus Americana* (White or Weeping elm), and the *Taxus canadenesis* (Ground hemlock).

At the end of Lake Winnipeg, about latitude 50°, we first meet the *Tilia Americana* (Linden hasswood); *Acer Sacharinum* (Sugar; Maple) *Prunus Americana* (Northern wild plum); *Tagus ferruginea* (Red beach); *Popolus caordicans* (Balm of Gilead poplar); and one or two of the more hardy varieties of oak. Further east, in the basin of the St. Lawrence and lakes, the following species were added, occurring in the order here given coming eastward: *Abies canadensis* (Hemlock spruce); *B. Nigra* (Black birch), and one or two other varieties of birch, and the *Populus grandidentatu* (Soft aspen poplar.

The Appalachian Province.

By this division is designated all that part of the Atlantic States south of latitude 43 deg. and East of the borders of the prairie which commencing at the west of Lake Erie forms a curve nearly parallel to the Atlantic coast. All this was originally covered by a dense forest, of remarkable richness—both in the variety and beauty of its trees—in this respect surpassing any other part of the temperate zone, and even many parts of the tropical. This province is subdivided into 6 regions: 1, the Alleghanian; 2, the Ohio; 3, the Tennessee; 4, the Carolina; 5, the Mississippi; and 6, the Florida. The reader will at once recognize the impossibility of giving here a list of trees found in this wide and fruitful region.

The Campestrian Province.

The word "Campestrian" is here used to express the most marked characteristic of the "Prairie" and great "Central Plain" regions of North America, which consists in their comparative destitution of forests and nearly uniform surface; gradually rising from the level of the Gulf of Mexico, to the base of the Rocky Mountains, where they attain an elevation of from 4,000 to 5,000 feet. The eastern boundary of this province has been already mentioned as forming the western boundary of the Appalachian, and the southwestern limit to the Lacustrian Provinces. Commencing at the Rocky Mountains in latitude 60 deg. it runs southeast to the south end of Lake Winnepig latitude 50 deg., then, sweeping round with a curve, crosses Lake Michigan about latitude 43 deg. and terminates at the west end of Lake Erie, latitude 42 deg. Then turning abruptly at a right angle it curves parallel to the Atlantic coast in a southwest direction, and ends at the mouth of the Sabine river; the western boundary of Louisiana.

This province may be divided into five regions of about equal size, and with distinct characteristics, viz: the Saskatchewan, (1) embracing all north of latitude 49 deg., together with the basin of the Winnipeg, or the North Red River; the Illinois, (k), or eastern region, bounded for the present by the forest provinces on the east, the 97th meridian on the west, the 38 deg. of latitude on the south, and the 46th on the North. The Texas region (j), next southward, and extending West to the 101 deg. of longitude on the Rio Grande, while the remaining bare plains East of the Rocky Mountains are divided by latitude 38 deg., into the Dacotah region, northward, and the Camancha, southward of it.

The first two of these regions have no peculiar trees, and the three remaining regions being almost entirely woodless, there are of course very few species of trees; but a few stragglers occur in them belonging to the Mountain regions of the West, none of these, however, are sufficiently abundant or luxuriant to be of much use.



Tasteful and Tasty.—The editor in chief of the Rural Press authorizes the acknowledgment of the receipt of a box of grapes from T. B. Norton, in the neighborhood of Stockton. The present was put up in an extremely tasteful manner, and the fruit was of an excellent quality. Mr. Norton will please accept the thanks of the family of our worthy chief.

Department of Agriculture.—Our thanks are due to the Department at Washington for the Report of the Commissioner of Agriculture for the year 1872, just received.

The Volunteer Wheat is growing finely, and in many places in the San Joaquin valley will soon cover the surface of the ground.

A Noble Example.

The Baroness Burdett Coutts, at a recent review of the stock and stock-keepers, on the estate, set an example which ladies of much lower degree might well follow, producing results which are refreshing to contemplate. At the review fifty-four horses and thirty-seven donkeys were exhibited, all in good condition; one pony being thirty-eight years old, one donkey thirty-four, and another twenty-six years old. She distributed over fifty money prizes to those carters, wagoners and donkey drivers who at an examination gave proof that their animals had been well cared for. The exhibitors and their wives were entertained in a free and liberal manner, and at the close of the feast her ladyship addressed them on the law of kindness to animals; especially urging on the mothers present the importance of instilling into the minds of the young a due regard for the lives and well being of all animals, whether the horse or cow, or the more humble cat or sparrow.

It is not to be expected that the gutter-snipe students of human nature, who are searching exclusively for evidence depreciative of our present social condition, will notice such incidents as this; but those who like ourselves believe that human nature is as good to-day as at any time since it was moulded by its Creator, should make a record of such evidence as proves that our race is not going to the dogs. Especially should instances like the above be recorded; for, although the principal figure in the scene was a Baroness, there is nothing in this noble example that cannot be faithfully and practically followed by the humblest farmer's wife who reads the Rural Press. Where the good sense and pure sentiment that prompted this act exist, it will manifest itself in a degree in accordance with the position and means of the parties; and we have the assurance that but little is required of those unto whom little is given. Besides, those who are already engaged in works of a similar character should know that such acts are not allowed to go entirely unrecorded, even in this world.

Quail Suffering.—The snow storm was fatal to quail in Sierra county. The birds are imprisoned under bushes where they slowly starve,

Our Fruit in Chicago.

We recently gave a very favorable report of California dried fruit at the East, copied from the New York *Tribune*. The western boundary of our eastern fruit trade, Chicago, now furnishes quite as encouraging a report, though in this instance our green fruit is more conspicuous. Between these two great eastern markets there are many large and thriving cities that will, no doubt, in due time, open with us a lively trade on their own account, being as willing to buy as we are to sell. The growth of the trade thus far has been of a healthy character, and the reputation of California fruit is all that could be desired. It will be seen by the reports referred to that the fruit in being prepared and shipped, has the benefit of all means at present available for placing it before the consumer in the best possible condition; but there are evidently still further improvements needed. It is to be hoped that some means will be devised by which our green fruit may reach its destination with still less damage in transit than it receives at present. The Chicago *Times*, of a recent date, reviews the present season's trade in our fresh fruits as follows:

"California fruits carry off the palm wherever shown, for size, flavor and beauty of appearance. The display in this market this season has been unusually large, and one of extraordinary magnificence. Chicago handles 100 per cent. more of the fruit than does New York city. Parties who handle it here, in some cases, have the power to stop a shipment on its way through to New York, and, if necessary, receive it in this market. The first shipment this season was on the 25th of July, and consisted of pears and plums. The shipments will probably close on November 1st. All of this fruit comes in boxes, each pear, apple or plum being wrapped carefully in paper. During the first thirty days of this season all shipments are made by express at $901 per cargo. After this the shipments are by freight, at a cost of $501 per car. Coming by express the fruit is on the road seven days, and by freight from thirteen to fourteen days. Each car contains 500 boxes and each box will weigh 45 pounds. There are six firms in this city who handle California fruit, and during the season an average of ten car loads is reached per week. We give below the varieties and prices of California pears and grapes per box, in this market. In pears: Bourre Clergeau, $4; Vicar of Wakefield, $4; Pound Pear, $5; Bartlett, $1; Bnerre Hardi, $3 50; Easter Bnerre, $3 25; Winter Nellis, $3; Columbia, $4; Buerre Diel, $3@3 50; Lawrence, $3; Diana, $3 50; Orange, $3; Duchess, $3 50; Dixon, $3; Glout Moreeau, $3 50; Seckel, $3; Flemish Beauty, $4. The favorite in this market is the Winter Nellis. In grapes, the Tokay brings 20c per pound; the Muscat, 15c and Blue Martelle, 10c. Quinces bring $4 per box. Dry figs and peaches are also shipped from California; one lot of peaches brought readily $1 25 per dozen. The loss on early fruit is 33⅓ per cent., and during the season will average 10 per cent. of the entire amount received."

The acorn crop has been abundant this year in Lake county, and the hogs are feasting and fattening on the mast.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Zante Currants.

EDITORS PRESS:—I herewith send you a box of Zante currant grapes. My plants are seven years old from the cuttings and have borne well on both light and heavy soils. The best crop I ever had was on heavy adobe land, slightly ridged, near ground that was irrigated so that they had the benefit of the water.

As you will see, they are of the purplish variety, which is considered preferable to the white. They are very juicy, but being small and tender-skinned, are very easily dried in the sun or by artificial heat, so easily that care must be taken to prevent their drying too much. Being a seedless grape with a peculiar, agreeable taste, when fully ripe, they are liked by most people in that state; and when cooked by stewing, or made into pies, they are also well liked. But their chief value is when dried, as every housewife knows.

These Zante, or English currants as they are sometimes called, hold so important a place among our importations as to make them an important article of commerce, one which we ought to produce here. When we consider that this fruit has not been successfully grown east of California, and the market we should have in the United States and elsewhere, it looks as though some enterprising person would find it a good paying business to grow the fruit and dry it for the market. The fruit I send you was grown on trellises about three feet high, made by driving stakes in the ground to which two battens four inches wide are nailed. The vines are not summer pruned, as I wished to grow the wood for cuttings, and they bore quite as well as some that I pruned. Here and there is a large grape in the clusters which contains a seed or two. When I first observed these I supposed that the plants were a cross with some other variety of grapes. They all taste alike, and I have reasons for believing that it is a peculiarity of this fruit. I have not had these currants on exhibition at a fair, but those who have seen them appreciate them.

I. A. WILCOX.

Santa Clara, October 30th, 1874.

P. S.—I last winter sent you an article for the PRESS in regard to worms in codfish. I now send you samples of this fish that I have lately bought, containing these worms. The coiled up worm will show by holding the fish up to the light, and may be taken out with the knife. W.

[The receipt of the Zante currants was duly acknowledged in the PRESS of last week. The inhabited pieces of codfish alluded to in the P. S., were given into the hands of a microscopist, in order that we might form a more just conception of the character and number of their inhabitants.—EDS. PRESS.]

A Cause of Chicken Cholera.

EDITORS PRESS:—In the RURAL PRESS of October 24th, you gave your patrons a receipt for the cure of chicken cholera and gapes, so prevalent in this and other countries. I believe by giving my experience in poultry raising, I can benefit all who read and try to profit by others' experience. I have learned from observation that if you let fowls have access to ashes the year round, it will cause this difficulty. For a test, confine one or two hens in a coop, give them nothing to drink but strong lye, and you will soon perceive the symptoms of chicken cholera or liver disease. In twenty-four to forty-eight hours the hens will die. Open them and you will find all the fat that came in contact with the lye turned to a soapy substance. Then, I ask, why will not ashes, eaten in small quantities for months, and leached in the system, or lye drank from small pools around piles of ashes, produce the same effect? For four years I have kept ashes away from my fowls, consequently I have not lost one by disease of any kind; others by my advice have met with equal success. Occasionally I give my fowls charcoal, of which they are very fond. MRS. A. W. DILLE.

Rutherford, Napa Co., Nov. 7th, 1874.

From Petaluma.

EDITORS PRESS:—We have had an unusually wet fall. I find by referring to my diary that we have had rain, more or less, on ten days in this month already. The farmers, many of them, have started their plows. Should it come off clear and cold now it would be very severe on ontside stock; as the old feed is entirely destroyed, and as yet no new growth to support life. I did not start in to write a communication, but thought these items might be of interest to you. W. W. CHAPMAN.

Petaluma, Oct. 28th, 1874.

Items From Sherman Island.

EDITORS PRESS:—Thinking a few lines from here would be of interest to your readers, I send the following: Our farmers are behind-hand with their threshing. Yesterday we had heavy rains which have stopped all threshing for the second time. The machines worked on Sunday last and one engine broke down. Four steam machines, nine horse power, left the island several weeks ago, which has reduced the threshing force so much, that the few machines left were not sufficient to do all the threshing before the rains commenced. The days are short, the straw is long and damp and from two to three hundred sacks is all that each machine can get out per day. There are a good many tons of baled hay and straw in the field, and some wheat and barley in sacks is much damaged. Mr. J. M. Upham has built two large warehouses here; one is full of grain and the other is just finished. It is to store hay and straw, the greater part of which is now in the field and has received the full benefit of both rains.

Threshing is not yet done on Brannan Island. A little over a month ago two separators and the stalks where they stood were destroyed by fire; cause, carelessness of the engineer, who neglected to put out his fire entirely, after pulling it out of the engine and before moving to the next stacks. The fire started in the night. J. W. RILEY.

Sherman Island, Nov. 6th.

HORTICULTURE.

Cranberry Culture.

Notwithstanding the many failures in this business, fortunes have been made in the cultivation of cranberries. In fact, the business has become reduced to a science; so much so, that there is no need of failure if certain rules are followed. Some say cranberries need nothing but sand and water. This is a mistake, as no sand is clean until washed. What they do need is swamp muck, or vegetable mold. The roots of cranberries are very fine and short. They also want an acid, or sour soil, in order to bear fruit. Hence, you must not manure the land, as this makes the vines grow too rank, and then they will not bear. Manure also causes the weeds to grow. Taking off the turf and ditching it gradually sweetens the surface, especially if exposed to frosts. Sometimes the vines grow too rank. The only remedy in that case is to spread one inch of dry sand every year, immediately after picking the berries, and keep on doing so until they bear satisfactorily. This sanding covers the runners and makes roots of them, and of course increases the uprights, thus increasing the yield in the same proportion. The reason cranberries do not bear until the third year from setting is that the first year they throw out runners, the second put up uprights; the third season these uprights make about one-half inch growth, then throw out about five to six blossoms from the new growth. I know of no possible way to make a cranberry patch a success on a wild grass meadow, except by flooding it one or more years to kill the grass entirely; then sand with clean white sand lightly—not over four inches; the deeper the muck the more sand you will have to put on in time, to prevent the vines from growing too rank. But you must not put much on at first, because the roots of the plants want to reach the muck, and because if the muck is soft the sand will sink and it is necessary to mat the ground first. Never take a cold, springy piece of ground for cranberries; it costs too much for under-draining and for weeding grass. Here we have numerous streams with valleys from 10 to 25 rods wide, (not miles, as the printer made me say in a former article;) these valleys have a muck bottom of one to two feet in depth, and they never overflow. By ditching the best sand for covering is found beneath the muck. By cutting ditches every two rods enough can be thrown out to cover; this saves cartage and cost. Cranberry vines are very tenacious of life, and will live set any time when the ground is not frozen. Frost, however, injures them when first set out before taking root. Therefore, if set in the fall, set in September, as soon as the ground is moist enough for cabbage to grow. If set in the spring, wait until about corn-planting time, when there is no danger of frosts. To improve a grass-marsh for cranberries, flood it until the grass is killed out, then ditch and sand as with swamp lands with no grass; otherwise, take off one foot or top for manure, or, if sand is near the surface, upset the whole concern, putting the grass in the bottom and sand on the surface.—*A. J. Hinds in N. Y. Tribune.*

WINTER SECKLE PEAR.—Specimens have been shown us from a subscriber in Central New York, of a seedling from the Seckel, but ripening as a winter variety; has a fine quality though not quite as sweet or sprightly as the Seckel, yet more so than the Lawrence; firm flesh, a good keeper, russety color, brighter and better in this respect than the Seckel, and seems to be a very desireable acquisition. Doubtless there are more winter Seckels scattered through the United States, yet this is stated to be a genuine seedling, and the fruit is really fine.—*Horticulturist.*

Strawberry Culture.

R. L. Gazley, of Bridgewater, a very successful strawberry cultivator, sends us a box of specimens of twenty varieties of berries, which we have examined with interest. The specimens were for the most part in stocks and exhibited well the abilities of the different varieties, both in quality and quantity of product. Mr. Gazley believes that the Col. Cheeney variety crowds out Charles Downing and shows superior excellence. He places first in estimation the Col. Cheeney, the Agriculturist and the Fillmore. We quote the results of Mr. Gazley's experience for the benefit of our berry-growing readers. He says:

The Fillmore bears the heaviest foliage and the strongest foot-stalks I ever saw. The Green Prolific is large and good and so is the Charles Downing. The Michigan and Boston Pine resembles the Cheeney. The Jenny Lind in fruit resembles the Fillmore, but not in vine. Napoleon III, Triomphe de Gaude, Jucunda and Golden Queen resemble in some respects the fruit of the Agriculturist, but not the plant, that being very fine and with light-colored foliage. The Golden Queen grows very low, and bears a purple, delicious fruit. The Russel Prolific and C. Downing are similar, except in shape and fruit. The Pine is similar to the Cheeney. All the above sorts, except Jenny Lind and Fillmore, are much larger, superior in flavor, more prolific, and more hardy, except the Napoleon and Golden Queen, to the following:

The Col. Wilder and Nicanor are similar. The French is merely like the Wilson's, except that it is earlier and sweeter than that noted variety. The Downer and Ida are too acid, but are prodigious bearers. The Royal Hautbois is peculiarly sweet, but it is fit only for the amateur grower. It has run itself into the ground. The Colfax is hardy and an abundant bearer, and will do for those who say they prefer field berries. Barnes' Mammoth is large and good enough, but there are not enough of them. One row of this variety has stood three years between Fillmore and C. Downing, but now it must give place to its neighbors, for eleven hills or stools have produced only five foot stalks and but three berries. Gazley's Seedling must leave next year if it does not improve in size and flavor. My thornless blackberry is hardy, a prodigious bearer; the fruit is small but long and almost sweet. My white blackberry has stood fifteen years' trial; it has a small spine, very light-colored wood, the fruit is long and sweet, but there is not enough of it. I shall try them longer.—*Utica Herald.*

A RELIABLE ORCHARD.—There is no written or oral testimony that since the orchard of San Gabriel commenced bearing, now more than 50 years, there has ever been a failure of the crop from disease or other cause. The scale insect made its appearance here some years ago, after the introduction of trees from South or Central America, but its ravages have not been attended with any serious results.

THERE is a currant bush at Rochester, N. H., which, though growing among the branches of an elm, twenty feet from the ground, has borne well for more than a dozen years.

PROTECTING INFLUENCE OF THE EARTH'S ATMOSPHERE.—Weilman, after reducing the hourly observations made at Berne, Switzerland, for seven years, and deducing therefrom the laws of diurnal change of temperature, has investigated the effect of cloudiness on the daily variation, especially at night. He finds that the radiating power of the earth's surface is everywhere and at all times the same. The temperature in the morning is, he finds, in cloudy weather, five or six degrees higher than in clear weather. And again that the simple atmosphere of the earth surrounds it like a protecting layer of clouds, and that without this the earth would experience daily an enormous variation in temperature. Even the clear sky, or rather the moisture present, as an invisible vapor, protects the earth with an efficiency equal to about one-third of that exerted by a layer of clouds, against too strong a daily change of temperature.

COAL FIELDS OF SPAIN.—M. Grand, in describing the coal fields of Spain to the Paris Society of Engineers, estimated their area at 150,000 hectares (the hectare being about 1·47 acres), from which only 500,000 or 600,000 tons are annually extracted, while Belgium, with the same area, yields 10,000,000 tons. The Spanish coal fields are situated in Castile, Leon and Asturias. The processes are described as being very rough and imperfect. M. Delesse stated that the coal of the Asturias was chiefly used for gas making.

DISCOVERY AT HERCULANEUM.—The Italian journals notice an interesting archæological discovery of some importance recently made in Herculaneum. It is a silver bust of life-size, and in an excellent state of preservation. It is impossible at present to say whether it is cast or worked with the chisel, or whom it may represent. It is said to be the first discovery of its kind made either at Herculaneum or Pompeii.

AN EXPENSIVE ROAD.—A curious experiment in paving is being tried at Liege. The road is first paved with stone, then covered with asphalte, and on this are laid blocks of cast iron, two inches thick—a rather costly kind of road.

STOCK BREEDERS.

The First Annual Stock Sale.

Following is the result of the first annual sale of choice stock, held at San Jose under the auspices of the California Cattle Breeders' Association.

The first animal offered was Frank, a white bull, owned by Jesse D. Carr, of Monterey county. He was calved May 23d, 1873, and was got by Romeo. A. A. Weatheral of Monterey was the purchaser; $450.

Col. Younger's red roan bull, Oxford Lad, was next sold. He was calved Oct. 4th, 1873, and was got by Thorndale. He was purchased by Mr. Curtis for $120.

First Chance, a red and white bull, the property of Cyrus Jones & Co., of San Jose, was purchased by Mr. Blake for $170.

Pat. Reardon's red and white bull, Tom Moore, was sold, on a reserved bid, for $300. He was calved May 20th, 1872; got by Tyrone, and weighs 1,960 pounds.

Wm. Quinn's roan heifer, Jenny Lind, was sold to Jesse D. Carr for $50. She is of graded stock, and is 15-16 Durham. Quinn's roan cow, Frederica, three years old, was also purchased by Mr. Carr; price, $130.

Cherry 6th, red and white heifer, 2½ years old, owned by Jones & Co.; sold to J. H. Combs for $500.

Lorena 3d, red and white heifer, 2 years old, owned by Jones & Co.; sold to Sargent Bros. for $425.

Maznrka Star, red and white bull, 2 years old, owned by Jones & Co.; sold to George Street, of San Luis Obispo, for $400.

Linda 5th, red and white heifer, 2 years old, owned by Jones & Co.; sold to Canfield, of San Juan, for $490.

Fairy Queen 3d, red and white heifer, two years old, owned by Jones & Co.; sold to Jesse D. Carr for $550.

Lucy Ann 10th, red cow, owned by Jones & Co.; sold to M. B. Sturges, of Centerville, for $405.

New Year's Gift, roan bull calf, 8 months old, owned by Jones & Co.; sold to Joseph Kay, of San Jose, for $270.

Breeding Swine.

It does not pay to breed or to feed poor hogs. The hog is a voracious animal, and unless his voracity can be turned to profitable account, it is better to have nothing to do with him. The great majority of farmers who breed pigs, do so with definite aim towards producing a profitable animal.

A good thoroughbred boar costs money. We will say twenty-five to fifty dollars for a really first class young one, three to six months' old. But one is enough for a whole neighborhood, and if several will club together to purchase and keep one among them, or agree to pay a moderate price for each sow they may get served, the cost will be small to each.

One great source of loss to farmers on their hog production is that they keep the animals they breed too long, and feed them too little. If they were better fed they would come to maturity earlier, and produce better pork at less cost. An animal kept in full flesh from its earliest day is ready to fatten, and does so quickly, at small cost and at early age; and will have a fair proportion of fat and lean. An animal put up to fatten from a starvation point will take a long time to fat, and when it does so most of the fat will be laid on superficially, much of it in the hog going into lard rather than pork.

With a good breed, and good judgment exercised in feeding, so as to keep the animal in a constant state of thrift and progress, there is no doubt that making pork will pay, even at present prices, but otherwise it is unprofitable to keep pigs at all. Prices will undoubtedly advance some before next fall; as it is quite likely that large numbers of store hogs will be thrown upon the market this winter, and go into the hands of feeders, and further breeding will be limited to those who have means to hold over, or stock too valuable to sacrifice at the present.—*Rural Home.*

THE COLOR OF NORMANS.—To say that a black colored horse could not be a Norman would certainly be absurd, though it is true there are comparatively few found in France of any other colors than grey colors, shading all the way from white even to black. There seems to be an effort among the French people to breed in darker colors at the present time, by using black stallions. Now, for the sake of argument, what does it take to constitute a dark grey color in a horse? Is it not a combined mixture of black and white colors? In every dark grey the black color must predominate. The majority color in the Norman stock is dark grey, shading lighter down to a white and darker up to a black. Here we can see how absurd it would be to say that a black colored horse could not be a Norman. I have this present season imported for Norman or Percheron horses, one of them jet black in color. He possesses every characteristic of a Norman or Percheron horse.—*Cor. Prairie Farmer.*

Good Health.

One Hundred Years.

HOW TO ARRIVE AT THAT AGE.

It has been said that the human frame, as a machine, is perfect; that it bears no mark within it by which we could predict its decay; that it is apparently calcnlated to go on forever, and that only by experience have we learned that it will not do so. A French writer has tersely remarked that, nsually, men do not die—they kill themselves. There is a great deal of trnth in the latter, and there is a great deal of encouragement in the former saying. That our organism is so perfect that the seeds of decay are not observable within it, affords grounds for hope that man may add to the average numher of his years. And this is rendered all the more probable as it is well established that the average of human life is longer hy a very considerable fraction than it was a century ago.

An English physician has lately published a work on the means of prolonging life after middle age. In common with a great many of his profession, Mr. Gardner, the physician referred to, seems to believe in the possibility of man's adding to his years. Flourens has formnlated the law of natural organic life, and claimed that it is capable of extension to five times the period of growth. Assuming this law to be true, man's natural years should be from 90 to 105 years. Dr. Gardner seems to have fully coincided with Flourens. Reasoning from the analogy of anesthetics, he sees no cause to despair of the discovery ultimately of a genuine *elixir vitæ*. Meanwhile he would prolong the reign of youth by tranquility of mind, sobriety and uniform temperature. He would have no one fret or worry.

Dr. Duncan Gibbs, who has written a work on the physical condition of centenarians, and who had personally examined six persons over 100 years of age, conrfims Dr. Gardner's views, in this latter respect at least. In all six, Dr. Gibbs found the lung perfectly whole, also the heart. All six had good "bellows-power," as evidenced by the firmness, sonorousness and clearness of the voice. In each the cartilage at the top of the wind-pipe was in a vertical position. The skin was in each case tough and silvery. There was no case of enlarged or fatty heart. The digestion was perfect, and so was the calmness of mind. The bodily senses and mental faculties were unimpaired. Drs. Gardner and Gibbs agreed that climate was nnimportant as regards longevity. When bordering on old age, the advice given is to stay at home, to keep warm, to have pleasant occupation, to take proper exercise and diet, to avoid starch of potato, malt liquor and cheese. Dr. Gardner would not undertake to lay down rules by observing which each one could make himself a centenarian. The task is an impossible one; and yet his advice is not wholly to be disregarded. It may if scrupulonsly followed out make centenarians of us all, which perhaps would be a great misfortune for the world; but it will be calculated to make sexagenarians of those who might have died in their thirties or forties.

If a man would add to his years let him take care of his lungs by properly exercising them, of his heart by avoiding all undue excitement, of his brain by cultivating tranquility. Let him be temperate and pay a proper regard to the cleanliness and temperature of his person, and he will have done more for himself than a doctor and the whole pharmacopœia can do. If he will do all this, some future Dr. Gibbs may find him, at the age of hundred or thereabonts, with lungs and heart perfectly whole, with good "bellows-power," a firm, clear and sonorons voice, with tongh and silvery skin, and the cartilage at the top of his wind-pipe in a vertical position, and with his senses and his facnlties as keen as those of a man in his prime—with his children and his children's children around him. Virtue is the basis of longevity, as of individnal prosperity and national greatness.—*Chicago Tribune.*

Sore Throat—Tight Collars.—Says an exchange: An eminent physician, who devotes his whole attention to diseases of the throat and lungs, told us the other day that about three-fourths of all throat diseases would get well by wearing very loose collars, and no necktie at all. He said that often singers came to him for throat diseases and loss of voice, and he would tear open their cravats and cure them, with no other treatment whatever. "The pressure of the collar on the arteries of the neck is very bad for the health," said he. He also added: "If you have a disease of the throat, let nature do the curing, and the physician as little as possible."

Hair Oil.—Are hair oils good things to put on the hair? No! Some of them are poisonous, and others filthy. The *Laboratory* says: "Many hair oils are colored with aniline red, instead of the long nsed anchusa, which answers every purpose, and should be continued. A hair dresser had been accustomed to nse hair oil composed of castor oil, colored with aniline red. A patron, whose head had been dressed with with this oil several times, became aware of a disagreeable itching in the scalp, similar to that produced by arsenic. Inquiry traced the presence of arsenic in this aniline coloring, and by a discontinnance of the oil the eruption disappeared."

Raw Fruit.—Does fruit agree better with the stomach cooked rather than raw? A writer in an English paper says: "An almost universal prejudice prevails against the free use of uncooked fruit. It is looked upon as very unwholesome. The prejudice is easily accounted for. Suppose any one eats a good dinner, and forthwith sits down to a second, the second dinner would assuredly disagree with the first. This is exactly what has happened in the case of fruit. Ladies and gentlemen dine freely off a great variety of food, and many afterward eat sufficient fruit as dessert to have sufficed for a temperate meal. The result is discomfort or deranged function, followed by an outcry against the use of fruit. But supposing the fruit to have been eaten as, instead of after, a meal no snch consequences would have followed. A moderate quantity of apples, pears, plums, cherries, grapes, with a slice or two of bread, form a cheap, pleasant, wholesome and satisfying meal. Without entering into their chemical composition, it may also be affirmed that fruits are tolerably nutritious, and as an alterative they are exceptionally wholesome. Of conrse there are those with whom raw fruits disagree, just as there are many who are unable to eat pork or veal. But these can have their fruit cooked. Stewed pears, apple pies and puddings, plum or currant tarts, with plenty of bread, would furnish a dinner fit for a king, without the preliminary of meat, fish, etc. In fact it is the mixture that proves injurious. Few fruits if eaten alone disagree with healthy stomachs. Only bread and light cake should be eaten with them. The food of a large portion of mankind, broadly stated, is bread or rice, which is almost the same thing, and fruit."

Overworking the Brain.—Softening of the brain is becoming a more common disease than formerly; as it is ntterly incurable, attention should be given to its causes. The softening is caused by an inflammatory condition or a gradual degeneration of the substance of the brain, arising from intense mental excitement, as a result of study, of the use of spirituous liquors, or allowing the mind to dwell upon one subject unpleasantly, especially when there is no real cause, or conjectured injuries, or injustices and the like, moping over them, cherishing thoughts of them. This lamentable malady comes on at one time with a sudden head or ear ache, at another with difficnlty of speech, or numbness, or convulsions, or paralysis, or actual insensibility; or at other times there is simply a decline of the power of the senses, sight, hearing, speech, and the mental powers generally. The same disease is caused by want of something to do, when there is no compulsion to mental effort or muscular exertion. To ameliorate a malady arising from causes so diametrically opposite, antipodal means should be employed—less work to the over-worked, more work for those who have nothing to do.—*Hall's Family Doctor.*

Plain Diet Best.—It is possible to satisfy all the demands of nature at a very small cost. In many parts of the continent the average wages of the laboring classes, taking the year throughout, is not more than fivepence a day, or half a crown per week; yet these classes are on the whole healthy and robust, although meanly olad. It has been proved over and over again that healthy life can be maintained on cheap and plain food, and that the longest livers and surest workers are those habituated to plain diet. The Scotch are a notable instance of this; a hardier, stronger, more enduring race probably is not to be found; and the staple of the Scotch peasant's food is oatmeal, the cheapest as it is the most nourishing of grains. "A Highlander," says Findley, "will traverse the monntains all day upon a diet of oatmeal stirred in fresh water from a gushing spring, with his finger, in a leathern cup." An English navvy who boasts of eating a pound of beefsteak for dinner, would starve on oatmeal and water, while all the beef he could devonr, and the beer he conld drink, would not enable him to keep up with the Highlander for a single day.—*Leisure Hour.*

The Grape Cure.—What is termed the "Grape cure" has not as yet become very popular in this country, owing probably to the lack of grapes snited to the purpose. In Europe the fruit used is of quite a different character from that of our native varieties. The skin of foreign sorts employed in the grape cures adheres firmly to the flesh and it would be a difficult matter to separate it in eating, but the flesh being brittle and firm it readily breaks open under pressure allowing the seed to drop out if the consnmer desires to reject these indigestible pellets. But whether swallowed or not will depend somewhat on the patient's stomach, as well as the disease to be treated. A person consuming from three to ten ponnds of grapes daily—which is not considered extravagant at the grape cures—would have to possess the stomach of an ostrich to safely carry the stones from the quantities named. As a rule it is safe to reject the seed, although they are not considered injnrious in moderate quantities.

A Frenchman has discovered that a stream of water directed from a force pump against a spot visited by neuralgia will relieve it. The operation is painful, but "patients call for a repetition on a retnrn of the disease."

The Dairy.

Butter or Cheese?

A well fed and well sheltered herd of natives, whose milk is skillfully cared for and manufactured, will yield a pound of butter the season throngh from twenty pounds of milk. An inferior herd, not very highly fed, with inferior skill in making butter, will yield one pound of butter from twenty-eight to thirty pounds of milk. With an average quality of milk of native cows, and with average skill in managing milk, we may assume twenty-five pounds to make one pound of butter, and that the same quantity will make two and one-half pounds of cheese. The owners of butter factories make and pack butter in tubs, furnishing every thing for $4 per hundred as the lowest price. For making and furnishing every thing for a hundred pounds of cheese is $1 62½, which makes the cost of manufacturing a hundred pounds of butter and two hundred and fifty pounds of cheese differ only six and one-fourth cents. The difference in the cost of manufacturing a given quantity of milk into bntter or cheese is therefore, so little that it may be considered the same in either case.

There is considerable difference in the value of the refuse of a butter or cheese dairy for feeding purposes. The whey from 1,000 pounds of milk has for two or three years past netted about fifty cents. The sour milk and buttermilk from the same amount of milk is estimated at from two and a-half to three times that of whey. The difference in the value between the sour milk and whey, from a given quantity of milk, is equal to $1 per hundred on the cheese. If 2,500 pounds of milk will make 100 pounds of butter that sells for $30, the 250 pounds of cheese it would make ought to sell for $32.50 to make an equal return for the milk. This would make the cheese thirteen cents a pound when butter was thirty cents. The quality of milk in special cases may vary this proportion somewhat, but as a general rule it will be safe for dairymen to assume that thirty to thirteen is the ratio of prices between butter and cheese, to make them equally profitable.

In a herd of Jerseys sixteen pounds of milk would very likely make one of butter, and but two pounds of cheese. In such a case the cheese would have to sell at sixteen cents to equal butter at thirty cents.

In a herd of Ayrshires that would require twenty-six pounds of milk for one of butter, two and three-fourths pounds of cheese might be made instead, when cheese at $11.90 per hundred would be as good as butter at $30 a hundred.—*L. P. Arnold, in Farmers' Advocate, Canada.*

First Prize Butter.—At a recent exhibition of the Chester county agricultural society, Pennsylvania, Isaac Acker received the first prize on butter, who, on being called on for his mode of management, remarked as follows: He feeds ten quarts of corn meal and bran to each cow per day, with hay. Does not think that corn fodder makes good butter. The temperature of the cream at churning was fifty-seven degrees, and it was churned from twelve to twenty minutes. Uses six ounces of salt and three ounces of white sugar to twenty pounds of butter. Uses an Embree butter worker, with a sponge and cloth, and did not wash the butter with water. Mr. Acker believes that the essentials to make the dairy business pay are good cows, well fed and well taken care of, good and convenient dairy houses and appliances, and then produce a good article and sell it at a high price. One year ago his cows averaged 230 pounds each.—*Utica Herald.*

Management of Heifers.—Farmers anxious to make their animals productive are very liable to crowd upon natural laws, and in doing so, lose instead of gaining thereby. We do not agree with the *Live Stock Journal* in the opinion that heifers that have been well kept from calf-hood may come in at two years with perfect safety and profit to the owner. The *Journal* thinks the milk secretions should be developed early, and that this will produce a better milker at five years old than when she comes in at three. It is very important, it says, that there should be no check in the growth of the heifer during the first year, for it will be very difficult to make this up by an extra feed afterward. Just here is where the trouble comes in. It is almost impossible to prevent a check of growth and development; the extra feed and care required to keep up the system will cost as much as the receipts from the products of the animal.—*Ohio Farmer.*

Pumpkins for Stock.—The different opinions of farmers as to the value of pumpkins for milch cows and other stock, is believed to be the result of different ways of feeding them, by a correspondent of the Germantown *Telegraph*. In a hurry to clean a field, farmers will give their cattle a surfeit of pumpkins for a day or two, then for a day or two perhaps none, and thus alternate feasts and fasts, and then conclude pumpkins are worthless. The writer gives regularly, as long as they last, once a day, from one to three pumpkins per peard, never more, and finds them greatly conducive to the health of stock, besides greatly increasing the quantity and quality of butter made.

Sheep and Wool.

Fattening Sheep.

Sheep fatten much more readily during warm weather; hence at less expense than dnring the fall and winter. Young and thrifty animals fatten rapidly on good pastures, but old sheep shonld have a moderate quantity of grain fed to them regularly, as a supplement to the pasturage. One bushel of grain fed to them will fatten them as rapidly as four, when fed in the winter. In fattening any kind of animals, one fact should never be lost sight of, and that is, that quietude and warmth and well ventilated enclosures, are indispensable. It is a great waste of food to attempt the fattening of animals without first attending to these important requirements. Animals will fatten on the least quantity of food when they are kept closely confined, and are warmly sheltered. But they must have exercise in order to aid in the digestion and the assimilation of their food. Indian corn is with ns the most economical feed, bnt every precaution should be taken to feed it economically in every sense of the word.—*Rural World.*

The Sheep Bot Fly.—Some years ago we nsed to keep several hundred sheep, some of which were frequently troubled with "grub in the head" as we called it, and the only cure we ever found was the blowing of tobacco smoke up the sheep's nostrils, by holding the sheep firmly while one inserts the stem of a tobacco pipe in the nostril, and then, by placing his mouth over or near the bowl of the pipe, blow and force the smoke far np into the head. Onr sheep, I believe, always recovered after such treatment. Whether that effected it or not I do not know; hut prevention is the best of all. We had seen it stated somewhere, that the place to tar is at the upper part of the nose, between the eyes, instead of the nostril; "that in that place the nose is protected only by a very thin and delicate membrane beneath the skin, through which the parent insect can easily thrust her ovipositor, deposit her egg and depart instantly. This egg hatching produces the 'grub in the head.'" On this hint we acted. Having at shearing time a bucket of tar near by, we daubed each sheep as it was shorn, across the nose between the eyes, with a broad, thick band of tar. This seemed to prove a perfect preventive. Never after were we troubled with the grub among the sheep.—*Cor. Country Gentleman.*

Stubble-Shearing.—At a recent meeting of the Southeastern Wisconsin wool-growers association, resolutions were passed strongly condemning stubble-shearing; that is, the practice of leaving the wool half an inch or more long at shearing; the wool, of course, retaining that extra length throngh the ensuing year. The resolutions were:

Resolved, That we discard all stubble-shearing at fairs, and that a committee be appointed by the chair to draft rules to govern committees at fairs, said committee to report at next meeting.

Resolved, That any member of this association who shall be found practicing stubble-shearing, shall be excluded from our exhibitions.

Resolved, That the managers of all societies, at whose exhibitions sheep are shown for premiums, be required to instruct their examining committee to require exhibitors to state age of sheep, age of fleece, manner of feeding, and to give evidence of their breeding, and that all sheep that give evidence of stubble-shearing, or any dishonest practice, shall be exclnded from the exhibition.

How Sheep got into Australia.—In 1797 three Merino rams and five ewes were carried to Australia; but so slow did wool-growing increase, that it was not until 1807, ten years later, that the first bale of wool was shipped thence to England. But the flocks of Australia did not originate from that source. Mr. Hayes tells ns that the development of fine-wool husbandry in these colonies was the result of an accident. Some English whalers captured in the Sonth Seas, about the beginning of the present century, a vessel proceeding to Peru from Spain, in which there was some 300 Merino rams and ewes. These sheep were carried to Australia, and originated the fine Merino wool husbandry which to-day plays so important a part in the fine-wool supply of the world.—*National Live Stock Journal.*

Bell-Wether Billy of Buffalo.—The hero of the Buffalo stock-yard is named Billy. Beneath this homely appellation he carries his load of honors and wool at the same time, for he is a wether; but whether Cotswold, Southdown or Merino, or all three in part, no one can tell. Billy wears a bell, and as the nightly stock train arrives, he puts himself at the head of flocks of sheep as they are unloaded, and leads them safely through the circuitous byways of Buffalo to the yards. As soon as the last sheep is safely penned Billy slips out of a door specially provided for him, and retires to his own quarters and his bale of hay.—*New York Tribune.*

Southdown and Merino Crosses.—A Connecticut farmer is reported to have received an average of $7 per head from the lambs of Merino ewes crossed with Southdown rams. The lambs sell for $5 to $6 per head at three months old, and the wool makes up the balance.

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms; Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, 415 California street, S. F.

Grange Clubs for the Rural.

The Secretary (or some other Patron) is invited to act as club agent for the Pacific Rural Press in every Grange. Circular and sample copies sent free. Five or more names will constitute a club, at the rate of $3 a year. No new subscriptions will be taken without payment in advance. We will pay the postage after Jan. 1st, 1875. All club subscriptions in Granges should end on the last day of June or December. Old subscribers may join the club by paying the Secretary up to club dates. No single subscriptions will be received at less than $4 a year. Every Patron farmer should read a reliable agricultural paper. We need the support of all on this coast. Help the Secretary (or club agent) to make up a large list in your neighborhood. Don't delay.

NOTICE.

From and after this date, all moneys due to the State Grange by Subordinate Granges should be forwarded to the Grangers' Bank of California, No. 415 California street, San Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. CARRINGTON,
Treasurer State Grange.

November 4th, 1874. 19-v8-tf

Extra Copies of the Pacific Rural Press

Containing Grange addresses, resolutions, obituaries, etc., will be furnished post-paid at ten cents per copy. Grangers wishing numerous copies should send the order for them with the MS.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

California State Grange.

OFFICERS:

Master—J. M. HAMILTON, Guenoc, Lake Co.
Overseer—O. L. ABBOTT, Santa Barbara.
Lecturer—J. W. A. WRIGHT, Borden, Fresno Co.
Steward—N. L. ALLEN, Salinas, Monterey Co.
Assistant Steward—WM. M. JACKSON, Woodland, Yolo Co
Chaplain—J. A. HUTTON, Yolo, Yolo Co.
Treasurer—W. A. FISHER, Napa City, Napa Co.
Secretary—W. H. BAXTER, 320 California street, S. F.
Gate Keeper—R. R. WARDER, Waterford, Stanislaus Co
Ceres—MRS. G. W. DAVIS, Santa Rosa, Sonoma Co.
Pomona—MRS. S. C. BAXTER, Napa City, Napa Co.
Flora—MRS. R. S. HEGLER, Bodega, Sonoma Co
Lady Assistant Steward—Mrs. S. M. GARDNER, Grayson, Stanislaus Co.

Executive Committee:

J. M. HAMILTON, W. M., Chairman, of Guenoc, Lake Co
I. O. GARDNER, Grayson, Stanislaus Co.
J. C. MERRYFIELD, Dixon, Solano Co.
H. M. LEONARD, Santa Clara, Santa Clara Co.
J. M THOMPSON, Suscol, Napa Co.
G. W. COLBY, Nord, Butte Co.
A. B. NALLY, Windsor, Sonoma Co.

The State Grange Meeting.

On Thursday of this week the special meeting of the California State Grange, P. of H., will convene at Pythian Castle, (Knights of Pythias Hall, corner of Fifth and Market streets, San Francisco), at 9 A. M. It is sufficient to say here that its object will be first and last "the good of the Order." It is not our province at this time to discuss the probable action of the meeting. We already have the evidence that late misfortunes have added zeal to the hearts of both brothers and sisters of the Order, and we bespeak still more unity, vigor and determined action on the part of Patrons hereafter throughout the State.

New Salem Grange.—Bro. J. R. Whitlock sends us the following information about this Grange: Our Grange, No. 196, was organized May 28th, 1874, with twenty-three charter member. It is now in a flourishing condition, with very favorable prospects ahead. The present officers are mostly old incumbents, and have filled their positions with satisfaction to the members. Progress has been retarded somewhat by the fact that many in the neighborhood did not fully appreciate the intent of the Order; but now, as the purposes and workings of the Grange become better known, a large accession of members is anticipated.

Farmers' Bank.—In accordance with a call made by Lakeport Grange, P. of H., for a meeting with the view of organizing a farmers' bank, a meeting of Lake county farmers was held in Lakeport, on Friday, October 30. Mr. Johnson, of Scott's valley, was called to the chair, and D. Q. McCarty was chosen Secretary. The following persons were chosen a committee to procure subscribers for the proposed bank: D. Q. McCarty, Upper Lake; G. Tucker, Lakeport; James Renfro, Kelseyville; R. K. Nichols, Lower Lake; A. Ritchie, Guenoc. Meeting adjourned to November 20, when they will meet for organization.—*Bee, Nov. 5th.*

Report of Progress.—During the meeting of the Grangers' Fruit Association on Wednesday, Bro. Sanders entered our editorial rooms to report progress with bands loaded with magnificent specimens of Napoleon, Muscat, Hamburg, Flame Tokay and white (Zante) currant grapes. They were from a box presented to the meeting by Dr. Strenzel, from his celebrated Alhambra ranch, near Martinez.

Notes of Grange Travel—No. 3.

[Written for the Rural Press by J. A. W. Wright.]

Editors Press:—There will be perhaps no more favorable time than this to complete these notes to date. Work in preparation for the State Grange meeting, Oct. 6th to 10th, the busy period of that session and its after work, and the all-absorbing incidents connected with the lamentable failure of E. E. Morgan's Sons, after as heroic a struggle against great odds as the annals of commercial conflicts can ever record, have interfered with an earlier completion of these sketches.

But now while one is sharing with at least four hundred passengers on the Orizaba a delightful two-days' sea voyage, along our coast from San Francisco to San Pedro (the Los Angeles landing), while enjoying a calm ocean whose surface is now as placid as a summer lake, while breathing in its purest form the air from this vast reservoir of the Pacific which gives from its unfailing richness to the varied climates of California their

Incomparable Purity and Vigor,

What more fitting time to recall and dot down some of the many pleasant incidents connected with Grange visits from August 17th to the 29th inclusive? Should this letter be rather long, please pardon it.

Let me premise these remarks by saying that as we sped rapidly through the Golden Gate about 10 A. M. yesterday, feasting our eyes on the superb scenery of San Francisco bay, in a sunlight so clear that we could distinctly see the Farallone Islands in the distance; we observed that the hillsides everywhere are already showing the effects of last week's abundant rains. The grass is beginning to look quite green. To-day we see the same results along the sea-shore, where we have been coasting for some time within easy shot of a 12-pound Parrott gun. What will our Eastern friends think of it? Our soil is already beginning to show the verdure of spring. Yes, inconsistent as it may seem, this sign of spring has already come in California, just as bleak winter is about to close in upon our north Atlantic coast. Our valleys can hardly be expected to wear any winter garb this season. Our grass and weeds will not again become "dry and sere" till next harvest approaches. Does this not promise almost literally

A Perpetual Spring?

We confess the weather signs appear generally to be worth very little, but beyond question all indications now promise us a wet and mild winter and spring. No weather-gift could be more welcome.

But—to the subject.

Official visits we made, according to appointment, on the 17th, 18th, 19th and 20th of August to Petaluma, Santa Rosa, Healdsburg and Tomales Granges in the order mentioned. At each of these points many of our most zealous members were met, and quite a number attended from neighboring Granges in Sonoma and Marin counties. At Petaluma we had a very agreeable meeting, considering the small attendance on account of some uncertainty about the hour.

Of the most notable of these occasions you have published a full and interesting account by "a visitor." We refer to

The Santa Rosa Gathering

Which, for its many features constituting a number one Grange meeting, can not easily be surpassed. The attendance was large even from other Granges. We had a most abundantly provided harvest feast, which outside friends shared. We really had three separate meetings during the day, from 10 to 12 A.M.; lecture and conference on business arrangements, from 2 to 4 P.M.; lecture and conference on unwritten and other Grange work, and at 8 P.M., a public lecture in explanation and defence of our principles.

My leisure time there was most agreeably spent at the well improved and happy home of Bro. G. W. Davis, Worthy Master of the Grange. Here father, mother and two sons, the entire family, are true and active Patrons of Husbandry. Bro. Merry and wife of Healdsburg Grange were also there, having kindly come to take me by private conveyance to their meeting next day. An early ride with them next morning gave a good opportunity to see this well wooded, productive and beautiful part of our State around Santa Rosa and the Russian River country. Santa Rosa is indeed a beautiful and attractive place, and the surrounding country well deserves its reputation as one of the

Garden Spots of California

For grain and fruit growing. Many things of especial interest to a farmer were observed here. The most striking of these is the rotation of crops now being successfully practiced by some farmers of Sonoma county, with wheat and corn. The experiment is interesting, as one of the first applications in California of this great principle of successful agriculture; at least one of the first which has come under my observation. Farmers who have tried it find that if they sow wheat one year and plant corn the next alternately on the same land, then wheat sown there the third year will yield much more than the first year, seasons and other circumstances being equal. In some instances they have in this way almost doubled the yield of wheat. Consequently this method of undoubted excellence is becoming popular among the farmers of Sonoma, as all rotation of crops will wherever in California sufficient moisture can be controlled either naturally or artificially to produce a variety of crops. For your distant readers, who no doubt often wonder why

Rotation of Crops

Is not more resorted to in California, it is necessary to mention that in the dry valleys of our State, where irrigation has not yet been provided for, nothing but wheat and barley can be raised with safety. With irrigation our variety of products is almost unlimited, and with irrigation must eventually come an improved system of husbandry by rotation of crops.

At Healdsburg Bro. Alexander had quite a large number of his flock gathered around him, and I enjoyed a cordial welcome. Bro Cooley, Master of Cloverdale, and several from Windsor Grange, were present. We had a "good time," including a public as well as a private talk. The evening was spent under the hospitable roof of Brother and Sister Peck, who did everything in their power to make a roving brother comfortable, as he most certainly was, and most acceptably after two days of pretty hard work. At 8 o'clock next morning I reached Petaluma by rail and drove rapidly 18 miles toward the sea coast to Tomales. A part of this drive was through one of those heavy fogs for which the coast regions of our State are noted. Part of the time it was almost like a rain. Yet this was the 20th of August.

At Tomales we had a rousing Grange meeting for a small membership, under the leadership of Bro. Vanderbilt, their Worthy Master. The spirit shown there promises well for the future. Next morning railroad and steamer soon hurried us to San Francisco.

[Continued next week.]

The Literary Feature.

It does seem that the framers of our beautiful ritual were little else than inspired. Its beautiful lessons embrace in their teachings the soundest and purest morality, the tenderest humanity, the highest type of literature, the wisest finance, and most elevated sociability. Not the least worthy of these is the door they open to the young, and in fact to all to cultivate a taste for literature and to improve themselves in this direction. A Grange cannot be well conducted without becoming a literary society; and the nearer it approaches to a well organized lyceum in all its workings, the more efficient it will be as a Grange. No class of people under the sun need this kind of training more than the farmers. Their isolation has shut them out in a measure from the benefits of other societies, and they have never had the advantages in this direction which other classes have possessed. But the Grange opens a rare field for the development of this useful part of every education. Especially is it interesting and beneficial to the young people, and each one should be ambitious to make the most of the opportunities thus presented. All business outside of conferring the degrees should be done in a strictly parliamentary manner, and several copies of Cushing's manual should be in every Grange, and be studied by its members. All departures and irregularities should be noticed, and in this way will the Grange serve as a training school in business forms. Besides this no meeting should pass without an essay from some of the sisters, a short address from some one of the members, or a song or recitation. The time thus occupied would be but small, while the benefits would be incalculable. It will stimulate a love for literature, awaken a desire for improvement, lead to careful study and investigation, and bring out and develop latent powers and talents. Who can tell the bright but slumbering geniuses which will thus be awakened to new life and a bold and high career of usefulness? Twenty or thirty minutes spent at each meeting in such exercises would be like money loaned at high interest and the interest compounded monthly. "As iron sharpeneth iron, so does the countenance of a man that of his friend." What blessed, golden hours to the farmer are those spent in the Grange; how they fill up a want in his nature long felt, but never understood. With how much more alacrity are the labors of the week performed in view of the glad holiday on Saturday. We are pleased to see so many of our boys and girls gathered into the Grange. It is just the place for them, and if they can be induced to improve the rare opportunity for improvement thus presented time cannot measure the beneficial results that will follow. While the financial benefits of the Grange will follow almost immediately, those which the literary feature confers extend through all time, and gather rich fruit for eternity.

Bennet Valley Grange.—The Secretary of this Grange writes that its members "have cleared the hall of debt, and are now sailing in open seas, and are enjoying the fruits of their labor."

Resolutions.

Text Books.

Pomo Grange, Mendocino Co., has passed the following preamble and resolutions:

Believing that our educational interests lie at the foundation of our material prosperity and character for intelligence as a State.

Believing, also, that from brains to bread our true policy as Grangers and citizens lies in a cordial co-operation of home producers and home consumers.

Believing, moreover, that to encourage outside competition to the detriment of our producers and manufacturers—publishers of books and newspapers included—is suicidal to our best interests and happiness as a people. Therefore,

Resolved, That while as Grangers and citizens, we deprecate unnecessary changes, we do ask that the State Board of Education, in determining the selection of school books, shall give the preference—prices and merits being equal—to those offered by publishers of our own State.

At a late meeting of the Roseville Grange the following resolution was adopted:

Resolved, That the members of Roseville Grange, No. 161, are opposed to the frequent changes of text books for the use of our common schools, believing the same to be injudicious, unwise and unjust, resulting in no good, save and excepting to fill the pockets of book publishers, speculators and ring men at the expense of the people.

Cloverdale Grange, Sonoma county, and Oristimba Grange, Stanislaus county, have also adopted resolutions strongly deprecating change in text books.

On Action of the Executive Committee.

Bro. I. A. Wilcox, Secretary of Santa Clara Grange, forwards the following resolutions, passed by that Grange:

Whereas, The losses and failure of the house of E. E. Morgan's Sons were occasioned in the interest of the farmers of this State; and,

Whereas, It is not the part of wisdom to take other than our own counsel, therefore

Resolved, That this Grange approves the action of the Executive committee in convening the State Grange, in whose united wisdom we may rely in devising plans for the future; and also for considering what may be consistantly done for the relief of brothers who have met with losses in shipping their produce through our State agency.

Resolved, That this Grange relies on the integrity and judgment of our State Executive committee, to carry out the plans of the people whose interests they represent; and especially do we commend our immediate representative, H. M. Leonard, lately elected a member of that body.

Domestic Help.

The following resolution has been adopted by the Chico Grange:

Resolved, That in view of the great scarcity of domestic help in this State, it shall be the duty of the Executive Committee of the State Grange to take immediate steps to perfect such arrangements with the Order in the Atlantic States as will enable us to import female help by the car load under the auspices of the Order.

In Memoriam.

Whereas, Since our last meeting the Great Master has called upon our beloved sister, Melissa Stephens, to come up higher and glean in never failing fields where pure water ever flows and bright flowers are perpetual; and,

Whereas, Our hearts are stricken with sorrow by the sad blow which has taken her from our social gatherings; still we humbly submit to the decrees of Him who doeth all things well;

Resolved, That in the death of Sister Stephens Stockton Grange has sustained an irreparable loss, which, while we deplore, we believe to her is great gain.

Resolved, That we extend our heartfelt sympathy to the bereaved family of our beloved sister, who have parted with a dutiful wife, an affectionate friend and a loving mother. And we commit them in this, their great hour of affliction, to the Great Master of the Grange on high from whom there is no appeal, but whose gates are ever open to them who give the true word and sign.

Resolved, That this preamble and resolutions be entered on the minutes of this Grange and a copy be sent to the *Stockton Independent*, Rural Press and one copy to the family of Sister Stephens.

The foregoing resolutions were adopted by Stockton Grange No. 70, P. of H., Stockton, San Joaquin county, California, October 17, 1874.

Attest. Wm. L. Overhiser, Master.
Wm. G. Phelps, Secretary.

The University.

The Bakersfield Grange, Kern county, on the 3d inst., passed resolutions on the management of the affairs of the University of California under the present Board of Regents. The gist of the matter is contained in the concluding paragraph, which we quote:

Resolved, That having lost confidence in the statements and promises of the Board of Regents, and seeing no prospect whatever that the University will under the present management accomplish the purpose of its creation, we will make a persistent and strenuous effort to obtain a modification of the imposition as shall insure at least an honest effort to establish an institution in conformity with the evident purpose of the Acts creating the University of California, and intend to furnish to the people of the State a first-class Agricultural and Mechanic Arts College.

Grange Libraries.—The Sacramento Valley *Agriculturist* of last week contains a timely plea for the establishment of libraries by the Grangers, which we reproduce: We notice that many of the Grange papers are agitating the question of Grange libraries. This is a move in the right direction, and if carried out successfully will render the Grange a very useful educator. There is no Grange so poor that a beginning cannot be made at once. In the first place the standard works on agriculture should be secured. These will give the members an opportunity, at little cost, to post themselves thoroughly in the theory of farming. After these works are secured, as your pockets will allow, procure the best works on science and literature. Make your library something to be proud of. Interest your children in its pages, and you have, in a little time, a valuable educator. A small monthly tax on each member will soon accomplish all this. We hope the library question will not be allowed to sleep until every Grange in this broad land has full shelves of standard books.

Election of Officers.

STOCKTON GRANGE, No. 70.—From Wm. G. Phelps, Sec'y, Nov. 8: Thos. E. Ketcham, M.; Wm. G. Phelps, O.; Benj. E. Brown, L.; J. B. Haselson, S.; Wm. A. French, A. S.; D. Discbo, C.; Israel Lander, T.; E. N. Allen, Sec'y; Thos. Stephens, G. K.; Miss Emma French, Ceres; Miss Mary E. Stephens, Pomona; Miss Mary A. Haselson, Flora; Mrs. Wm. B. West, L. A. S.

TURLOCK GRANGE, STANISLAUS COUNTY.—From W. S. Robinson, Sec'y, Nov. 7: Charles T. Campbell, M.; Edward McCabe, O.; M. C. Monroe, L.; E. G. Warner, S.; J. B. Sears, A. S.; J. T. Dunn, C.; John Warner, T.; W. S. Robinson, Sec'y; James Keyhoe, G. K.; Miss Ora Warner, Ceres; Mrs. S. H. Jefferds, Pomona; Mrs. J. Warner, Flora; Mrs. S. H. Crane, L. A. S.

SANTA ROSA GRANGE, No. 17, SONOMA COUNTY. From J. A. Obreen, Sec'y: Geo. W. Davis, M; C. P. Teague, O.; S. T. Coulter, L.; T. Staley, S.; J. Adams, A. S.; J. Fulton, C.; J. Gauldin, T.; J. A. Obreen, Sec'y; A. J. Mills, G. K.; Mrs. C. R. Davis, Ceres; Mrs. N. Mills, Pomona; Mrs. R. M. Coulter, Flora; Miss M. B. Hendrix, L. A. S.

MONTEZUMA GRANGE, SOLANO CO.—T. T. Hooper, M.; C. H. Rice, O.; S. H. Depuy, L.; F. Unger, S.; Wm. Hanson, A. S.; C. Ish, C.; Wm. Quick, T.; C. K Marshall, Sec'y; E. D. Shedd, G. K.; Mrs. S. A. Daniels, Ceres; Miss A. Streeter, Pomona; Miss A. Daniels, Flora.

GALT GRANGE, SACRAMENTO CO.—From J. L. Fifield, Sec'y, Nov. 10: J. C. Sawyer, M.; A. B. Bryant, O.; Hiram Chase, L.; John Brewster, S.; Henry A. Gear, A. S.; Rosannah McIntyre, C.; Ephraim Ray, T.; John L. Fifield, Sec'y; Wm. Fawcett, G. K.; Mrs. J. L. Fifield, Ceres; Mrs. A. B. Bryant, Pomona; Alice Brewster, Flora; Mrs. Hiram Chase, L. A. S.

ORANGE GRANGE, No. 40, LOS ANGELES CO. From J. W. Anderson, Sec'y, Nov. 5: L. J. Lockbart, M.; Robert Furlong, O.; H. Lockwood, S.; C. M. Marshall, A. S.; M. F. Parker, L.; Joseph Beach, C.; P. J. Shaffer, T.; J. W. Anderson, Sec'y; S. M. Falkington, G. K.; Mrs. L. J. Lockhart, Ceres; Mrs. Henry Lockwood, Pomona; Mrs. Tillie Beach, Flora; Mrs. C. M. Marshall. L. A. S.

POTTER VALLEY GRANGE.—From A. H. Slingerland, Sec'y, Nov. 6; L. A. Preston, M.; H. Slingerland, O., E. L. Maze, L.; G. W. Smith, C.; I. Carner, T.; S. Logan, S.; D. Phillips, A. S.; J. M. St. John, G. K.; Mrs. A. H. Slingerland, Sec'y; Miss Mary Christopher, Cercs; Miss Mary Crawford, Pomona; Mrs. Laura Lierly, Flora; Mrs. M. A. Smith, L. A. S.

BENNET VALLEY GRANGE, SONOMA CO.—From G. N. Whitaker, Sec'y, Nov. 6: N. Carr, M.; A. Lacyne, O.; J. DeTurk, L.; W. Phillips, S.; D. E. Miller, A. S.; C. Lyman, C.; A. Burnham, T.; G. N. Whitaker, Sec'y; J. C. Burnham, G. K.; Mrs. A. Lacyne, Ceres; Mrs. H. Carr, Pomona; Miss J. Burnham, Flora; Mrs. C. Lyman, L. A. S. Trustees—B. Lacyne, N. Carr, J. DeTurk.

SANTA CLARA GRANGE.—I. A. Wilcox, Secretary, sends the following list of officers so far as elected: S. J. Jamison, M.; J. Knowles, O; Jas. P. Kennedy, L.; Wm. Swope, (re-elected) S.; G. W. Thenerkauf, A. S.; P. G. Keith, C.; C. Peebils, (re-elected) T; I. A. Wilcox, (re-elected) Sec'y; H. Goepper, G. K.; Fannie A. Wilcox, (re-elected) Ceres.

POMO GRANGE, MENDOCINO CO.—From G. B. Nichols, Sec'y: John Mewhinney, M.; B. Pemberton, O.; T. W. Dashioll, L.; G. W. Pickle, S.; J. Grover, A. S.; Wm. D. Jones, C.; Life Farmer, T.; G. B. Nichols, Sec'y; Henry Cox, jr., G. K.; Mrs. D. Mewhinney, Ceres; Mrs. L. Grover, Pomona; Miss Martha Hughes, Flora; Miss J. Deselms, L. A. S.

HOLLISTER GRANGE, No. 11.—From Wm. H. Oliver, Sec'y: R. Ruckledge, M.; U. Wood, O.; E. Nason, L; H. F. Haver, S.; J. Holsbery, A. S.; A. Martin, C.; T. Flint, T.; Mary E. Cowan, Sec'y; H. W. Cothran, G. K.; N. G. Stockton. Ceres; Hattie Brown, Pomona; Theresa Lockwood, Flora; F. A. Shaw, L. A. S.

SANTA CRUZ GRANGE, No. 68.—The following partial list of officers elect has come to hand: G. C. Wardell, M.; B. Pilkington, O; Mrs. Martha Wilson, L.; L. Pollard, C.; T. Pilkington, Sec'y; Henry Daubenbiss, T.; J. Francis, S.; Joseph Francis, jr., A. S.; Miss Eliza Pollard, L. A. S.; Mrs. Comstock, Pomona.

VACAVILLE GRANGE, No. 5, SOLANO CO.—From Oscar P. Dobbins, Sec'y, Nov. 4th: E. R. Thurber, M.; W. J. Dobbins, O.; A. C. Dellinger, L.; W. C. Harris, S.; O. Bingham, A. S.; J. Longmire, C.; Wm. Cantelon, T.; O. P. Dobbins, Sec'y; H. A. Bassford, G. K.; Miss Mollie Wells, Ceres; Miss Neaves Peña, Pomona; Miss Clara Davis, Flora.

MERCED GRANGE.—W. E. Elliott, M.; R. S Clay, O.; N. S. Rogers, L.; W. P. Fowler, C.; J. F. Goodale, T.; John B. Ralston, Sec'y; J. E. Perry, S.; W. H. Ostrander, A. S.; Mrs. C. M. Herren, Ceres; Miss A. Clark, Flora; Mrs. G. A. Smith, Pomona; Mrs. J. F. Goodale, L. A. S.

SAN JOSE GRANGE, No. 10.—Wm. Erkson, (re-elected) M.; Thos. Snell, O.; Alfred Chew, C.; Joab Hall, S.; Jos. Holland, A. S.; J. Stonier, C.; W. L. Manly, T.; Rufus Fisk, Sec'y; Jos. Cottle, G. K.; Mrs. Bicknell, Ceres; Mrs. Erkson, Pomona; Mrs. Rucker, Flora; Miss E. Farnsworth, L. A. S.

SUMMIT GRANGE, SAN LUIS OBISPO CO.—From A. T. Foster, Secretary, Oct. 31: John V. N. Young, M.; Anderson Smith, O.; S. P. Sitton, L.; H. B. Morehouse, S.; F. G. Young, A. S.; G. W. Richardson, C.; L. D. Brians, T.; A. T. Foster, Sec'y; P. Gillis, G. K.; Mis. A. Young, Ceres; Mrs. M. J. Meyers, Pomona; Miss Lucy Young, Flora; Miss M. L. Morehouse, L. A. S.

BINGHAMPTON GRANGE, No. 174, SOLANO CO. Albert Bennett, M.; J. M. Bell, O.; J. B. Jameson, L.; C. E. Plummer, S.; H. C. Gay, A. S.; J. Tuck, C.; J. F. Brown, T.; E. A. Beardsley, Sec'y; J. A. Thompson, G. K.; Mrs. B. V. L. Bennett, Ceres; Mrs. Heleu Bell, Pomona; Mrs. E. Lent, Flora; Miss Ida Jamesou, L. A. S.

LAKEPORT GRANGE, LAKE CO.—J. W. Boggs, M.; S. Ballenger, O; Lindsey Carson, L.; L. Hendricks, S.; J. C. Thompson, A. S.; William Gessner, C.; George Tucker, T.; N. Phelan, Sec'y; J. J. Hendricks, G. K.; N. Phelan, Local Agent for Lakeport; Miss J. Rippy, Ceres; Miss M. Carson, Pomona; Miss Emma Cornwall, Flora; Miss Mary Thompson, L. A. S.

NICASIO GRANGE, No. 135, MARIN CO.—P. K. Austin, M.; T. H. Estey, (re-elected) O.; C. L. Estey, L.; J. R. Foulks, S.; Thomas Campbell, (re-elected) A. S.; William J. Dickson, (re-elected) C.; B. F. Parlee, (re-elected) T.; J. W. Noble, (re-elected) Sec'y; W. I. Clark, G. K.; Mrs. H. F. Taft, (re-elected) Ceres; Mrs. John Schaub, Pomona; Miss S. A. Coldwell, Flora; Mrs. J. W. Noble, L. A. S.; Organist, Mrs. P. K. Austin.

CAPAY VALLEY GRANGE, YOLO CO.—J. M. Rhodes, M.; E. E. Perkins, O.; Geo. Palmer, L.; J. P. Goodnow, S.; M. A. Neuse, A. S.; W. J. Duncan, C.; W. Holcomb, Sec'y; J. W. Aldrich, T.; Thomas Powell, G. K.; Mrs. E. Blair, Ceres; Mrs. G. Palmer, Pomona; Mrs. Keithly, Flora; Mrs. P. M. Savage, L. A. S.

ENTERPRISE GRANGE, SACRAMENTO CO.—From M. Toomey, Sec'y: J. G. Martin, M.; Wm. Baker, O.; M. W. Lowell, L.; G. Baker, S.; S. Green, A. S.; J. M. Bell, C.; A. A. Nordyke, T.; A. Root, Sec'y; Wm. Birch, G. K.; Mrs. Plumer, Ceres; Mrs. Atherton, Pomona; Mrs. Wm. Blake, Flora; Mrs. George Baker, L. A. S.

ALFALFA GRANGE, RENO, NEVADA.—From F. B. Kloecker, Sec'y, Nov. 7: G. W. Huffaker, M.; H. M. Frost, O.; Wm. Elmendorf. L.; J. C. Haynes, S.; B. S. James, A. S.; Wm. L. Ross, C.; M. C. Lake, T.; F. B. Kloecker, Sec'y; D. W. Bryant, G. K.; Mrs. F. M. Smith, Ceres; Mrs. Emma Elmendorf, Pomona; Mrs. Martha Haynes, Flora; Mrs. C. B. Norcross, L. A. S.

SOUTH SUTTER GRANGE.—Thomas Boyd, M.; John R. McLealand, O.; Cyrus Briggs, L.; W. Roberts, S; Geo. T. Boyd, A. S.; R. McLealand, C.; H. Sanky, T.; Geo. Ritchardson, Sec'y; W. W. Monroe, G. K.; Mis. S. Boyd, Ceres; Mrs. S. McLealand, Pomona; Mrs. J. R. McLealand, Flora; Miss S. C. Boyd, L.A.S.

From Alabama.

O. H. Kelley, Secretary of the National Grange Association, having written to W. H. Chambers, Master of the State Grange of Alabama, inquiring as to the truth or falsity of various reports of political outrages in that State, Mr. Chambers replies as follows:

Alabama is to-day as law-abiding as New York. Its people are as much opposed to violence and proscription as any community in New England. It is not denied that there are instances of outrages or violation of law, but they are promptly condemned and denounced by the people of the State, as they would be anywhere in the United States. No band of incendiaries who ever meet under cover of darkness to plot schemes of burning homes of unsuspecting citizens, and murdering them in their sleep, more richly deserve the gallows than do those scoundrels who deliberately concoct lies like these for the purpose of arraying against the people of the South the prejudice and hatred of the Northern masses. As a general thing the negroes are quite well disposed and well behaved, and I may say they are universally kind. When instigated by bad white men, who seek to secure office, by appealing to their prejudices and inflaming their passions, in some instances, they have so far misled the negroes as to lead them to acts of violence and instances which, in spite of patience and forbearance on the part of the whites, have resulted in collision. In not a single instance so far as I know or believe has a collision of this sort occurred in which negroes or their misled leaders, were not to blame, and in every instance the whites have been forced, from sheer self-protection, to resist their demonstrations against their lives and property. But the whole thing is misrepresented, in that it creates a false impression of the state of things in Alabama. There is no more sense of insecurity than there has been at any time since the war. I live in a town of the heaviest negro population in the State, where there are fifteen negroes to one white person, and we feel as safe as you do in the district of Columbia. There has never since the war been an instance of collision between races in this neighborhood.

The Model Overseer.

His place in the Grange is well known to all whom you see passing before you. He is a man who walks worthily, and is held in esteem among his fellows for integrity and devotion to principle. He is prompt in all business engagements, and punctual in every relation. He doesn't come twisting into the Grange after the opening hour, and look suspiciously at the clock which he knows is always correct in a model Grange. When the Grange is called to order he is in his place and answers all questions correctly and promptly.

He aids the worthy Master in the maintenance of order, and the Grange is always more cheerful by reason of his presence. When a Patron seeks admittance, the model Overseer assures himself, through the Steward, that the passwords are correctly given, and that the Patron is clothed in proper attire. Not a sign, action or salutation is overlooked in his presence; and a proper observance of all that partakes of decorum only is in order while he occupies his station. The model Overseer is well versed in the constitution, by-laws and rules of order of the National, State and Subordinate Grange; he can take the place of the Master, in his absence, and fill the position quite as acceptably as that officer. What candidates are to be instructed he is prompt in the discharge of his duties, and the ritualistic work is as familiar with him as with any Patron of the organization.

When committees are to be appointed, he acts in his capacity that the best interests of all shall be subserved. When the fourth degree is conferred, the practical workings are often supervised by him, much to the admiration and approval of all present. In short, all the orders of the Master are faithfully transmitted to the laborers through this officer; and when they come to him for instruction in their work his influence is for good. He sweetens human toil in every sphere wherein he walks, and all who know him have felt the enduring result of a kind word spoken in season. Faithful in the performance of every duty, the Grange is blessed by his presence, and her influence and prosperity enhanced by his devotion to her every want. Well meaning men and women on all sides desire to come where such men are found, and the inward conviction of every citizen is that nothing but good can flow from a fountain where such models of integrity, virtue and uprightness are found near the head.—*Farmers' Friend.*

COLUSA STORAGE AND COMMISSION COMPANY. This organization, gotten up under the auspices of the Granges, is a grand success. They have received so far this season 7,069 tons of grain; have shipped 800 tons and have now in storage 6,269 tons of wheat, belonging entirely to the farmers in this county; have received and shipped 2,115 hogs, weighing 211,059 pounds; received 101,570 pounds of wool, and shipped 72,780, leaving a balance on hand of 28,700. We were proud to note these signs of prosperity in Grange organizations, and hope they may continue to prosper.—*Colusa Independent.*

COLUSA COUNTY COUNCIL.—The regular meeting of the Colusa County Council will be held at Colusa on Weduesday, November 25th. The *Sun* says: Very important business will come before it. On the faith of recommeudations made by the Council, Grangers have lost money, and it is not right that they should lose it all. It is time now that next year's business should receive some consideration. If then, it is intended to make the organization available for any practical good, let every Grange be represented.

ENTERPRISE GRANGE. — Brother Toomey, Master elect, writes us that this Grange was organized with twenty-five charter members, and now numbers seventy-eight. The fourth degree was conferred upon a class of two males and four females, October 17th, at which time a harvest feast was also enjoyed. The Grange and its guests were present to the number of 150, and a very pleasant time resulted.

GRANGE HALLS.—A room known as Garibaldi's Hall is being fitted up for the Merced Grange. The Yountville Grango Hall is about finished, and a grand ball is promised to be given in it on its completion.

ANOTHER DESTROYER.—Henry Godard, of Oakland, writes to the Secretary of the State Grange that he has a very efficient method for destroying squirrels.

ON "MADE GROUND."—Our attention has been called to the fact that the Eucalyptus tree makes a remarkable growth on "made ground," even when on adjoining hard adobe soil it is comparatively a failure. In Brooklyn trees planted where the streets have been filled in advance rapidly and make a more than usually full and shapely tree.

OVER 6,000 tons of wheat are stored in the Farmers' Warehouse at Colusa.

ST. HELENA shipped 112,000 gallons of wine during the past three months.

THE Alden fruit-drying works, at Los Angeles, are curing figs.

PATENTS & INVENTIONS.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[FROM OFFICIAL REPORTS FOR THE MINING AND SCIENTIFIC PRESS, DEWEY & CO., PUBLISHERS AND U. S. AND FOREIGN PATENT AGENTS.]

By Special Dispatch, Dated Washington, D. C., Nov. 10th, 1874.

FOR WEEK ENDING OCT. 27th, 1874.*

MACHINE FOR MOLDING AND PRESSING BITUMINOUS COMPOUNDS.—Rodman Gibbons and Robert Skinner, S. F., Cal.

HEATER FOR CHEESE VATS, ETC.—Geo. Harris, Petaluma, Cal.

BED LOUNGE.—John Hoey, S. F., Cal.

APPARATUS FOR SUSPENDING TOBACCO.—Sebra Mathewson, Gilroy, Cal.

SCALE FOR WEIGHING COINS.—Wm. Schmolz, S. F., Cal.

STONE-SPLITTING MACHINE.—Stephen S. Brooks, S. F., Cal.

MACHINE FOR TURNING GLOBULAR FORMS.—Andrew J. Kane, S. F., Cal.

DUST CAP FOR WATCH REGULATORS.—Wenzel H. B. Schmied, Napa, Cal.

SOCKET FOR BROOM HANDLES.—Heury Anderson and James F. Houghton, Sacramento, Cal.

GATE LATCH.—Edward Halsey, Sau José, Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & CO., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

General News Items.

HAY FOR FUEL.—The hay in some parts of Iowa is so abundant and cheap that it has been found more economical as a fuel for steam purposes, than peat or any other substance. One enterprising inventor wishes to know if he can obtain a patent for the idea of using hay for fuel in steam boilers. He thinks it new in the annals of steam engineering to use hay for firing. Patents have been taken out in California for using straw for steam fuel—the same will, of course, apply to hay—moreover, such fuel has been found both effective and economical.

RYE FOR HAY.—As seeding time is approaching, we wish to give a hint about raising rye for hay. Mr. Sunderland, of Murphy's cañon, west of Gilroy, has sowed rye with the best of success for several seasons. It is liked as well as wheat. After one season's use by livery men they consider it desirable. One important thing in its favor is the fact that squirrels do not molest it unless it is allowed to fully ripen. On the hilly land in that section it produces a larger crop. It requires cutting promptly at a season before ripe, and should not be allowed too long in the oock. Rye should be thoroughly tried by all hay raisers on foothill lands.

GATHER THE SEEDS.—There are now many Eucalyptus trees (including the favorite "blue gum"), which bear good seed in this State. It ought all to be saved. There is no question but that much of it is as good as the imported article. Encourage the children to gather it. Help them prepare it for market and let them have the profit from its sale. There is no doubt that large quantities will yet be wanted on this coast.

HOLDING BACK GRAIN.—Like the farmers of California those of the West seem disposed to hold their grain rather than sacrifice it at rates at present ruling, and a Chicago paper lately reported five miles of cars side tracked upon three of the roads centering in that city, for lack of work.

OUR California spring has come. In Oakland the streets are already lined with new green grass. Dandelions are in perfect bloom. The latter, contrary to their Eastern sisters, go to sleep daily, about nine A.M., in sunshiny weather.

THE POTATO CROP about Bloomfield is not turning out so well as was expected a few weeks ago. It was injured by frost and grasshoppers, and it is estimated that it will be 25 per cent. short of last year's yield.

PROSPECTING IN A FARMING COUNTY.—It is estimated that 1,000 men are employed in working and prospecting in and about Pine Flat, Sonoma county.

HAY BURNED.—C. S. Abbott, of Salinas City, lost 50 tons of hay by fire on Monday last. It caught fire from burning straw.

SAN MATEO COUNTY SEAT.—The San Mateo county seat question will probably be decided by the Supreme Court this week.

HEAVY TOLLS.—The farmers of Sutter county complain of the tolls on the Feather river bridge.

WM. THOMAS, of Los Angeles, is making arrangements to plant an orchard of 50,000 acres.



The Two Anchors.

By R. H. Stoddard.

It was a gallant sailor man
Had just come home from sea,
And as I passed him on the town
He sang "Ahoy!" to me.
I stopped, and saw I knew the man—
Had known him from a boy;
And so I answered, sailor-like,
"Avast!" to his "Ahoy!"
I made a song for him one day—
His ship was then in sight—
"The little anchor on the left,
The great one on the right."

I gave his hand a hearty grip,
"So you are back again?
They say you have been pirating
Upon the Spanish Main;
Or was it some rich Indiaman
You robbed of all her pearls?
Of course you have been breaking hearts
Of poor Kanaka girls!"
"Wherever I have been," he said,
"I kept my ship in sight—
The little anchor on the left,
The great one on the right."

"I heard last night that you were in;
I walked the wharves to-day,
But saw no ship that looked like yours,
Where does the good ship lay!
I want to go on board of her."
"And so you shall," said he;
"But there are many things to do
When one comes from sea.
You know the song you made for me?
'The little anchor on the left,
The great one on the right!'"

But how's your wife and little one?"
"Come home with me," he said.
"Go on, go on, I follow you;"
I followed where he led;
He had a pleasant little house;
The door was open wide,
And at the door the dearest face—
A dearer one inside!
He hugged his wife and child; he sang—
His spirits were so light—
"The little anchor on the left,
The great one on the right!"

'Twas supper time, and we sat down—
The sailor's wife and child,
And he and I; he looked at them,
And looked at me, and smiled.
"I think of this when I am tossed
Upon the stormy foam,
And though a thousand leagues away,
Am anchored here at home."
Then giving each a kiss, he said,
"I see in dreams at night
This little anchor on the left,
This great one on the right."

An Outrage on Women.—Charles Reade says: "Nothing is so hard on women as a long, steady struggle. In matters physical, this is the thing the muscles of the fair cannot stand. In matters intellectual and moral, the long strain it is that beats them dead. Do not look for a Bacons, a Newtons, a Handells, a Victoria Hugs. Some American ladies tell us education has stopped the growth of these. No, mesdames. These are not in nature. They can bubble letters ten minutes that you could no more deliver to order in ten days than a river can play like a fountain. They can sparkle gems of stories; they can flash like diamonds of poems. The entire sex has never produced one opera nor one epic that mankind could tolerate a minute; and why?—these come by long, high-strung labor. But weak as they are in the long run in everything but the affections (and there they are giants), they are all overpowering while their gallop lasts. Fragella shall dance any two of you flat on the floor before four o'clock, and then dance on till the peep of day. You trundle off to your business as usual, and could dance again the next night, and so through the countless ages. She who danced you into nothing is in bed, a human jelly crowned with headache."

Poverty a Blessing. — Poverty is the nurse of manly energy, and heaven-climbing thoughts, attended by love, and faith, and hope, around whose steps the mountain breezes blow, and from whose countenance all the virtues gather strength. Look around you upon the distinguished men that in every department of life guide and control the times, and inquire what was their origin and what was their early fortune. Were they, as a general rule, rocked and dandled in the lap of wealth? No; such men emerged from the homes of decent competence or struggling poverty. Necessity sharpens their faculties; and privation and sacrifice brace their moral nature. They learn the great art of renunciation, and enjoy the happiness of having few wants; they know nothing of the indifference or satiety. There is not an idle fiber in their frames; they put the vigor of a resolute purpose into every act. The edge of their mind is always kept sharp; in the school of life, men like these meet softly-nurtured darlings of prosperity as iron meets the vessel of porcelain.

This is the way a colored preacher at Richmond harranged his hearers for mutual convenience: "De fore part ob de church will please sit down so de hind part of de church can see de fore part, for de hind part can't see de fore part of de fore part perfect in standin' before de hind part, to de utter exclusion of de hind part by de fore part."

Kitchen Economies.

[Written for the Press by Mrs. C. I. H. Nichols.]

Waste, waste! "Where? In what? I do not understand."

In cutting that twelve-pound roast. Cook it whole and you save nearly one-fourth its value. The larger the surface the greater the loss of nutritious juices by evaporation. For the same reason large messes, and messes cooked in covered vessels, go farther in feeding a family than small messes and messes cooked in open vessels. The cook has less appetite than eaters from other departments of labor. Why? She imbibes nutriment from the atmosphere—nutriment that escapes from the food in process of cooking. To prevent the escape of this nutriment, which takes with it the finer flavor of the food, is an economy worth attention.

In keeping an account of the expenditure in food, for my family, varying in number from six to twenty, my attention was arrested by the fact that as the eaters increased the cost of food, per head, decreased. Certain that in the cookery lay the secret of difference. I soon came to the conclusion which years of experience and observation have confirmed without a questioning fact.

How often we hear it remarked that food tastes better with a table full of eaters, the speaker attributing to the sociability of numbers the relish which is due mainly to the superior richness and flavor of food cooked in large quantities, etc.

Keep an exact account of expenditures in setting a table for four persons. At the end of a month divide the sum total by the number 4, and you will have the cost of board per head. Add four to your table for the next month and provide as before, in qualities and kinds, and at the end of the month you will find, that if the cost of the first four was $2 per head, the cost per head of the eight will vary little from $1.75. And for twelve persons the average cost will be about $1.50. Take into account fuel and hire of help—which is not materially increased by the increased number to be provided for—and the difference in favor of the greater number will be still more apparent.

A dozen children eat proportionally less than half that number. So that the poor man, with a house full of healthy boys and girls, is amassing a capital in labor, at less expense of bread and butter, than his wealthier neighbor who has the smaller number. This view of the case diminishes the wonder at "how Mr. D. contrives to find food for so many mouths." Stews and soups, so economical as regards time and cost of material, so wholesome, and always so much relished by children, are more frequent dishes in such families, and have much to do with their general healthfulness and vigor.

Said an Alabama lady, "Mrs. Nichols, the Yankees do not cook rice like Southerners." "And how do Southerners cook it? It being a Southern production, and staple of Southern tables, Southern cookery should turn out a prime article," I replied.

"We would put into your oven a pan with rice and the requisite quantity of water or milk and keep it cooking moderately till done—half an hour perhaps—then turn it, without stirring, into a dish for the table. The rice grains, feathery as snow flakes, will be whole, and the skin which forms over the mass in the commencement of cooking, and which can be stripped off before turning out the rice, prevents the escape of the delicate aroma of the rice, and you have a fine flavored food in place of the pasty, insipid result of boiling and stirring."

Waste, Waste!

"And what is the matter now?"

Why, my dear sir, you are buying your groceries by the pound and small measure, when if you bought by the hundred, the box, the sack, and keg or barrel, you would save the time you waste in going for small quantities and get a handsome discount on prices. There is besides less waste in the purchase of large quantities—they "spend better."

You are of the opinion that "a more lavish use would make the wholesale purchase, money out of pocket?"

Well now, that reminds me of a neighbor of my father's, whose children were my playmates. And as the story has a moral and couldn't be embellished by fiction, I will make it round out my kitchen economies.

Our neighbor, Mr. B., was what was called a "forehanded man." He had a good farm which he got by marriage, his wife's money having paid for it. He was a clothier by trade, and a good workman; managed his own business ordinarily well, but was a most remarkable economist in household affairs, which he supervised with great vigilance. With nine children to clothe and feed, Mr. B. had frequent opportunities for lectures on economy, which his patient little wife heard, something as one hears a disagreeable noise, that can't be shut out, but need not be listened to. Year after year she had begged for materials to make for her children comfortable garments; had urged, that she could take her time in the making and save her strength for seasons of hurry and extra work or sickness, if she could have a bolt of muslin, etc., to make under-clothing, etc., etc.

"No," said Mr. B., "the cloth would be used more lavishly; you would put more in a garment and wouldn't patch and make the old ones last so long. We've none of us ever been sick long enough to feel any inconvenience from want of clothes, and I guess we can get along as we have for a while yet. It's no matter about children's clothes, and as for yours, why, if a woman's dress suits her husband that's enough. A man has to go to town, and sit on juries, you know, and travel round the country on business, and must have a good suit of clothes."

So this woman, who couldn't help herself, because she had no means in her own right, gave it up. The children continued to go to bed Saturday nights shirtless, while their tired and disheartened mother washed, dried by the fire and ironed their garments for Sunday morning. One year later and B's economy ended in ten motherless children, between the ages of 16 years and one week. And whether or not her last dress "suited her husband," it was to her the most comfortable one he had ever furnished.

There are very few thoroughbred B's in the world; but there are very many with a strain of the same economy; and many a woman spends her strength to disadvantage and wears out with the friction of ungenial espionage and privation of materials for which her husband's means are ample, who, if free to make and carry out her plans, would develop unsuspected talent and energy in the conduct of household affairs. My plea is for these unfortunate women. Men have business enough of their own and it would be unmerciful to expect them to manage the house additional. It is enough when sickness of the house-mother compels them to take up the burdens of nurse or cook. And their thoughtful help in many directions relieves the over-burdened wife and fills her heart with love's sunshine.

Potter Valley, Oct. 19th, 1874.

"I Love You."

Who do you suppose said it?

She was very beautiful, with her cheek of rose-hue and curling auburn tresses that the wind sports with so gallantly; but she did not say it. No. That bright creature, by whose side stands a lover, looking so tenderly in those happy eyes, nor yet the dimpled babe, with cherub face lifted to the more mature but not less innocently sweet features, with the holy light of mother glorifying every smile again. Wrong again.

Then, who do you suppose said it?

Not that newly-wed husband, whose home for a few fleeting months he has called heaven—full of smiles and tenderness, and oft-repeated vows. Although he whispers many times of love, yet this "I love you" was not spoken then and there.

A tired woman sits hushing to sleep her nestling babe. Beauty once made that face radiant, perhaps, but all that beauty has gone now. The blue eye is dim and faded—the whole expression is sorrowful—the pale brow covered with lines of care. Perhaps, in that far-off look of hers, she sees three little graves, green with as many summers. Her home is very humble—all day she has toiled, and the fainting spirit almost surrenders to fatigue, the downcast eyes trembling with tears—she is so weary. And every nerve tingles when the boys come hungry from school, some with weeping and tales of sorrow, that mothers must hear. And after that they are hushed with kissings or chidings, till it is time to get supper for seven hungry mouths, and then the accustomed, never-ending routine of putting away and clearing up, till the worn out creature wonders with a sigh if there really will ever come a rest to her—an eternal rest.

At last she can rest her weary limbs in the old rocking-chair. The babe, whose eyes close fitfully to a low lullaby, lies in his father's lap. He is a plain man, that good father with an honest face and great heart that would if he could, take in all the care and sorrow of the household.

The babe sleeps. With a rude gentleness he lays it on its mother's bosom, and as the ruddy firelight plays over her care-worn features, he looks upon her with eyes suddenly grown lustrous and beautiful. He lifts his great hand softly, till it rests on her shoulder, as he says, "I love you, dear Mary!"

Ah! you long-married husbands, who exact every attention as a duty, how much would it cost you to make your home beautiful with all its cares? I tell you one word of love will loosen great burdens from the shoulders of the toiling woman you call wife. Try it. Go home some night and look upon her with the eyes of long ago. For one little moment think what great trials she took unto her heart when she married you. Then tenderly clasp her hand, and as she looks with wonder-open eyes, say to her in a low and steady voice, not carelessly nor sportively, but earnestly—

"I love you."

Trust me, it will be to her, and to you both, "better than diamonds."

A French Lady's Secret.—Fair ladies of Utah, discard all kinds of drugs and all cosmetic nostrums for perserving the fairness of your complexions, for I will communicate to you a secret, an infallible recipe, of one of the most fascinating ladies of modern times. I mean the Countess Diana of Poitiers. When forty years old, a king in the bloom of youth was smitten with the charms of this celebrated beauty. Diana of Poitiers washed her face with rainwater, even during the bitterest cold of winter, and three kings in succession were passionately fond of this bewitching lady.—*Ex.*

A "big Indian" strayed away from his camp and got lost. Inquiring the way back, he was asked if he was lost. "No," said he disdainfully, "Indian no lost; wigwam lost." Striking his breast, he exclaimed, "Indian here!"

Boxing Match between William IV. and an American Sailor.—Nathan Lord served during the Revolution on board an American privateer, which was captured by a royal navy frigate, and its crew taken prisoners. The young Duke of Clarence, afterwards William IV., was an officer of the English ship. One night subsequent to the capture, while some of the rebel sailors were standing upon the upper deck, the royal middy addressed them with insulting words, calling them rebels, Yankees, etc. Lord, one of the number being rather of an inflammable spirit, and not relishing his remarks, replied that if he were at liberty he would compel him to retract, and suggested some rather forcible arguments that he would use if necessary. The English officer was disposed to test his fighting qualities and accordingly a common seaman's chest was brought up from below, the combatants were placed upon each side, and a regular set-to was the result. The Englishman was the first to "cry enough," and thus the affair ended. Soon after the arrival of the ship in England, and while the American prisoners remained on board, previous to being removed to Dartmoor, a message arrived from the Duke of Clarence, bearing an official dispatch commanding young Lord's release, granting him full pardon, and giving him permission to return to America.

Baby Life.—Who has not slept on a mother's lap? Who has not loved a mother's smile? Who has not looked to that mother for kind words, for sympathy, for guidance through life? Yet who knows the mother's task work? Only a mother. There lies her darling, smiling, and apparently happy. Its cheeks are round, peach color, and beautiful. Its dreams we may imagine are sweet, but they are beyond comprehension. The mother, however, can interpret them. She speaks to her child in a language which no philosopher can translate. Her smiles and her talk to that gift from God can electrify the coldest heart. Baby-life is a great as well as solemn lesson. It teaches more than books. It shows us that innocence and happiness and love are to be found in this task work. The mother will risk all for her child. She has courage to do any great deed to save its life. Sublimity cannot go beyond her thought and high daring. But, after all, it is but a short jump from the cradle to the grave. We may dissect human character with our scalpel-pen to day, but O great truism! the carcass is gone to-morrow. Cradled amidst joy, we depart amidst tears. Yet how sweet is baby-life! Would not we who are beyond it, give all we possess to return to it once more? It is the golden year of our existence, as the angels of heaven well know.

What a Good Periodical may Do.—Show us an intelligent family of boys and girls, and we will show you a family where newspapers and periodicals are plentiful. Nobody who has been without these silent private tutors, can know their educating power for good or evil. Have you never thought of the innumerable topics of discussion which they suggest at the breakfast table, the important public measures with which, thus early, our children become familiarly acquainted—the great philosophic questions of the day, to which unconsciously their attention is awakened, and the general spirit of intelligence which is evoked by these quiet visitors? Anything that makes home pleasant, cheerful and chatty, thins the haunts of vice, and the thousand and one avenues of temptations, should certainly be regarded, when we consider its influence on the minds of the young, as a great moral and social blessing.

A Word To Boys.—Some one has said: "Boys, did you ever think that this great world, wealth and woe, with all its mines and mountains, its oceans, seas and views, with all its shipping, its steamboats, railroads and magnetic telegraphs, with all its millions of men, and all the science and progress of ages, will soon be given over to the hands of the boys of the present age—boys like you, assembled in school-rooms, or playing without them, on both sides of the Atlantic? Believe it and look abroad upon your inheritance, and get ready to enter upon its possessions. The kings, presidents, governors, statesmen, philosophers, ministers, teachers, men of the future, all are boys, whose feet like yours cannot reach the floor, when seated on the benches upon which they are learning to master the monosyllables of their respective languages."

Mother.—Young man! Thy mother is thy best earthly friend. The world may forget thee—thy mother never; the world may wilfully do thee many wrongs—thy mother never; the world may persecute thee while living, and when dead, plant the ivy and the nightshade of slander upon thy grassless grave, but thy mother will love and cherish thee while living, and if she survive thee, will weep for thee when dead, such tears as none but a mother knows how to weep. Love thy mother!

Laughing.—Luther said that "the devil hated a good laugh." We can almost imagine his satanic majesty prowling about for prey among the downcast and gloomy, the satiated and greedy of mankind, and turning away from the hopeful and light hearted, the innocent and generous. If we admit that Luther's maxim embodies a truthful principle, we should apply such maxim to our course of life, and raise the laugh that will keep the devil out of our hearts and out of our lives.

Read This.

There was a great stir in the garden the other day. The po atoes were ready to jump out of their skins. The beets turned red to their very roots. The celery lost their heads, and the cabbages their hearts. The peas split their pods with excitement. The asparagus could with difficulty be kept in its bed. The parsley curled itself up in one corner. The cucumber alone maintained its habitual coolness. The cause of all this commotion was the presence of a noted vegetarian. The potatoes never took their eyes off of him.—*Punch's Almanac.*

And Then This.

There was a great stir in the fields the other day. The partridges suddenly limped away. The hares scampered. The pheasants whizzed through the air. The larks soared fast as they could, and every little singing bird was in panic. The sheep and lambs were aghast, and a hugely fat ox would have run away if he had had breath in him for it. All this horror was caused by the presence of a noted omnivorous epicure. The fish, lobsters and frogs were happy not to get sight of him. The very snails and periwinkles shuddered. The worms had ugly forebodings.—*Francis W. Newman.*

THE AREA OF CALIFORNIA.—For the information of those who have never visited the Pacific Coast, we will give the area of our State. It is not a State so much as an Empire, with its 188,981 square miles, or 130,927,840 acres. A recent authority makes the following showing: The combined area of the six New England States is but 68,338 square miles, showing that California has an area almost three times as great as this division of the Republic. The area of the six Middle States—New York, New Jersey, Pennsylvania, Delaware, Maryland and West Virginia—is 137,464 square miles larger than this section. The combined area of the twelve States forming the New England and Middle States is 205,812 square miles, showing that California contains an area almost as great as these twelve States. It is 78,225 square miles larger than the whole of Great Britain, the latter being 110,856 square miles. It would make twenty-four States the size of the State of Massachusetts, leaving 2,784 square miles; and the area of California would make one hundred and forty-five States as large as the State of Rhode Island.

TO THOSE WHO DRAW NOTES.—A man drew a note promising to pay one hundred dollars. He used a printed form, and did not close up the blank devoted to dollars, and after passing it as negotiable paper, somebody inserted "and fifty" after the one hundred and before the printed dollars. The note, thus altered, got into the hands of an innocent party who presented it to the drawer, and the Supreme Court decided that the maker of the note was liable for its face, because through negligence he did not draw a line between the word "hundred" and the printed word "dollars." Any testimony that the drawer might offer to establish the fact that he gave the note for one hundred dollars must go for nothing, as there was nothing on the face of the note would have changed the case. Let this be a lesson to all drawers of promissory notes. No one can be too careful in such matters.

Another consideration: the rogue who filled the blank in the note above, will everlastingly curse his own stupidity for not making it $99 87½ in stead of the $50 additional. Therefore, rogues cannot be too careful in such matters.

A WIFE'S PRAYER.—If there is anything that comes nearer to the imploration of Naomi than the subjoined, we have not seen it:

Lord bless and protect that dear person whom Thou hast chosen to be my husband; let his life be long and blessed, comfortable and holy; and let me also become a great blessing and comfort unto him, a sharer in all his sorrows, a meet helper in all the accidents and changes in the world; make me amiable forever in his eyes, and forever dear to him. Unite his heart to me in the dearest love and holiness, and mine to him in all sweetness, charity and compliance. Keep me from all ungentleness, and discontentedness and unreasonableness of passion and humor, and make me humble and obedient, useful and subservient, that we may delight each other according to Thy blessed Word, and both of us may rejoice in Thee, having our portion in the love and service of God forever. Amen.

BOOKS.—The tendency of a book should be to attract and fascinate the attention and interest of the mind whilst it does not rack the attention by spurring it forward feverishly. If at any given moment we can take up the book and get absorbed in it, and can at any given moment lay it aside and feel our heart and mind filled with it; if reading on, or reading again what we have already, gives us equal satisfaction, that book is the right reading for us.

THE gallant secretary of a life-insurance company, being in command of a platoon during the late unpleasantness at New Orleans, struck up the gun of one of his men, about to fire on a staff-officer, with the exclamation, "Hang it, don't shoot at him, we've got a policy on him!"

PEOPLE talk of evil deeds bringing their own penalties even in this world, and yet here is a sewing-machine agent who inherits $3,000,000 from an uncle in Scotland.

FRUITFUL in axe-idents.—A chopping sea.

YOUNG FOLKS' COLUMN.

The Fairy.

Come, little fairy, in your robes so bright,
Make me a fairy with your wand of might;
Dress me up fine in your silvery sheen;
Take me to the home of your fairy queen.

I want to tell all the children I meet,
Of the beautiful things in a fairy's street,
Of the little coach drawn by butterflies
Over the flowers, away through the skies.

But mother tells me it cannot be so—
To the fairies' home I never can go;
The fairy is only a pleasant theme,
For a childish thought, or a childish dream.

Buckeye, Yolo Co., Cal. M. J. H.

Be Content.

A boy was found on board the steamer who had no ticket, and no money to buy a ticket with. He stole on board and hid behind a pile of freight until we were far out on the lake. "Stealing your passage, hey?" said the second mate, dragging him to light and taking him to the first officer.

"What! a runaway?" said the first officer.

"Where from, and where bound?"

The boy made no answer.

"Have you a father?" "Yes," said the boy. "A mother?" "Yes." "A home?" "Yes." "Run off?" "Yes." "What for?" asked the mate.

"To be *my own master*," cried the boy, gruffly; "that's what for."

"Well, my boy, I am afraid you have chosen a pretty poor master," said a man standing by. "A man who counsels you to run away from home is the worst sort of a master."

It is the greatest mistake in the world for children to think that they are capable of being their own masters, and taking care of themselves. A kitten, a dog, a calf, a lamb, can better take care of itself than a child can. Children are longer dependent upon the kind offices of their parents than any other young creature. They have to be cooked for, and sewed for, and sent to school, and taught a thousand things, before they can ever be of any use either to themselves or other people. Nobody loves to do all these for them so well as parents. And in return for their care and love, children are bound to love and obey their parents. This is God's plan. This is the way the Son of God did when he became an earthly child, to show our boys how to do. There is only one thing told about his boyhood, and that is, when he wanted ever so much to stay longer in Jerusalem, he willingly gave up to his parents, and went back to the country, where he stayed, "subject" to them; and it was the first thing that could be said of him.

WHAT DID THE CLOCK SAY?—The clock upon the tower of a neighboring church tolled forth, slowly and solemnly, the knell of the departed hour. As the last sound died away, Willie, who was sitting on the carpet at his mother's feet, lifted his head, and, looking earnestly in her face, asked, "Mother what did the clock say?" "To me," said his mother, sadly, "it seemed to say, 'Gone—gone—gone—gone!'" "What mother? what has gone?" "Another hour, my son." "What is an hour, mother?" "A white-winged messenger from our Father in heaven, sent by him to inquire of you—of me—what we are doing; what we are saying; what we are thinking and feeling." "Where is it gone, mother?" "Back to Him who sent it, bearing on its wings, that were so pure and white when it came, a record of all our thoughts, words and deeds while it was with us." Were they all such as our Father could receive with a smile of approbation? Reader! what record are the hours, as they come and go, bearing up on high for you?

CHILDREN.—Juvenal says: "The greatest reverence is due to a boy." Plutarch relates of Cato the censor, that, when his youthful son was present, he was as careful of his words as though he was conversing with the Vestal Virgins, whose lives were devoted to perfect purity. Juvenal adds that nothing unseemly, either in words or appearance, should ever touch the thresholds within which a boy dwells. These sayings commend themselves to every one, and they scarcely need illustration or argument to enforce them.

A LITTLE five year-old boy was undergoing an examination in catechism. He made bad work of his lessons. The words were too long, and he did not understand them. The blunders that he made were so many that his maternal teacher was obliged to rebuke him sharply. In despair, he at last cried out, "Ma! ain't there any *kittenchism* for *little* boys? this *catechism* is so hard!" That's not bad for a five-year-old, is it?

A CHILD ON THE ETERNAL FITNESS OF THINGS. Mr. P's little daughter came running to her aunt one day, saying, "Aunt Kate, little Mattie has swallowed a button!" Seeing her terror, her aunt calmly replied, "Well what good will that do her?" Said the child very seriously, "Not any that I can see, *unless she swallows a button-hole!*"

GIRLS, as you value your lives, don't get up and get breakfast in the mornings. A young lady attempted it one day last week, and was burned to death. Show this to your mammas.

ALL the girls are becoming vegetarians. They wear turn-up hats.

USEFUL INFORMATION.

Breeze Coke.

A new industry has sprung up in our city in the last year or two that gives employment to quite a number of men, and, at the same time, utilizes one of the waste products of our mills which, heretofore, has been thrown away as useless. The technical name of the article is "Breeze Coke." The ashes from the furnace ash-pits are hauled into one place, and the first thing to do is to separate the larger particles of coke from the finer ashes by the use of a rake. They are then placed in a large tank of water, and all the coke that is fit for use floats on its surface, while the heavy ashes and cinders fall to the bottom. The breeze coke is then taken off the surface, and any light cinder that did not sink, taken out by hand, when the coke is ready for market. It is used principally by blacksmiths, and is the best article known for a forge fire. Messrs. Lewis, Oliver and Philips use 125 bushels a day for their forges, for their forges, for which they pay five cents per bushel, having furnished the ashes for them free, and allowing the breeze washers to sell all that they do not use for their own profit. Mr. Rodgers, of the firm of Rodgers and Day, informed us that the company shipped a car load a week ago into the state of Ohio, besides furnishing many of our local shops with them, while other firms have shipped three car loads a week. As most of the shops are at present doing but little, the breeze coke business, of course, is not so brisk, yet the three firms that are operating in the city find ready sale for all they can make. Mr. Schultz, the Carson street bridge builder, uses a large amount of the coke for his forge fires. The price ranges from 6 to 6¼ cents per bushel.—*Pittsburgh Leader.*

INVISIBLE INK.—If we write with a very diluted solution of chloride of copper, which has scarcely more color than pure water, the characters are invisible; but if gently heated, they become distinctly yellow, and are easily read. Let the paper cool, and they vanish; and they may be made to appear and disappear an indefinite number of times. If heated too strongly, the compound is decomposed, and the writing becomes permanently brown from the deposition of the copper. The chloride of copper may be conveniently made by mixing solutions of sal ammoniac and blue vitriol. The change of color in this and kindred cases is due to the removal of the water of crystallization by the heat. In chemical combination with the water, the salt is transparent; without the water, it is opaque. The salt, being very deliquescent, rapidly absorbs moisture from the air when cool.—*Boston Jour. of Chem.*

HOW TO FASTEN RUBBER TO WOOD OR METAL.—As rubber plates and rings are now-a-days used almost exclusively for connections between steam and other pipes and apparatus, much annoyance is often experienced by the impossibility or imperfection of an air-tight connection. This is obviated entirely by employing a cement which fastens alike well to the rubber and to the metal or wood. Such cement is prepared by a solution of shellac in ammonia. This is best made by soaking pulverized gum shellac in ten times its weight in strong ammonia, when a slimy mass is obtained, which in three to four weeks will become liquid without the use of hot water. This softens the rubber, and becomes, after volatilization of the ammonia, hard and impermeable to gases and fluids.—*American Artizan.*

PETROLEUM PRESERVATIVE.—We do not think that the value of crude petroleum as a preservative of wood is properly appreciated, especially among farmers. Even for implements, fences and buildings which are to be painted, it is a good plan to give one or two coats of petroleum first. It is very often the case that when the first coat of paint is placed directly on the wood that it is injured by the too rapid absorption of the oil by the dry wood. One or two coats of petroleum will prevent this, and save both oil and paint. For fork and shovel handles nothing can be better.

BRONZING WOOD.—Saturate the article first with hot parchment glue, previously filtered and not too weak; and when dry, coat while slightly warm, with red ochre mixed with a little yellow, and when perfectly dry coat a second time. Then rub the whole carefully with moistened shave grass and apply, with a brittle brush the bronze, of copper and brass or tin, mixed with alcohol. The article, as well as the bronze must be kept warm during the operation, either in the sun or near a fire. Two or three coats are necessary to produce a perfect effect.

RENOVATING BUGGY TOPS.—Enamel leather tops which have become hard, but have not lost their color, can be softened and much improved in appearance by oiling them with pure castor-oil. This oil is readily absorbed by the leather, and will not fry out in the sun. When the leather has turned gray, apply a coat of hatters' blacking, after the oil has struck in, and rub well with a cloth to bring out the polish. Most varnishes dry too hard to be used on tops, shellac varnish being the only kind that can be used with safety, but this will crack unless the coat be applied very thin.

DOMESTIC ECONOMY.

Tasteful House Furnishing.

The following, which we clip from an old number of Blackwood, may not be counted strictly as household "economy." In our time and place and with our actual ideas and actual wants, such rooms as are described below may be considered typical; they represent the highest form of realization of modern taste without its faults, or rather with as little of them as is consistent with the expenditure of any given amount of money and thought:

The Dining Room.

In the dining room there is an atmosphere which we do not often breathe elsewhere. All is dark brown cloth and ebony; but the weakened daylight which struggles in through the heavy curtains finds resting places, and marks points on the angles of the old *faience* which stands upon the dresser, on the steel hinges of the sideboards, which flicker vaguely on the yellow and dull blue of the hanging lamp. Brown walls set in black beading frame in the room, and lend its aid to its austere but grand effect.

The Drawing Room.

The drawing rooms are painted in a tint which the catalogues of color do not define—something between a fading China rose and half-ripe Indian corn. Narrow banks of faint pearl grey surrounded each panel, and here and there a thin line of gold relieves the gentleness of tone. Chairs of varied shapes, all made for comfort and suited to the position which each sitter may wish to take, stand about in pleasant irregularity. They are clothed in different stuffs of all the finer sorts, so that the varying sheen of damask, silk and satin may prevent the uniformity of one material; they are embroidered with fantastic flowers of every hue, but calculated so that each shall mingle with and neutralize the other, the object being to subordinate each part to the whole effect. As the French say, "nothing screams," for all fits well together.

And plants with variegated leaves, and books whose very binding has been calculated for the place it is to occupy, and the thousand trifles which lie about, and the work basket from which skeins of wool are cunningly allowed to overflow, because their colors will serve a purpose, and the laced handkerchief left trailing there in the angle of a sofa, in order to light up by its whiteness a too dark corner—all these things show thought; all are contrived with skill and art, with the one object of creating a thoroughly charming room, where the mistress asserts herself in her own handiwork.

The Bed Room.

Now go to the bedroom, and from the doorway observe it with your eyes, for never have you seen a picture so complete. The walls, the hangings, and the seats, are all in pale blue satin, edged sparingly with velvet of the same shade, and embroidered daintily with pale moss rose buds, swathed in still paler yellow leaves. But this description, though exact, gives no idea of the effect produced by that wondrous tissue, of the incredible effect of delicacy and thorough feminine elegance which it sheds around. The room is filled with a vague floating perfume of charm and grace; its every detail is combined to aid and sustain the almost fairy aspect it presents. The bed is shrouded in thickly wadded satin curtains, inside of which hang others made of muslin so vaporously filmy that its folds seem almost mist; the coverlet which hides the lace trimmed sheets and pillows, is in blue satin, lined with eider down, and covered with the same veil of floating white hanging down in a deep flounce over the wood work of the bed. The toilet table is the same—a nestling mass of transparency and lace, with blue beneath; and knots and streamers of mingled satin and velvet round. On the chimney piece stands a clock and candlesticks of Sevres china. The piano is in pale *boise de rose*, (not rose-wood, which is a very different thing) inlaid with plates of Sevres to match. At night light comes from above, where hangs a lamp of Sevres again.

GRUEL.—We give the following from the *Health Reformer* concerning what seems a very simple matter—the making of gruel. It is important that every woman should know the best way of preparing that which is both food and medicine for the sick: "Several articles may be used, but wheat-meal is preferable. Have the water boiling. Make a paste of the meal and cold water, and stir it slowly. It must not stop boiling for a moment; if it does it will have a raw taste, which you cannot remedy by cooking for hours."

POTATO PUDDING.—With a pound and a quarter of mealy potatoes boiled very dry and mashed perfectly smooth while hot, mix three ounces of butter, five eggs, a few grains of salt and the grated rind of a lemon. Pour the mixture into a well buttered dish, and bake in a moderate oven three-quarters of an hour. When done sift some sugar in it.

WASHING WINDOWS.—In washing windows or other glass, never use soap, unless it can be thoroughly rinsed off; wash off the dirt in clean warm water; after the glass is dry, rub with a little paste or whiting and water, in the center of each pane. With another cloth rinse over the glass, then rub it with a dry cloth till it shines like crystal.

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SAN FRANCISCO:

Saturday, November 14, 1874.

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THE EUROPEAN NURSERY, Wm. Appleby, proprietor, is situated at the corner of Mission and 21st streets in this city. It occupies a lot 280 by 520 feet. The nursery has been under cultivation a few years, yet they have 100,000 plants in pots and boxes, besides any quantity of hardy plants which remain out all winter. There are four hot houses on the place. There are in the nursery over 150 varieties of roses, 30 of geraniums, 20 of fuchsias and 12 of verbenas, and a beautiful plant of the *cactus triangulala* was in bloom last week, displaying a magnificent flower 12 inches in diameter.

CORRECTION.—In an article in the RURAL PRESS of last week, we had occasion to allude to an article which we incorrectly credited to the Mendocino *Democrat*. The credit should have been given to the Sonoma *Democrat*.

Seed Time in California.

Anyone embarking in agricultural pursuits, no matter what country or what district he may be in, will miss the traditional regularity of "seed-time and harvest," and of many other matters connected with the farmers' calling. The irregularity of the seasons in California—of seed-time especially—and the great diversity of soil and climate here, have been amply dilated upon. Probably the subject has been amplified a little too much; and the contrast between California and Eastern farming, as regards certainty and regularity, certainly is carried to a point which the facts in the case will not warrant.

The variations in the seed-time in the Eastern States are reckoned by days; whereas with us they range by weeks; but we should consider that, owing to the comparative length of the growing season in the two localities, a day with them is of as much consequence as a week with us. When we hear about the farmers there always getting in a certain crop from the first to the tenth of any month, we might be led to admire the regularity of the system, if we did not know that the seed could not possibly be put in before the first of that month and that the crop would not mature if it were put in after the tenth.

The seed-time of California may be said to extend throughout the year in what is known as the agricultural portions of the State. The ground is even now being prepared for seeding with

Wheat, Barley, Oats and Rye,

The recent unseasonable rains having accelerated the plowing season. Good farming—and we have more good farming here than we get credit with—does not neglect to steal a march on the planting season whenever this can be done. As a general rule the grain is sown as early in the season as the condition of the soil will permit. Reports from the crops of the last season are in favor of late sown grain; this however was an exceptional instance, and being so considered by farmers will probably have no influence in their future course. In following the course of grain sowing in this State we are not to be guided by geographical rules, but by the supply of water, natural or artificial, upon which the sections of country may depend. The capacity of soil to retain its wintry supply of moisture will, of course, influence to some extent the farmer in his choice of seed-time; but the main consideration is the summer supply of water obtainable. Where irrigating facilities exist, or where neighboring mountains supply the surrounding valleys with moisture by seepage, or the district is benefitted by fogs from the sea coast, the necessity for early seeding is not so urgent; but where these resources are wanting, and the soil becomes dry in early summer, then early sowing is indispensable.

Potatoes

Of the Humboldt and other varieties for general use should be planted at once, in order to have their growth accelerated as much as possible by aid of the winter rains—thus obtaining the use of the land for the second crop—at an early period in the coming season. In localities where the soil dries out early in summer, the Early Rose and other early varieties are also planted about this time.

In localities visited by spring frosts the planting of

Indian Corn

Is of course delayed until after the period when these are to be expected; still early planting is desirable, in order to have it attain as much growth as possible, before the dry season fairly sets in. Rapid growth is essential in corn growing, and this is materially aided by warm nights. In some of the best corn-producing portions of America, planting can not be done before the 10th of May; and nipping frosts may be expected about as early in September, yet within these four months it attains perfect maturity; but this it could not accomplish if its growth were even partially suspended at night. Where the nights are hot and sultry, accompanied by copious dews, it attains, probably, a larger portion of its growth at that time than by day; the rapidity of this growth also aiding the plants in escaping the ravages of worms. Our most successful corn growers seem to prefer to plant quite early in April.

The same precautions against frost that govern the planting of corn, are used in planting

The Bean Crop.

But where no frosts are to be expected this crop may be put in as soon as the ground can be got ready; or planting may be delayed until spring where moisture may be relied upon during the growing season. The planting of tomatoes is governed by the same rules. Cabbages are planted at any and all times, subject only to the supply of moisture to be expected.

There are various methods practiced in this State in growing

The Onion Crop.

Those engaged most extensively in this business grow them from seed. Some practice the transplanting method; constructing beds of very rich, finely pulverized soil in the fall, and in these they sow the seed at once, very closely; sometimes in drills and sometimes broadcast. As soon as the young onion begins to bulb they are transplanted to the field. Where transplanting is not practiced the sowing is delayed until the latter part of winter, when the seed is sown in drills. People here prefer a mild onion to a strong one; consequently the red onion is not much cultivated. The yellow Danvers is the leading variety; next to this come the yellow and the white Silverskins. A good many top or "button" onions are grown here. In growing

The Beet Crop,

Especially the sugar beet, it is extremely important to secure a uniform growth. On land that is subject to overflowing, or that retains a surplus of water, any crop growing thereon is necessarily retarded in its growth, and a suspension of growth is injurious to crops generally, and particularly beets. If they are stopped in their growth, even for a few days, they are injured permanently. Vegetable life cannot remain stationary any more than animal life. With the stoppage of growth, even temporarily, the maturing process commences, and it will be found that where beets have stopped growing from a surplus or lack of moisture, or from any other cause, when these causes have been removed and the growth is resumed, they will be inclined to send forth seed stalks; showing that the maturing elements had been called into requisition during the brief suspension of growth, and even though the tendency to go to seed may be removed, and the subsequent growth all that could be desired, the vegetable will be imperfect in consequence of the fiber of the previous growth being hardened. In growing beets for stock this is of less consequence; and in many places they are sown in the fall for this purpose; but it is only in localities particularly favored that the requisite growth for sugar beets can be obtained except by sowing in the spring.

Street Sweepings and Fertilizers.

In the large centers of population in Europe considerable attention has been paid of late years to the utilization of sewage. In this country few attempts have as yet been made in this direction, though it is probable that before many years it will become a subject of more importance than we consider it at present. In England fertilizing substances of every description are extensively used, and the land is supplied with what it needs in the proper quantities according to the class of crop. Detailed scientific experiments have been made and the results given to the public, and the people have not been slow to adopt the systems and substances that have been proven practically to be successful. The main thing, of course, has been to get a substance which was plentiful, efficient and at the same time cheap.

Near some of the large cities in Europe establishments have been put where night soil is collected, deodorized and prepared for fertilizing purposes. In some of the English towns the "pail" system of removing night soil has been adopted. This system consists in placing an iron pail under the seat of the privy to receive the night soil, and which is removed as frequently as necessary through a small door. The pails are covered with a lid and placed in a wagon specially constructed for the purpose, provided with a roof and doors at the sides for the admission and removal of the pails. An empty pail is substituted for a full one at each collection. This system is in vogue in six or seven of the principal towns in Lancashire, having originated in Rockdale. The company which collects this material have machinery, retorts, etc., for utilizing the sweepings of the streets. The sweepings are exposed to an intense heat in the retorts and are converted into a finely pulverized charcoal. This makes a very efficient charcoal solely from street sweepings, and available for deodorizing purposes, being adapted for use in dry closets, the wards of hospitals, public urinals, mouths of sewers, and for using with all kinds of offensive material. By its use all decomposing substances are rendered perfectly harmless, so that they may be removed without offence or damage in the daytime instead of at night.

On the arrival at the yards of the wagon with the pails above spoken of, their contents are emptied into a shallow tank formed in the floor of the shed and a few shovelfuls of the charcoal are immediately thrown on the night soil. A reporter of the *Engineer*, who witnessed the operation says the effect is certainly surprising, the offensive odor being immediately removed. The mixture is then well incorporated, placed in sacks and sold for manure at a very reasonable price, which, however, leaves a profit to the company. The street sweepings are also ground and mixed with certain proportions of clay and then charred, in which condition they are used for the filtration of sewage. The manure made by this process is very good, as it is composed entirely of night soil and carbonized street sweepings, which latter contain a large quantity of animal droppings. The works where this business is carried on were erected at Salford to ascertain, experimentally, whether charcoal possessing powerful deodorizing properties could be made from the street sweepings at a cost which would be commercially profitable.

Fruit Drying.

As we Saw it at San Lorenzo.

The ride from Oakland to San Lorenzo is exceedingly pleasant. It leads you through almost one continuous orchard and garden. In its efforts to become a town San Lorenzo has not been very successful, a few scattered houses, one hotel, two small stores, a schoolhouse, which also answers for a church, and you have named all—no, not all. There, in nearly the center of the village, stand the works of the San Lorenzo Fruit and Vegetable Preserving Co., something which would naturally attract the attention of a representative of the RURAL PRESS. Upon presenting ourself at the door we were taken in charge by the polite superintendent, Mr. Geo. Martin, and shown through the establishment from "cellar to garret." The main building is 40x80 and three stories high, besides the basement.

The building contains five Alden evaporators,

The First Erected on this Coast.

In the basement are the furnaces, one for each evaporator. A pipe leads from each furnace to the main flue, which is of brick and composed of six small ones, one for each furnace and one for the engine. The fuel now used is Sydney coal, costing from $10 to $15 per ton. Formerly the company used Mt. Diablo coal and coke, but find the Sydney the most desirable and economical. The first floor is the work room proper, where the fruit and vegetables are prepared and placed in the evaporator. These evaporators have been so often described in print that a full description at this time is perhaps unnecessary. Each evaporator contains when full 50 screens, 4¼ inches apart. The fresh fruit is placed in the shaft at the bottom, several feet above the furnace. It is allowed to remain from five to six minutes. Then a bell is rung, and a man at the top by giving a crank five revolutions moves the frame up 2¼ inches and another frame of fresh fruit is entered, and so on until the shaft is full, then each time a fresh screen is entered at the bottom one is removed from the top. Pears require about 3¼ hours, apples three, and vegetables which require a lighter heat also require a longer time. The temperature is closely watched and varies from 200° to 300° Fah. The heat is

Never Allowed to Die Out

From Monday morning until Saturday night, and if perishable fruit is on hand work is continued during Sunday. The entire work is done by Chinamen. Sixty are employed at present, thirty during the day and thirty at night. Their wages are 75 cents per day and they board themselves. The arrangements with the company are such that only those necessary to do the work are employed, the others lying in wait. This arrangement is the most economical possible.

Some of these Chinamen work eighteen hours out of the twenty-four. One hour is allowed at noon and one at midnight. Mr. Martin says they will eat five minutes and sleep the other fifty-five. Upon the first floor is also the steam chest, where most of the vegetables are placed about three minutes before before being put into the drier. This process is new, was originated by this company and is found to greatly facilitate the process of curing. The second floor is used for packing and also contains large bins where the fruit is placed in piles when removed from the drier. It is allowed to remain seven hours before being packed. During this time it goes through a kind of

Softening Process

And is much more pliable in packing. The fruit is put up in one, ten, forty and fifty pound boxes.

The third floor is used for removing the fruit from the driers. One difficulty has been found in these evaporators which has been avoided in those recently put up. It consists in contracting the top of the shafts to about one-fourth the size of the column. It is found that this does not give room for the escape of the moisture.

Every thing is being conducted on the most economical plan this season, and the company are determined to solve the problem whether fruit drying by this process can be made profitable. The superintendent is giving his most careful attention to every minutia. The works are

Run to Their Fullest Capacity,

And their agents in the city, Messrs. Littlefield, Webb & Co., are finding sale for most of the fruit as fast as it comes in. In fact, the factory is not able to supply the demand for some fruits. This firm has taken a very active interest in finding a market for the Alden dried fruit and vegetables, and are deserving of the success which is attending their efforts. Each one of these evaporators consumes about 300 pounds of green fruit in twenty-four hours, making 1,500 pounds for the factory. The season commenced the 25th of May, and will continue until some time in February—say 250 days, working 1,875,000 pounds of green fruit and vegetables during the season. Most of this will be furnished by the stockholders of the company. During the current season the capacity of the factory was found to be inadequate to drying the currant crop furnished by stockholders.

The American Beverage.

There is evidently a strong tendency, both in California and throughout the Eastern States, to return to our old-time American beverage, cider. Excessively rigid temperanoe notions undoubtedly had some influence in causing a decrease in cider-drinking; bnt the national preference of the inoreasing foreign element in our population has nad more, and the power that fashion exercises over appetite has also been felt here. Our fickle people have in many cases discarded the pure juice of the apple as a household drink, and snbstituted domestic wines made from the red and black currants, gooseberries, the wine plant, the elderberry, and other bases for wine, to which various ingredients were added, forming compounds more difficnlt and expensive than cider in making, and the drinking of which was quite as deleterions to health, and as reprehensible from the temperance stand point; and which also required a good deal of "make believe" on the part of the imbibers thereof, to make them as palatable as cider. And what, we would ask, has been the sanitary or moral gain to the country in substitutmg the lager-beer keg for the cider barrel in the cellars of our householders?

American cider, even as produced forty years ago, with the imperfect machiuery then available and under other difficulties then existing, was a cheap, good and wholesome drink; one that was well suited to our climate and to the habits of our people—especially farmers. It was one of the good things that autumn brought to them; it was a regulative ingredient in the winter's fare, and in the seasons of planting, haying and harvesting it was a healtlful, nourishing drink, its acidity and "hardness" being quite unobjectionable to those who had been drinking of it during its hardening stages. The quality of Eastern cider has been greatly improved of late, in consequence of improved machinery, better fruit and greater care in making and storing. All who are acquainted with the old style of cider-making, know that nothing but the refuse of apples were used, and even these were left upon the ground to partially rot, and were then carelessly gathered and hauled to the cider mill, where they perhaps remained for a fortnight before grinding, owing to the great rnsh of business at this season, and the limited facilities for manufacturing. Now, however, cider-making is as greatly improved as auy other part of farm work.

Battle Creek, an enterprising little city situated in the center of the apple district of Michigan, has just erected a very extensive establishment for the manufacture of cider on an elaborate scale. The buildings are just outside of the city, and are located with special reference to easily receiving snpplies and making shipments, side tracks from two railroads having been built for their accommodation. The most intoresting portion of the establishment is the cider manufactory, a large building filled with a bewildering confusion of tanks, tubs, complicated machinery, presses, boilers, engines, etc. The presses, of which there are three of the largest size, are capable of making 400 barrels of cider a day. The apples find their way into the mill hopper through a long bin or trough large enough to hold 10,000 bushels, which passes through the side of the building to the streets, where the fruit can be thrown into it from the farmers' wagons. The cider, as it trickles from the presses, falls into a large vat beneath the floor; thence it is carried through pipes, by means of a force pump, to several tanks in the second story, where it is again filtered. From these rubber hose is led outside the huilding to the freight cars to be loaded. The empty barrels being placed in the cars, they are filled one at a time by simply turning a stop-cock, which allows the cider to pass from the tanks through the hose and into them. Including the boiled, four kinds of cider are made—the first is the simon-pure juice, the second is a clarified article, and the third is a compound of cider and hops. This last has become a very popular drink for bilious persons. A fruit-preserving house, four stories high, and of peculiar construction, is another novelty of the establishment. This has a capacity of 30,000 barrels, and fruit placed in it oan be kept perfectly sound for three years. The walls are of solid stone, 30 inchos thick, and the floors and walls are covered and backed up with 10 inches of sawdnst, coverod with galvanized iron.

Cider as an article of commerce is also greatly enhanced in value. Twenty-five years ago the standard price was one dollar per barrel; now it sells readily for five dollars. Cider ought to keep better in California than in the Eastern States. Our dry climate, with its equable temperature, should preserve freshness and flavor throughout the summer. We do not believe in any componnds for improving cider. Give us the pure juice of the apple.

We find in a recent numbor of the *New England Homestead* the following sensible suggestions in regard to disposing of cider: When the cider is made strain out all the pomace you can, then leach through a barrel of clean sand. If the sand is not entirely clean, put in water until it runs clear, then put in cider, which will drive out the water remaining in the sand. Put in clean barrels; if you use liquor casks, look out for the poisonous drugs in the bottom, few are free from them. A good, well-soaked and clean cider vinegar cask is as good as any (discard those that have contained acid vinegar); fill the casks full, so that they will work out at the bunghole, and keep them so until the fermentation has ceased. Then bung tight and keep till March; then bottle, corking tight, with good, firm corks, and tie the corks in. If you add a raisin to each bottle it will add to the flavor. Cider treated in this way will keep for years, if you don't drink it. If bottling is delayed until the warm weather comes, and the second fermentation commences, it will be impossible to make the bottles hold, or prevent the cider from turning to vinegar. The secret of having cider keep well before bottling, is in freeing it from all dregs or emptyings, and after bottling and corking tight, to exclude air, to be kept of course in a cool cellar.

A Curious Experiment.

Every now and then an old wonder, which has been sleeping in the unused corners of a few memories for years, is revived and excites a momentary surprise, makes a new draft upon our credulity, and again subsides. It appears to have no connection with the acts of "spiritualists," although such people and the practitioners of natural magic have a general monopoly of latter-day miracles This ancient wonder—sometimes called "body lifting," sometimes "buzzing up," it is said is just now being revived again in East Norwich, Long Island, where it is making quite a sensation, and is said to be regarded as an innocent amusement quite apart from the so-called spiritual demonstrations of the present day and times.



A CURIOUS EXPERIMENT.

In order that the description which follows may be moro readily understood, we have introduced the following illustration which appeared for a similar purpose, several years ago in an eastern publication. This is what a newspaper correspondent says ahout it as now practiced on Long Island:—

"The young people collect together in companies and lift each other by the tip ends of the index fingers. The subject to be lifted lies down upon the carpet, face upward. He is instructed to assume a stiff or rigid state, approaching the condition of a stick of wood as much as possible.

"The lifters, six in number, stand three on each side. Then at a signal, the snapping of a finger by the leader, the lifters and subject inhale the atmosphere, filling their lungs to their utmost capacity. When this is done the lifters s oop and try to lift the subject. If they fail they again assume an erect attitude, and again inhale; then try again, and thus repeat the operation till at last, generally the second, third or fourth trial, up goes the subject like a feather, being frequently borne to the ceiling on the tip ends of the fingers of the lifters. They claim that the heaviest person lifts as easily as the lightest. Subjects weighing two hundred pounds have been thus lifted by four persons. Some declare that the operation produces an exhilerating sensation; others that it causes depression.

"The writer of this article was thus lifted, and experienced no unusual sensation more than he went up without any apparent physical effort on the part of those who lifted him. It is said that if one of the actors laughs or does anything to cause him or others to exhale while the subject is going up, the latter will immediately come down unless he is caught by main strength. The cause of all this the operators claim to know nothing about."

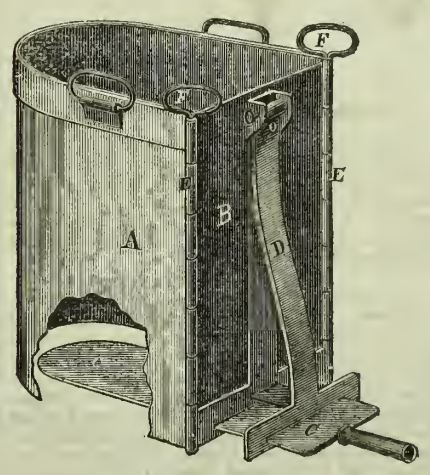
This writer thus speaks of his own experience with apparent candor. It is true he does not give his name, but he doubtless had his own good reason for remaining concealed—probably for fear of ridicule. It is a very simple experiment to try.

The only materials required are about five able-bodied men, immeasurable faith, and a securely locked and shuttered room for a laboratory, with a lone tallow dip for witness. The operators ought to he sworn to keep each other's secret, and in case they fail, of course they will say nothing about it. If they succeed, the bond of secrecy to be annulled by snccess.

It is possible that tbis story may bo of a piece with such as are often honestly told by school boys who have done somo wonders, or think they have, and they recollect hearing that their fathers did the samo things whon they were boys; and thus the traditions descend through the generations, and now and then the newspapers record them in more durable shape. Still, after all, it may not be "a school-boy's tale—the wonder of an hour;" and if it he indeed true, it doubtless has a philosophy which may be penetrated. Who knows —this toy of time, this youth's plaything, which age dimly remembers yet feels obliged to laugh at, may evolve a true principle of natural law, which it is said to suspend or set at defiance? There have been many childish blunders npon truths, and this may be one of them, continually thrusting itself upon the attention of mankind for recognition.

Sir David Brewster in his "letters on Natural Magic," speaks apparently somewhat seriously of the matter as follows:—

One of the most remarkable and inexplicable experiments relative to the strength of the human frame, which you have yourself seen and admired, is that in which a heavy man is raised with the greatest facility, when he is lifted np at the instant that his own lungs and those of the persons who raise bim are inflated with air. This experiment was, I helieve, first shown in England a few years ago by Major H., who saw it performed in a large party in Venice under the direction of an officer of the American navy. As Major H. performed it more than once in my presence, I shall describe, as nearly as possible, the method which he prescribed. The heaviest person in the party lies down on two chairs, his legs being supported by the one and his back by the other. Four persons, one at each leg and one at each shoulder, then try to raise him, and they find his dead weight very great, from the difficuty they experience in supporting him. When he is replaced in the chair, each of the four persons takes hold of the body as before, and the person to be lifted gives two signals by clapping his hands. At the first signal he himself and the four lifters begin to draw a long and full breath, and when the inhalation is completed, or the lungs filled, the second signal is given for raising the person from the chair. To his own surprise and that of his bearers, he rises with the greatest facility as if he were no heavier than a feather. On several occasions I have observed that when one of the bearers performs his part ill by making the inhalation out of time, the part of the body which he tries to raise is left, as it were, behind. As you have repeatedly seen this experiment, and have performed the part of both load and bearer, you can testify how remarkablo the effects appear to all parties, and how complete is tho conviction either



Device for Moving Plants.

that the load has been lightened or the bearer strengthened by the prescribed process.

At Venice the experiment was performed in a much more imposing manner. The heaviest man in the party was raised and sustained upon the points of the forefingers of six persons. Major H. declared that the experiment would not succeed if the person lifted were placed on a board, and the strength of tho individuals applied to the board. He conceived it necessary that the bearers should communicate directly with the body to he raised. I have not had an opportunity of making any experiments relative to these curious facts; but whether the general effect is an illusion or the result of known or of new principles, the subject merits a careful investigation.

Some friends of ours who tried this experiment a week or two since, in Oakland, across the bay, hear out the statement of Sir David Brewster. A young man woighing about 130 ponnds was lifted in the mannor described, by four persons, two being ladies. When the experiment was tried on the heavy weight of the party, who turns the scale at over 200 pounds, it did not work, nor did it work well when any one of the lifters failed to draw his breath at the proper time. But in the oourse of the evening, three persons in the party were raised in the manner described. They were not raised as high as represented in tho engraving, but were simply lifted up a foot or more from the table on which they lay, and then only kept up for a moment.

Device for Removing and Transplanting Trees.

Timotby Carrol, of Anaheim, Los Angeles county, California, patented last month through the agency connected with this office, a device for removing and transplanting trees, which is an improvement on one patented by him last June. The invention consists in a novel construction of the enclosing case, by which it can be employed in removing plants with large or spreading tops or branches, without disturbing them. The enclosing case is provided with a strengthening band at the top, and the arm, through which the slide passos, is hinged so as to stand at any distance from the side of the case, or swing up entirely out of the way.

The accompanying engraving shows the apparatus. *A* is the enclosing case, which surrounds the tree or shrub, and is driven into the gronnd so as to enclose the roots and a portion of their surrounding earth. This case is made in an arched form, as shown. The two sides of this arch are united by a stont arm or gate, *B*, which extends across between these sides, and may he hinged in any suitable manner. In the present case, sections are formed to interlock, and the rods, *F*, are passed through like the pintles of a hinge. Either one or both of these rods may be removed, and the case can be passed around the body or stalk of the shrub, when the portion, *B*, can be replaced and the rods, *F*, put back so that the shrub will be enclosed. The shell, *A*, can then be forced down, and the slide, *C*, at the bottom, pushed in heneath the roots and enclosed earth, and the whole can he lifted by the handles and carried to any desired point.

The top of the shell, *A*, is strengthened by a stout metallic rim. A plate extends down the middle of the gate, *B*, and two lugs are formed near the top, between which the arm, *D*, is hinged. This arm, *D*, has a T-shaped extension at the lower end, and through a slot in this extension the slide, *C*, passes, as well as through a similar extonsion at the bottom of the plate. These two plates guide the slide, *C*, and a projection, *O*, from the hinged arm, *J*, prevents it from shutting too closely against the side of the gate, which is thus adjustable, out or in, as may be required. By taking out the pintle at the top, the arm, *J*, can be entirely removed, after withdrawing the slide, *C*, so that the case will take up but little room. Further information may be derived from the inventor, by addressing as above.

River Bank Nursery.—We unexpectedly made a call upon Mr. L. F. Sanderson, proprietor of this nursery, last Monday. It is situated northeast of San José, comprises 15 acros, and has a desirable sandy loam soil. Mr. S. has worked the place nine years, and shows some of the finest growth of trees in tho country. His large specimens of the Lawson cypress are the finest we have yet beheld. Among other choice trees, for shade and ornamental purposes, we were shown the French cork bark elm, silver maple, white ash, tulip, or white wood of the Western States, and lindon. He has a fine variety of others, in good condition. At this time the variegated foliage in his nursery shows to advantage, and reminds one that more attention can be given to advantage by those who are planting ornamental grounds than has been the rule heretofore in California. In this line is an English oak, as full tintod and beautiful as any shrub that can be found in N. Y. Central Park. Japan ginko (*Salisburia*), a coniferous tree which shods its foliage, is highly recommended. Its light, orange-tinted leaves are soft and handsome. The tree is well recommended. A weeping out-leaf white birch treo stands as a novelty among others. The Scotch larch, a handsome evergreen, is just shedding its foliage. Menzies' spruce, a native of the northern coast hills of California, is a handsome tree of large and rapid growth, worthy of planting on large grounds. We had barely time to glanco into the hot-houses and see that they wore well filled with choico plants and flowers. Mr. S. evidently takes much interest and pleasure in his calling.

Professor Hilgard Accepts.—We are happy to announce that Prof. Hilgard has accepted the professorship of agriculture in the University of California. Tho State generally, and our great agricultural interests in particular, are to be congratulated on securing the services of one whose record gives assurance of competent ability to fill the high position which has been tendered him, and that he is an earnest practical worker, as well as a thorough scientist.

Somewhat Cheeky.—We received recently an anti-railroad communication headed "For the Pacific Rural," and while having it under consideration on our table we chanced to look over one of our exchanges, and saw in its columns the same communication, with the same address and signatnre in full, the only difference being in the names of the two papers to whfch it was sont. This is one too many for an original communication.

Sonoma county's vintage this year is valued at over $1,250,000.

Salmon Hatching.

John Muir, the mountaineer geologist, has made a tour this year through the foothills of the Sierra, and his wanderings having brought him to the McCloud river, he writes an interesting account of the fish breeding establishments there. In 1873, one and a half million of eggs were procured and shipped; this year 5,752,500 eggs were obtained and distributed over the United States, while 25,000 eggs were sent to New Zealand. Of the operations Mr. Muir writes as follows:

Toward the end of August the McCloud river salmon are ready to spawn, and are then seen pushing their way up toward the sources of the river to deposit it. Mr. Stone has constructed a salmon dam at this place which stretches across the river from bank to bank. In front of this dam the salmon collect in great numbers, and keep up a constant plashing in their efforts to leap over it. Most of them are unsuccessful, and fall back wearied and glad to rest in the first slow-currented eddy. This eddy is a few yards below the dam, and here the tired salmon are captured, and the eggs stripped from them into suitable vessels. The eggs are then impregnated by pressing the milt of the male salmon upon them, and stirring them gently, so as to bring every egg in contact with it. The eggs, thus artificially spawned and artificially fecundated, are then placed in troughs through which a stream of pure water, carefully filtered, is kept flowing. The eggs measure about ⅓ of an inch in diameter—are pink in color, and look like ripe currants. After they have been in the hatching-troughs about 16 days the eye-spots of the coming salmonets begin to appear, and they are now ready for shipment. They are packed in boxes, in layers spread upon mosquito netting, between layers of green, living moss, and these boxes are packed in crates with ice, to keep them cool. In this way, with adequate care and skill in handling, they may be sent safely by ship, wagon or rail, to great distances. After arriving at their destination, they are replaced in hatching-troughs similar to those from whence they were taken, and the hatching process continued until the young fry break the shell and swim. In procuring the 5,752,500 eggs mentioned above, about 5,000 salmon were taken, more than half of which were males.

Thus it will be seen that the berry-like eggs or seeds are stripped from the salmon like peas from a pod. The empty fish husks average about fifteen pounds, and fall to the share of the Indians, who dry them for winter. It is supposed that all salmon die after yielding their spawn even in the natural way. This destruction, therefore, of so many handsome fish legumes need not be deplored. Here the question is sure to rise, Why not capture the breeding salmon and transport them alive to the waters where they are wanted, and allow them to spawn and hatch in their own natural way? Before the discovery of artificial fecundation by Jacobi, this method was the only one known and is still in practice to some extent. The troutless streams that rush out from cool cañons of the Sierra in the Owen's river valley were stocked last year by a German, who packed trout in cans on the backs of mules from the King's river, Yosemite, over a pass of 12,000 feet hight. But this more natural method is too slow. Nature does not seem to think of hatching more than one or two in a hundred of the eggs that are spawned, whereas Mr. Stone hatches more than ninety-five per cent. by the artificial method. In every hundred, Nature gives one to the frog, one to the mink, one to the snake, and one to the water ousel, etc., and hatches one into a salmon. In like manner the nut-eggs of pine trees, contained in burrs, are sufficient for the food of many a bird and squirrel as well as for the wants of reproduction.

Artificial destruction has made lakes and rivers as barren as deserts, so far as fish-food is concerned. Prior to the gold period the Tuolumne abounded in salmon, but the mud of mining destroyed them, or drove them away. The Connecticut was also a salmon stream until obstructed by dams, and poisoned by those strangely-complicated filths for which our civilization is peculiar. When fish-ladders are constructed over dams and the sewage of towns and factories is consumed upon the land instead of being poured into the water, leaving paths from the ocean to the spawning grounds free and clean, then our migratory food fishes, such as the shad and salmon, will again become abundant, and that ere long, provided artificial destructions be compensated by artificial reproductions.

Fish may be tamed, and many engage in their culture for the novelty of the thing, or for a natural love of playing and choring in an ichthyological atmosphere, but Stone and his fishy co-workers mean bread and business, and their practical success, considering the infancy of the piscicultural art and the magnitude of the obstacles which had to be overcome, is truly remarkable.

Besides the hatching and distribution of McCloud salmon ova, Commissioner Stone brought shad, bass, whitefish, eels, horn pouts and oysters from the East mostly for the fructification of California waters. The first aquarium car destined for this State tumbled through the railroad trestlework into the Elkhorn river with all its precious fry, much to the discomfiture of Commissioner Stone, who had not the slightest intention of thus casting his shad upon the waters, though some may grow and be found again after many days.

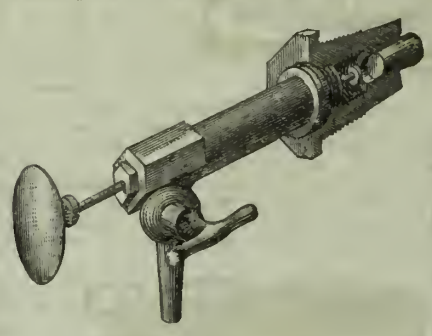
Nearly a million of the eggs taken here this season have been fully hatched and turned into the McCloud river, from whence they were derived, and for this host of wriggling fry the State of California pays the Commission $1,000.

The eggs hatch out into finned fishes in about fifty days, more or less, according to the temperature of the water. When they break the shell they seem eager to try life, and immediately ply their fins. They are then only half an inch long, frail and semi-transparent, and utterly incapable of gaining an independent living; but nature makes that all right by providing each youngling with a bag of provisions big enough to last six or seven weeks, and at the end of this period they are grown sufficiently strong to shift for themselves. Their provision sacks are twice as heavy and bulky as their bodies, and they cannot swim far with them at a time. In resting they frequently lean back or lie down upon their provisions, just as mountaineers do when weary and heavy laden. Long may McCloud salmon swim.

Tap and Faucet for Beer Casks.

John G. Schiffer, of this city, has recently patented through the Scientific Press Patent Agency, an improved tap and faucet for beer casks, an illustration of which is shown on this page. The invention is a device for making the connection between the interior of the beer cask and the faucet, and consists in the use of a plunger or rod, which passes through the faucet, being packed so as not to leak. The socket into which the faucet screws is screwed tightly into the barrel, and its central opening is stopped by a plug. After the faucet is screwed down to its seat, a blow upon the sliding rod or plunger forces it against the plug, thus driving it into the barrel, and leaving the connection open to the faucet. The construction of the faucet is easily seen by means of the engraving.

When it is to be used the faucet is screwed into its place, and the head of the rod is struck



Schiffer's Faucet for Beer Casks.

so as to force its inner end against the plug, and thus drive it into the cask. This allows the liquid in the cask to fill the faucet, in readiness to be drawn by turning the cock, and there will be no waste by making the connection with the faucet, as the whole is made tight before the plug is driven out.

Incombustible Paper. — Another attempt has been made—and it is claimed successfully—by a foreign inventor, to produce an incombustible paper; not an article that is absolutely indestructible by fire of any degree of fierceness, but one which will, under such circumstances as fires in houses, factories and other buildings, be measurably fire-proof, and thus insure a reasonable chance of preservation. This paper is prepared from a pulp consisting of vegetable fiber, asbestos, alum and borax, in the following proportions: Vegetable fiber, one part; asbestos, two parts; borax, one-tenth part; and alum, two-tenths of a part. The vegetable fibers are minutely divided, and treated in the manner usual in the production of ordinary paper; the asbestos is also divided as much as possible, and the two are then intimately mixed with the alum and borax in a sufficient quantity of water to make a pulp of the requisite consistency, which is then made into paper by any of the usual processes. The proportions given above may, of course, be varied according to the quality and nature of the desired product. In some cases, also, silicate of soda may be used, in order to insure hardness and coherence in the substance of the paper after it has been acted upon by a fire. If the sheets be made of linen or other woven fabric, and coated on both sides with the incombustible paper, great strength and flexibility are obtained.

The Largest Marine Engine in the World. The *Messager de Cronstadt* says that on the 30th ult. the engines of the new armor-plated double turret-ship "Pierre le Grand" were tried in the basin at Cronstadt. This colossal engine is of 1,400 horse-power nominal, and is the most powerful that has yet been placed in an armor-plated ship, 1,350 horse nominal being the power of the engines in the English ships "Minotaur," "Northumberland" and "Agincourt." The engines worked from the first moment admirably, and were kept going for eight hours without any necessity arising for stopping them.

Patent Nonsense.

It is really amusing to read some of the criticisms of the daily press on our Patent Law. The following article we clip from the *Daily Evening Post* of this city, dated Nov. 2d.:

"When the United States grants letters patent to an inventor it declares only that the invention if new and original is one which can be patented. The inventor no doubt believes that he is the first inventor, but in nine cases out of ten where an invention is useful it turns out that some one has previously invented the same thing, though he has failed to bring it into public use. Inventors and purchasers of new patents often do not find this out until they have invested large sums of money in procuring, perfecting and working the patent. The knowledge of this fact enables speculators to get hold of new and valuable inventions by ransacking the archives for forgotten inventions of a similar character, purchasing them for a song, and then frightening owners of meritorious inventions into giving away half or three-fourths of their interest to save the balance and avoid litigation. It is now seriously urged by some of the Eastern Press that the patent laws should be changed, and that the search for prior inventions should precede instead of following the issue of the letters patent. In the patent office are the only full records of United States patents. Their number is great, and is increasing rapidly every week, but as they are classified, experts could in a reasonable time make the necessary search. It is suggested that it would be well even to increase the fees if necessary, for the inventor could better afford to pay $160 to his agent for a patent which, like any United States patent for a portion of the public domain, would be unassailable and irrevocable, than to pay $40 for a patent which proves nothing, not even that somebody else had not two years before received a patent for identically the same invention."

The writer of the above article evidently did not know that a corps of seventy-one examiners are constantly employed in the United States patent office, examining into the novelty of patent applications *before the patents are granted*. If he had ever made an application for a patent he would have learned that his application had to pass through an ordeal of examination previous to its allowance by the office that would astonish his innocent ignorance. Ten to one he would find himself rejected on references that would require a wonderful stretch of mechanical imagination to discover any similarity between them and his invention. Yet with all this strictness of examination before granting patents, duplicate patents are sometimes issued; and that such is the fact is no wonder, when we consider the multitude of patents which have been issued from the office, and the number requiring to be examined daily in order to keep the work of the office from running far behind.

The trouble, we apprehend, is with the patentees themselves. It is too often the case that when an inventor improves some old machine and secures a patent for his improvements, that he either through ignorance or wilfully represents that his patent covers the entire machine, whereas it only covers the improvements. In such a case the trouble complained of by the *Post* would certainly occur; but our system of examinations and granting and issuing patents is correct, and our Government always sustains a patent when it is possible, for all that it covers.

Improved Engraving Process.—Some novel and interesting facts, observed by M. Gourdon, in the action of acids upon zinc covered with certain metals, have been communicated by him to the French Academy of Sciences. Zinc plunged into dilute solutions of sulphuric, hydrochloric and acetic acids, is attacked only at the points where other metals are present, the metals which produce this phenomenon with most intensity being cobalt, platinum, nickel and iron. Now, ammoniacal chloride of cobalt renders it possible to perforate zinc with water containing only one ten-thousandth part of sulphuric acid; and M. Gourdon applies these results, in a very ingenious manner, to various procedures for engraving. He states that, by writing upon zinc with different metallic inks, making use of the most active, containing salts of cobalt, for the blackest parts, and passing it then into acidulated water, an engraved plate is obtained. To reproduce leaves or plants, they are soaked in solutions of metallic salts, and applied to the zinc, which is then treated with weak acid. M. Gourdon has also discovered a new kind of heliographic engraving by transferring the silver from an ordinary photographic proof upon the zinc, which can be attacked by the acids in the parts where the silver has been deposited—a discovery evidently susceptible, when fully developed, of interesting results.

The Ocean's Floor.—Before the times of ocean telegraph cables, very little had been done in deep-sea sounding; but when the laying of ocean cables came first to be contemplated, and when it came afterwards to be realized, the obtaining of numerous soundings became a matter of essential practical importance, and the indications are that the topography of the ocean's floor will soon be almost as well known as that of the dry land.

San Francisco Microscopical Society.

The regular meeting of this Society was held on Thursday of last week. W. R. Barbour was elected a resident member. The principal business of the meeting was a paper by Dr. Harkness, giving a description of a fungus found on the scorched willows in San Mateo county, and which was presented to the Academy of Sciences by Dr. Cooper at a meeting last month, supplementing the same by oral descriptions of fungoid growth, using the yeast plant and mushroom, which he exhibited under the microscope, to illustrate the subject. Dr. Harkness' paper was as follows: At the last meeting of your Society a specimen of fungus found attached to a gummy exudation upon the trunk of a willow was submitted to me for examination. Having given the subject a somewhat hasty examination I offer the following report:

The willow gum on which the plant was discovered is of a dark red color, is readily soluble in water, but insoluble in alcohol, and contains a considerable amount of silicine. Some few shrunken threads of mycelium are still to be traced upon its surface; it, of course, having served as the parent of the plant. The enlarged filamentous hyphæ is, however, the portion of greatest interest. The hyphæ is of a bright, orange color, of an inch or more in length, and is enveloped in a gummy substance analgamous to that on which the plant is found. This gummy envelop is not soluble in alcohol, while in water this, together with the cell structure of the plant, is rapidly dissolved. The structure of the plant is not readily made out. By allowing glycerine to flow under the covering glass, using the spot lens and a ¼ objective, a faint trace of spiral tubes may be detected running through the long diameter of the plant.

Treated in the same manner under a ⅛-inch objective, indications of transverse striæ become apparent, marking the boundaries of cells. On applying a strong tincture of iodine these strike become still more conspicuous. In almond oil slight traces of imbricated cells of the epiderm appear. Its method of growth is doubtless analagous to that of all other plants of this genus.

Its method or reproduction is by conjugation, as it would appear, although I am unable this evening to demonstrate the actual presence of the exhausted male plant. My conclusions, however, are based on the following facts: On placing a portion of a filament on an uncovered slide with the half-inch objective, and adding water, the plant immediately begins to swell, and slight protuberances appearing on one side, corresponding to those seen in the Zygnems and other varieties of the conjugating confervæ. As the gummy envelop is dissolved away from the protuberances, motile gonidia spores are discharged in enormous numbers. In this experiment we obtain no further proof (except by the appearance of the protuberances) of the existence of the male plant. In the confervæ we see the cells, exhausted of their protoplasm, lying at an appreciable distance from those of the spore-producing plant. In the present instance the exhausted cell is in such complete contact that the moisture which sets on the one instantly obliterates the other. If we use acetic acid in the same manner as in the preceding experiment, we find that the acid acts still more energetically than water; and on the instant of disruption we may occasionally catch a glimpse of the two bodies flying away in opposite directions.

The gonidia spores are exceedingly minute; oblong in shape, and in their shortest measurement being less than a twenty-thousandth of an inch in diameter. With a-half or a fourth objective and a spot lens, if we allow glycerine and camphor water to flow gradually under the covering glass, the action is less violent, and we may at our leisure observe the spores as they swim away in the fluid propelled by their moving cilia. Aside from their scientific value they form a very pleasing picture as the glinting light plays upon their sides with every change in position. I am unable to class the plant with any described variety, yet I dare not say that it is new to science. The characteristics which I have described, however, would seem to preclude the possibility of its complete development in any other than a dry climate.

A New Theory of Electricity.—Professor Edlund, a Swedish physicist, expounds in a recent work a new theory of electricity, the substance of which is as follows: He supposes the existence of a highly subtle and elastic ether, everywhere present, both in *vacuo* and in ponderable matter. Two molecules of this ether are mutually repelled along the line of their connection, and in inverse ratio to the squares of the distances. In good conductors the molecules are displaced easily from point to point, it being presumed that they can be moved with little force. If the body be a non-conductor, this mobility is arrested, and depends on the molecules of the material body. A molecule is at rest from the moment when it is equally repelled on all sides. If the repulsion be less at one side than at the other, the body will move if it be free in the direction of the resulting forces.

Russian Navy.—The Russian authorities having decided upon abolishing wooden ships from their navy and substituting iron ships in their stead, have disposed of the whole of the former, and the last of their once celebrated frigates has been sold to Messrs. Wilson, M'Lay & Co., of London and Glasgow, who are dismanting her at St. Petersburg.

Fourth Year of the Pacific Rural Press.

The publishers of this journal design making its weekly issues during its fourth year (1874) still more acceptable and valuable than those of the past.

A Farmer's Paper Always.

The RURAL PRESS—established Jan., 1870, has been thoroughly a farmer's paper—"first, last, and always." Its success in popularity and rapidly increasing circulation has exceeded that of any other weekly on the coast.

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We shall strive to make it an ever welcome visitor to those who desire to constantly

Improve the Heart and Mind,

And shall give a larger space to our HOME CIRCLE department, which from the first has been a popular feature of the RURAL.

Our aim is to gather information from all reliable sources, in the varied forms in which it is to be obtained. Our work is to divest our gleanings of all superfluities; condense such information as is of most importance to our special class of readers—give it to these in the plainest and fewest words possible,—saving *their time* by *our labor*.

Our Leading Departments

Will be continued under the following heads:

The Home Circle,	The Horse,
Young Folk's Column,	The Swine Yard,
Short Stories,	Sericulture,
Home and Farm,	The Vegetable Garden,
Useful Information,	The Flower Garden,
Domestic Economy,	The Vineyard,
Good Health,	The Orchard,
The Dairy,	Tropical Fruits,
The Apiary,	Small Fruits,
Poultry Notes,	The Cereals,
Horned Stock,	Pasturage, etc.,
Sheep and Wool,	Fertilizers,
Goats,	Miscellaneous.

Practical Farmers

Know how important it is that the above subjects should be treated from a local standpoint—that generally the farming tactics of the East will not do for this coast; that agriculture, in its infancy here, can derive greater benefits from an exchange of experience through the columns of the press than in older fields. Constantly observing and studying developments in the special field we represent, we can be expected to give truer information on agricultural subjects, than more general writers at home or abroad.

Our Traveling Correspondents

Will do much service by gathering a large amount of interesting information from various parts of the Coast, which, but for their research and practiced observation, might never be placed on record or reach the eye of the reading public. Of our many

Local Correspondents

We have particular reason to be proud. No paper on this Coast—old or new—has ever been so highly favored with volunteer contributions. They are talented, reliable, independent and generous representatives of an intelligent and enterprising people, noble types of good humor, unselfishness and true progress.

Short Stories,

Original and selected, will hereafter appear in each number. Their selection, we trust, will be such as to render them popular and unobjectionable to all. In addition to a large number of

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Engravings (costing thousands of dollars originally) are inserted in our columns during a single year. They afford instant and perpetual impressions often more perfect and real than words can convey.

Patrons of Husbandry.

We shall continue to give our weekly summary of matters connected with the interest and progress of this growing and important movement. We shall aim to give information as fresh as possible in this department. Its readers are aware that the RURAL has been in the lead in calling farmers to organize. We shall continue to work zealously with the Granges for the noble objects of the Order.

The present is an

Important Period

In the history of our Coast. The coming 12 months promise greater developments in its agricultural progress than have been experienced in any previous year. Agriculturists are alive to improvements in every direction, and those who would keep up with the spirit of the times should certainly read the RURAL PRESS.

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Will receive greater attention in the department of DOMESTIC PRODUCE than that of any other weekly journal. We shall spare no pains to render the reports as reliable and complete as possible. By the employment of our special reporter we hope to make this very important part of our paper one of its best and most satisfactory features.

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Have done much to build up in this isolated and sparsely settled coast so large and complete an agricultural journal as the PACIFIC RURAL PRESS. We commence the new year with a regular circulation of

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Our intimate knowledge of the various inventions of this coast, and long practice in patent business, enable us to abundantly satisfy our patrons; and our success and business are constantly increasing.

The shrewdest and most experienced Inventors are found among our most steadfast friends and patrons, who fully appreciate our advantages in bringing valuable inventions to the notice of the public through the columns of our widely circulated, first-class journals—thereby facilitating their introduction, sale and popularity.

Foreign Patents.

In addition to American Patents, we secures with the assistance of co-operative agents, claims in all foreign countries which grant Patents, including Great Britain, France, Belgium, Prussia, Austria, Victoria, Peru, Russia, Spain, British India, Saxony, British Columbia, Canada, Norway, Sweden, Mexico, Victoria, Brazil, Bavaria, Holland, Denmark, Italy, Portugal, Cuba, Roman States, Wurtemberg, New Zealand, New South Wales, Queensland, Tasmania, Brazil, New Grenada, Chile, Argentine Republic, AND EVERY COUNTRY IN THE WORLD where Patents are obtainable.

No models are required in European countries, but the drawings and specifications should be prepared with thoroughness, by able persons who are familiar with the requirements and changes of foreign patent laws—agents who are reliable and permanently established.

Our schedule prices for obtaining foreign patents, in all cases, will always be as low, and in some instances lower, than those of any other responsible agency.

We *can and do* get foreign patents for inventors in the Pacific States from two to six months (according to the location of the country SOONER than any other agents.

Home Counsel.

Our long experience in obtaining patents for Inventors on this Coast has familiarized us with the character of most of the inventions already patented; hence we are frequently able to save our patrons the cost of a fruitless application by pointing them to the same thing already covered by a patent. We are always free to advise applicants of any knowledge we have of previous applications which will interfere with their obtaining a patent.

We invite the acquaintance of all parties connected with inventions and patent right business, believing that the mutual conference of legitimate business and professional men is mutual gain. Parties in doubt in regard to their rights as assignees of patents, or purchasers of patented articles, can often receive advice of importance to them from a short call at our office.

Remittances of money, made by individual inventors to the Government, sometimes miscarry, and it has repeatedly happened that applicants have not only lost their money, but their inventions also, from this cause and consequent delay. We hold ourselves responsible for all fees entrusted to our agency.

The principal portion of the patent business of this coast has been done, and is still being done, through our agency. We are familiar with, and have full records, of all former cases, and can more directly judge of the value and patentability of inventions discovered here than any other agents.

Situated so remote from the seat of government, delays are even more dangerous to the inventors of the Pacific Coast than to applicants in the Eastern States. Valuable patents may be lost by the extra time consumed in transmitting specifications from Eastern agencies back to this coast for the signature of the inventor.

Confidential.

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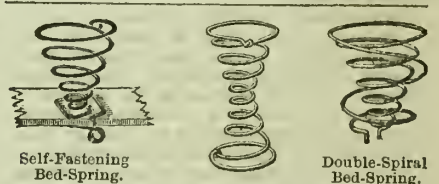
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Agricultural Notes.

ALAMEDA.

Samples.—Livermore *Enterprise*, Nov. 7: We were shown by Mr. N. D. Dutcher samples of corn and potatoes that were raised by W. H. Harris, about ten miles from Kingston, in Tulare county, which are a curiosity in one respect. The corn is a fine large ear of the yellow kind and was grown this year on ground that had been cultivated in wheat—making two crops in one year from the same land. The potatoes are a second crop from the same seed on the same land. They are very large and mealy, and of a very fine flavor.

Sunol.—The farmers in this section are very busy preparing to put in an early crop. Many have commenced plowing, and say the late rains have wet the ground to a depth of from 6 to 8 inches. If the season continues as favorable as at present next year's harvest will be even better than this.

Mission San Jose.—Business is getting a little better since the rain cleared off, as it affords the farmers an opportunity of coming to town with their plows and harrows for repairs, preparatory to putting in another crop, which they are generally preparing to do.

BUTTE.

Wheat.—Oroville *Mercury*, Nov. 7: Judge Smizer, of Dayton, informs us that there are thousands of acres of wheat that is now up and growing finely. The volunteer is the best ever known; while much of the summer-fallow that had just been sown did not need harrowing in, the rain doing that work for the rancher in the best manner possible.

Stock.—Large droves of sheep and cattle have crossed the mountains to the Sacramento valley from Plumas and Lassen counties, during the past week. Some of the flocks of sheep have had a severe time in the snow, and all had to feed wherever hay could be procured.

CALAVERAS.

Curious Effect of Heat.—*Chronicle*, Nov. 7: An instance of the effect of heat upon fruit trees, exemplified by the recent great fire here, has been brought to our notice. The orchard of Esquire Leavitt, situated in the suburbs of town, was subjected to a considerable degree of heat during the progress of the conflagration. Some of the trees were killed, while others were barely scorched, just enough to partially wither the leaves. Shortly after the fire the trees but slightly burned put on the emerald livery of spring, blossomed out, and are now bearing as thrifty a growth of young apples as we ever saw. The Judge has laid some of the fruit upon our table—apples as large as English walnuts. Who can explain this unseasonable effect of heat?

COLUSA.

Receipts and Shipments.—The Secretary of the Colusa Farmers' Storage and Commission Company has furnished the following statement of the company's transactions for the season; Received 7,069 tons of wheat—shipped 800; received 308 bales of wool—shipped 225; received and shipped 2,115 head of hogs. They now have in store 6,269 tons of wheat and 83 bales of wool.

CONTRA COSTA.

Prospects.—*Gazette*, Nov. 7: The chances are that the grain crops will all be in before Christmas, and that pasturage will soon be of substance and in abundance sufficient for the stock.

FRESNO.

Cotton.—*Expositor*, Nov. 4: The first of the cotton crop came into town last week. There was about 12,000 pounds received at the depot. It was from A. H. Statham's farm on upper King's river, and comprises a trifle over one-third of his crop. It was all well ginned and baled, the bales weighing from 300 to 400 pounds in weight. In conversation with Mr. Statham we gathered these facts: His crop will comprise about 30,000 pounds of lint cotton. The yield will average about 250 pounds of lint cotton per acre. The staple, he assures us, is equal to any he ever saw in the Southern States. The crop will pay well, and he feels satisfied that it is bound to be a leading product of this section. One portion of his field he irrigated and the other he did not. That which was not irrigated, produced the best. But his land was favorably situated. His first shipment left for San Francisco on Monday morning. His cotton gin is running steadily, and the balance will soon be sent forward. Dr. Brandt's cotton crop, we learn, is turning out much better than was anticipated, and the crop has always been regarded as excellent. Picking and ginning is going steadily on. It is to be hoped that the cotton-growers of this valley will devise some means to act in concert in selling their staple, so as to get as good a price as possible for it.

KERN.

Large Sweet Potato.—*Southern Californian*, Nov. 5: There is on exhibition at Geo. B. Chester's store a sweet potato which weighs over twelve pounds. It was raised on the ranch of Dr. Stockton, on Kern island, in a dark, sand loam soil, some of which can be seen in a box at the store. The form of the potato is almost round and is quite smooth on the surface, and no doubt is solid. Beat it for size, weight and form—who can?

LAKE.

Farming at Lower Lake.—Cor. *Bee*, Nov. 5: The farmers in and about Lower Lake are giving evidence of their intention not to go to Big valley, Scott valley, or any other valley for seed grain or horse feed, or food for themselves, as they have hitherto done since the county was organized. Those who summer-fallowed their lands have their grain in, the plow is going where it never went before, and it is confidently hoped that the farmers of the lower end of the county will be able to raise their own grain for once.

Wine Making in Lakeport.—Mr. R. Kennedy, whose vineyard and garden show what industry can accomplish, has this season made the first wine ever manufactured here. He has pressed the grapes from 119 vines and filled three barrels of 41 gallons each. The wine is now in a state of fermentation, and it will be some months before its quality can be determined.

LOS ANGELES.

Corn and Barley.—*Express*, Nov. 5: Corn is beginning to come in from the country, but not in such quantities as the abundance of the crop would justify dealers in expecting. There is still a large amount of barley of this year's crop in store on account of farmers. They are holding for a rise.

MENDOCINO.

Plowing. — *Independent Dispatch*, Nov. 7: Some of the farmers of Round valley have commenced plowing, and others will commence very shortly. Certainly it is well to make use of this fine weather, and the present fine condition of the ground.

Volunteer Potato.—R. H. Anderson, an old resident of Ukiah, but for the past few years a coaster, tells us that he dug a volunteer potato the other day, on his ranch, 32 miles from Ten Mile river, that weighed six pounds. Pretty good sized potato. He also says that he raised one last year that weighed eight pounds.

Heavy Rain.—*Democrat*, Nov. 7: This week we have had some heavy rain, which, if it does injury in other respects, certainly will cause the new grass to spring up rapidly, which is now a month earlier than last year.

Sheep.—*Star*, Nov. 7: Mr. Fred Heldt, of Bald hill, passed up to his home on Tuesday of this week after a trip to the vicinity of Cloverdale. He has brought with him three beautiful French merino bucks, and one Scotch buck; the former one year old and the latter three months old. Mr. Heldt has now on the Coast range about 1,500 head of sheep, and continues to increase and improve the stock.

MERCED.

Plowing.—*Tribune*, Nov. 7: A great many of the farmers in this vicinity are actively engaged in plowing their land for the next crop. The late rains have placed the soil in splendid condition, and with the opportunity thus early afforded it is probable that more acres will be sown to grain in this county than ever before. Our Fresno neighbors are not quite so fortunate, as we were informed by a gentleman from that county that the recent rains did not in that county wet the soil to the depth of three inches.

MONTEREY.

Fruit.—Salinas *Index*, Nov. 7: The opinion that fruit cannot be profitably grown in this valley is now an exploded idea. As fine fruit as can be seen anywhere was raised this season in this vicinity, upon the places of Edward Fenton, James Bardin and the Rev. Mr. Wilson. In a few years more the orchards and vineyards of this valley will be counted by the hundred.

Sale of Blooded Sheep.—*Democrat*, Nov. 7: Mr. E. Breen has purchased a band of 4,000 fine blooded sheep, from John Mulligan, and will place them on the Topo ranch. The flock we are told is a superior one, being bred by Mr. Mulligan, who has been engaged in the business for thirteen years in the county, from bucks bought of Flint, Bixby & Co. As the country in which they have been fed is peculiarly appropriate to such stock it may be expected that the Topo ranch will soon become noted as a sheep farm.

Rain.—After several days threatening Thursday afternoon it set into rain again, and we had eight or ten hours of gentle and continuous rain fall, which was all absorbed by the earth. At this place the rain gauge marks 2.43 inches for the season, though higher up the valley more has fallen. About Soledad, for example, the grass is well up, and the face of the country is green. We may state, as the general result, that plowing has fully commenced, and there is every prospect of a good year.

NAPA.

Shipment of Grapes.—St. Helena *Star*, Nov. 7: The shipments of grapes from St Helena last month were simply immense. From Mr. Haskin we learn that 912,498 pounds were shipped last month. The total for the season to date being 1,374,185 pounds.

NEVADA.

Pruning.—Grass Valley *Union*, Nov. 8:—The owners of shade trees find it necessary to lop off superfluous limbs. The early storms have found the trees heavy foliage, and to save many of them from breaking down liberal pruning is required.

PLACER.

Putting in Crops.—*Herald*, Nov. 7: Parties from the valley inform us that the farmers are as busy as bees, putting in their summer-fallow and plowing. Old ground, that is, that which has been cultivated, plows very well. New ground was hardly wet deep enough by the recent rains to be worked to advantage previous to the heavy rain this week. Here in the hills the ground is in excellent condition, and the farmers are improving the opportunity by working all their available force in getting in their crops.

Sheridan.—*Argus*, Nov. 7: E. C. Rogers reports farmers busy at work in that section, putting in grain. The rains had put the ground in good order for plowing. Sheridan is improving, and business is looking up. No damage has resulted from the early rains, in that region. A number of ranchers had their stock caught in the mountains by the storm.

SACRAMENTO.

Second Crop.—*Record*, Nov. 10: In the garden of William Avery, corner of Seventh and F streets, is growing a second crop of apples. The fruit is about the size of a hen's egg, of good flavor, and bids fair to ripen.

SANTA BARBARA.

Fine Fruit.—*Index*, Nov. 5: We have been shown a pear from Dos Pueblos, weighing 3¼ pounds and measuring nineteen inches in its greatest circumference. This pear, large as it is, is said to be a fair sample of the products of the orchard from which it was taken.

Wintea.—Our recent rains have sprouted the grass and volunteer barley seed, and the land everywhere looks fresh and green. The atmosphere is freed from the summer's dust and is very clear. The ocean wears its deepest blue, the shore its most brilliant white, and around the city and stretching out into the bay, the mountains loom up magnificently.

SAN BENITO.

Pasturage.—Hollister *Enterprise*, Nov. 7: The earth is again clothed in a mantle of green. The late rains, succeeded by warm suns, have brought out a marvellous growth of vegetation. There will soon be an abundance of pasturage for all kinds of stock.

Rain.—During the last storm, 85-100ths of an inch fell in Hollister. This, in addition to the quantity which fell previous, makes a little more than three inches for the season.

SANTA CLARA.

Tobacco.—*Mercury*. Nov. 7: The tobacco in the neighborhood of San Felipe is growing about as fast as it can be harvested. From one 100-acre tract eight crops have already been cut this season, and the tobacco is still growing, and will probably continue to grow until a frost comes severe enough to kill it outright. Such a frost is not very likely to occur at San Felipe.

Marvelous Yield of Grapes.—*Mercury*, Nov. 10: A few days since we published a statement of the product of 1,244 vines—a fraction less than one acre—of Gen. Naglee of this city, showing a yield of 31,660 pounds of the Cognac Brandy and Reisling or Rhine grapes. We then thought that there were other portions of his vineyard which would show a still larger yield, as the result proves. On Friday and Saturday, November 6th and 7th, there were gathered from 1,639 vines, covering one and three-tenths acres, 49,760 pounds of the Charboneau grape—the grape of which the most famous Burgundy wines is made. The vines are in their third bearing year, having been planted in the spring of 1869. The above is an average of thirty pounds to to the vine, exclusive of all defective grapes. The above at twelve pounds to the gallon will make over 4,000 gallons of wine.

SAN MATEO.

The Loss.—*Gazette*, Nov. 7: A considerable quantity of grain on the coast in this county, which the owners expected to save by the pleasant weather since the heavy rain two weeks ago, is lost beyond the hopes of saving by the rains of this week. The crops all along the coast from Half Moon bay to Pescadero received but slight injury during the recent storm, with the exception of the bean crop which is almost totally destroyed.

SAN JOAQUIN.

Work on the Farms.—Stockton *Independent*, Nov. 4: The present is a busy season with the farmers. Preparing for another wheat crop is the order of the day. There was a considerable area of wheat sown before the first rains, and a large portion of the first planted is now sprouted. From what information we have been able to obtain during the past few days, we are led to believe that the area of wheat sown this fall and winter in San Joaquin valley will be considerably in excess of that of last season. Generally, so far as we can learn, farmers are giving more attention to thorough plowing, finding, doubtless, that by that process better assurance is given of a sure and liberal yield. The season thus far has been peculiarly favorable for plowing, and the farmers are evidently making the best of it.

SOLANO.

Plowing and Sowing.—Valley's *Chronicle*, Nov. 7th. The farmers in the vicinity of J. C. Wolfskill's are busy with all of their available force in plowing and sowing for harvest. Gang plows and seed drills are to be seen in all directions. The late rains have given vegetation a fine start and the grass is looking splendidly. It is very fortunate for roving stock that the new grass has come up so quickly after the disappearance of the old.

SONOMA.

Plowing and Sowing.— Petaluma *Argus*, Nov. 6: We are informed that in Green valley several farmers have already finished seeding. The grass is growing rapidly, and feed will soon be good. Plowing has been commenced on many ranches in this vicinity, and should the weather be favorable, a large area will be sown or ready for seeding by the 1st of December. The potato crop about Bloomfield is not turning out so well as was expected a few weeks ago. It was injured by frost and grasshoppers, and it is estimated that it will be 25 per cent. short of last year's yield. Potatoes are arriving in town in considerable quantities. On Thursday H. Mecham, of this city, sold 6,000 sacks to San Francisco parties, for $1 per hundred pounds. The amount received will be about $7,000.

Grapes.—We have maintained that there is no district in the State better adapted to the production of grapes and for wine making than the region included within a circuit of five miles of Petaluma. Frost rarely does the slightest injury to fruit of any kind, and we cannot recall the time when grapes have been damaged by this cause. The yield here is not quite so large as in some other localities in especially favorable seasons, but taking one year with another an acre of land in the vicinity of Petaluma will produce as large an amount of grapes as in any other district, and of as good quality.

Vegetation.—The rapid growth of grass and grain in this vicinity since the first rain is truly wonderful. In many places bunches of wild oats and grass which have sprung from the seed are from eight to ten inches in hight, while in especially favored spots the average hight is over five inches. With favorable weather the feed will be as good on the first of next month as it usually is six weeks later.

STANISLAUS.

Bald Barley.—*News*, Nov. 6: By refereuce to an advertisement in this issue of our paper it will be seen Mr. Samuel Gibson, a farmer residing on the Stanislaus river, offers for sale a quantity of "bald" barley seed. This grain we believe was first introduced into this section by Mr. Barnes Potter, both himself and Mr. Gibson having given the grain a fair test. For purposes of hay its yield is much greater than that of any other grain per acre, and it is claimed to be of superior quality. If allowed to mature and threshed it has in all cases yielded one-fourth more than any other barley. As cheap feed for animals it is a great desideratum to our farmers, and to livery men we would recommend to give this barley a trial.

SUTTER.

Crops.—Marysville *Appeal*, Nov. 7: We were informed by a Sutter county farmer that summer-fallowed and volunteer crops have advanced so far as to give the fields a green aspect, and that the prospects were never more flattering.

Potatoes on Vines.—*Banner* Nov. 7: California continues to record the wonders of her productions. This week "Old Ned," of tule fame, near Meridian, sends the *Banner* a large Early Rose potatoe vine, about 18 inches long from the root to the top of the longest branch. The vine is well filled with potatoes of a brown and reddish color, some as large as a small hen's egg, there being one on the end of the topmost branch. In a note accompanying the vine the sender says: "I read in a Nevada paper some time ago of corn growing under ground. I send you a sample of pototoes which grew above ground, from the second crop, planted in the latter part of July. The yield was light, but the potatoes were very large and mealy. The first crop was planted in April." The tule land is so exceedingly productive that old dame nature finds it necessary to reverse her old time methods occassionally.

TUOLUMNE.

Farming Operations. — *Union Democrat*, Nov. 7: The past week has been favorable for out-door work; the ground being in good condition, our farmers have been busy. Fallowed land has been seeded, and the plow has been busily engaged. The first days of the week threatened rain, but none fell until Thursday morning, which continued until Friday morning.

YOLO.

The Weather.—During the past week the weather has been delightful. The grass is getting a good start, so that stock can live on it already. Farmers have commenced plowing. It rained hard yesterday. A few of our farmers had commenced on their fallow ground before this storm, and now work will be continued all along the line, and more ground will be put into grain this season than ever before.

Oregon has now an unpaid Board of Immigration Commissioners, appointed by the Governor in accordance with an act passed by the State Legislature during its recent session. The object of the Board is to encourage immigration into that State.

The Marysville *Appeal* says the ground in in that section is full of water from last year's rains. Very light rains this season will insure a crop.

On Colonel Preston's ranch, near Cloverdale, 500 almond trees were set out early last year and 1,500 more are in the nursery, to be set out this winter.

The farmers in Bitter Root Valley, Montana, are selling their wheat at $1 per bushel.

It is a matter of great importance to our agricultural friends in the country to know that Plowmen, Farm Laborers, Engineers, Teamsters, Blacksmiths, Millers, Carpenters, Gardeners, Woodsmen, Saw-mill hands, Shepherds and labor of every description is sent at the shortest notice to the country by Zeehandelaar's employment agency, (formerly Secretary of California Labor Exchange,) 715 Montgomery street, corner New Montgomery Avenue and Washington street, San Francisco, California. Orders per letter promptly and carefully attended to.

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S. F. Market Report.

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Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Nov. 11th, 1874.

The principal features in the market this week have been a further weakening in Wheat, with a corresponding stiffness in Barley. Otherwise the Produce market has changed but little since our last report.

Reports from our country exchanges show that the damage by the unexpected rains was by no means so great as was apprehended. If Grain in sacks and the ungathered Grapes were injured, Tobacco and other growing crops were benefitted; and the ground was well prepared for plowing, which fact has been taken advantage of by farmers.

The *Mark Lane Express* says: The week has been mild. Moisture was wanted in abundance, but now some apprehension is felt lest vegetation going on too fast may be checked by frost. Wheat sowing is nearly over. The absence of frost keeps open every port and hastens shipments. Foreign arrivals and dampness operate against prices. Not one European market reports a rise, but many fall a shilling per quarter. Continental speculators and shippers are hanging back, notwithstanding reduction in freights.

Upon the subject of Wheat shipments the New York *Bulletin* says: While at the middle of this month there was 74,800 quarters more Wheat afloat for the United Kingdom than the year previous, yet there was 125,699 quarters less of Corn; making on the two grains combined 50,899 quarters less afloat than last year. This fact plainly enough proves that Grain is not coming to market at all in proportion to the extent of the crop. Very soon, the close of navigation on our lakes and canals and in the Baltic, by shutting the gates upon a large share of the supply, will make it impossible to compensate for this holding back for some six months to come. It is impossible to say what France may contribute, and it is possible (though we cannot say decidedly probable) that the arrivals from San Francisco may be larger than last year; but, outside of these contingencies, there does not seem to be much probability that the imports into the United Kingdom between now and next spring will materially exceed those for the same period of last year, Should that prove to be the case, we should have the anomaly of unprecedented crops throughout the world without any increase of supply at the principal markets; a condition of things that would lay the basis for a large extent of speculative operations and a very fluctuating market; and that seems to be what the Grain trade may look for with the greatest show of probability for the next few months.

Receipts—For the week have been smaller than those of the week previous. The aggregates have been: Flour, 28,591 qr. sks; Wheat, 202,509 centals; Barley, 11,754; Oats, 922 do; Buckwheat, 75; Flaxseed, 132 hags; Beans, 1,246 do; Bran, 1,476 do; Middlings, 789 do; Hay, 2.703 bales; Straw, 1,104 do; Wool, 2,338 do; Hops, 48 do; Cotton, 108 bales; Potatoes, 3,225 sks; Onions, 1,805 do; Wine, 10,398 gals; Brandy, 240 do; Hides, 1,943; Pelts, 152 bdls; Skins, 21 do; Leather, 162 rolls; Salt, 259 tons; Butter, 829 do; Cheese, 642 do; Tallow, 566 do; Eureka Hair, 160 bls; Canary Seed, 41 sks; Almonds, 44 sks and 7 cs; Raisins, 314 hxs; Sugar Pine Lumber, 38,000 ft; Broomcorn, 118 bdls; Peanuts, 20 sks; Chicory, 30 sks.

Barley--Eastern demand has grown so strong that several carloads were shipped during the week. Local sales were not heavy.

Beans--Steady.

Beeswax—No change.

Broom Corn—Quiet.

Corn—Demand light.

Cotton—Sales quite large for this market.

Feed—Demand fair. Hay has advanced.

Flour—No change in quotations. Export, 5,175 bls.

Hides—Firm, without change.

Honey—Large shipments are going East. The stock in this city, lately so heavy, is getting under control.

Hops—The market still unsatisfactory.

Nuts—In light demand.

Oats—Are in better request, though prices have not advanced.

Onions—Have advanced.

Potatoes—The light supply has given an impetus to the market. Irish Potatoes are being high—nearly double quotations of a few days ago; while Sweet are comparatively dull.

Poultry—A decline is noted in Turkeys.

Rye—Feeling is better.

Tallow—Dull.

Wheat—The Liverpool market is a shade weaker. The local market is very quiet.

Wool—Slow of sale. The Eastern Wool markets are reported active for California Wool.

Wood Cuts for Sale.

We are willing to sell a large number of the wood cuts and electrotypes which have appeared in the PRESS, on very liberal terms to publishers abroad, and would invite correspondence on that business.

FOR STATE OF NEVADA.—We have appointed Mr. F. B. Alderson our special agent and correspondent for the State of Nevada. He will visit our friends and patrons there soon.

ONE of our most valued exchanges is the PACIFIC RURAL PRESS, published by Dewey & Co., San Francisco, California. Every number contains a vast amount of general news from the far west, besides much valuable information in the way of Grange news.—*The Farmer's Friend, Mechanicsburg, Pa.*

DOMESTIC PRODUCE.

WEDNESDAY M., Nov. 11, 1874.

BEANS.			
Beans, sm'l wh.℔	3¼	@	—
do. butter	3¼	@	4½
do. hayo	2¼	@	—
do. pink	2	@	—
do. pea	3¼	@	—
BROOM CORN.			
Per ℔	.5	@	8
COTTON.			
Cal. 1874, ℔ ℔	15	@	17
DAIRY PRODUCE			
Butter. Cal. choice ℔	45	@	52½
do, good	40	@	45
do, inferior	30	@	40
do, firkin	30	@	35
do, pickled	35	@	40
Cheese. Cal. new	12½	@	17
do. Eastern	12	@	17
EGGS.			
Eggs, Cal. fresh	45	@	50
do, Oregon	30	@	35
do, Eastern	15	@	25
do, Ducks'	40	@	45
FEED.			
Bran, per ton	—	@	19 00
Middlings	—	@	8 50
Hay	11 00	@	17 00
Straw, ℔ bale	—60	@	— 62½
Oil cake meal	—	@	30 00
Corn Meal	—	@	32 00
FLOUR.			
Extra	4 25	@	5 62½
Superfine	3 90	@	4 30
FRESH MEAT.			
Beef, ir quality..℔	7	@	8
do, seoond do	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed	6½	@	6½
do, dressed	8¾	@	9
GRAIN, ETC.			
Wheat, coast	1 45	@	1 50
do shipping	1 50	@	1 55
do milling	1 50	@	1 57½
Barley, coast	1 10	@	1 15
do brewing	1 25	@	1 40
Oats, ch ice	1 50	@	1 65
do common	1 35	@	1 55
Corn, White	—	@	1 37
do, Yellow	—	@	1 37
Buckwbeat	3 00	@	3 25
Rye	1 15	@	1 20
HOPS.			
California, 1874	30	@	32½
East'rn, '73. cb'ice	—	@	—
MISCELLANEOUS.			
Beeswax. per lb	25	@	27½
Honey in comb	15	@	22½
do Strained	5	@	10
Pulu	9	@	10½
Onions	75	@	1 00
NUTS—JOBBING.			
Cal. Walnuts	10½	@	12½
Peanuts per lb	7	@	9
Cbile Walnuts	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds b'rd shell	10	@	12½
do, soft	20	@	25
Filberts	17	@	18
Cocoanuts, 1000,—50 00	@	—	
POTATOES.			
Sweet, per cwt	—	@	1 25
Cuffee Covel	15	@	1 30
H. M. Bay	1 60	@	1 65
Pigeon Pt	—	@	1 75
Humboldt	—	@	1 75
Petaluma	—	@	1 25
Mission	1 00	@	1 10
Salinas	—	@	—
Bodega	1 25	@	1 50
St Barbara	—	@	—
Sac. River	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per ℔	15	@	16
do gobblers	15	@	16
Hens, per dz	5 50	@	7 00
Roosters, young, large	5 50	@	7 00
Broilers, small	2 50	@	4 00
do large	3 50	@	4 50
Ducks, tame. doz	5 50	@	6 50
Geese, per pair	2 00	@	2 50
Hare, per doz	3 00	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	1 75
Mallard Ducks	3 00	@	4 00
do small	—	@	2 00
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozon	50	@	75
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 25	@	1 50
do tame	5 00	@	6 00
Venison, per lb	6	@	8
PROVISIONS.			
Cal. Bacon, Light	—	@	16½
do Medium	—	@	15½
do Heavy	—	@	13½
Eastern do	14	@	16
Hams, Cal	14	@	14½
do Whittakers	—	@	17
do Duffield, ch	—	@	15½
do Plankton & Armour	—	@	15
do Boyd's	15	@	16½
do Stewart's	—	@	16½
Eastern Shonld's	9	@	9½
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	14½	@	17
SEEDS.			
Alfalfa, Chili	—	@	12
do California	—	@	15
Canary	4	@	4½
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	2	@	3
do. Brown	1¾	@	2
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	—	@	11
Timothy	11	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungarian do	10	@	13
Lawn do	50	@	60
Mesquit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Alsike	—	@	60
WOOL, ETC.			
FALL—			
Good to choice	19	@	22
Fair grade	16	@	18
Heavy free	14	@	16
Defective	12	@	15
Ilidcs, dip	19	@	20
do wet salted	8½	@	9
Tallow, Crude	5	@	6
do Refined	6½	@	7½

METALS.

WEDNESDAY M., Nov. 11, 1874.

American Pig Iron, ℔ ton	—	@	42 00
Scotch Pig Iron, ℔ ton	42 00	@	46 00
White Pig, ℔ ton	—	@	42 00
Oregon Pig, ℔ ton	—	@	46 00
Refined Bar, bad assortment, ℔ ℔	—	@	3½
Refined Bar, good assortment, ℔ ℔	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5¼
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	08	@	09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	—	9½	@ —
Norway Iron	—	8	@ —
Rolled Iron	—	6	@ —
Other Irons for Blacksmiths, Miners, etc.	—	—	@ 4¼
COPPER.—			
Braziers'	—	31	@ — 32
Copper Tin'd	—	45	@ — —
O. Niel's Pat	—	50	@ — —
Sheathing, ℔ ℔	—	—	@ — 24
Sheathing, Yellow	—	—	@ — 25
Sheathing, Old Yellow	—	—	@ — 12½
Composition Nails	—	24	@ — —
Composition Bolts	—	24	@ — —
TIN PLATES.—			
Plates, Charcoal, IX ℔ box	13 00	@	14 50
Plates, I C Charcoal	12 75	@	14 50
Roofing Plates	11 50	@	14 00
Banca Tin, Slabs, ℔ ℔	—	31	@ — 33
STEEL.—English Cast, ℔ ℔	—	20	@ — 25
Anderson & Woods' American Cast	—	10	@ — 17
Drill	—	18	@ — 22
Flat Bar	—	18	@ — 22
Plough Points	—	16	@ — 17
ZINC	—	—	@ — 11
Zinc, Sheet	—	—	@ — 11½
NAILS—Assorted sizes	—	5¾	@ — 8
QUICKSILVER, per ℔	—	—	@ 1 45

LEATHER.

WEDNESDAY M., Nov. 11, 1874.

City Tanned Leather, ℔ ℔	26@29
Santa Cruz Leather, ℔ ℔	26@29
Country Leather, ℔ ℔	24@28
Stockton Leather, ℔ ℔	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ℔ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	63 00@ 67 00
Cornellian Females, 14 to 16 Kil	71 00@ 76 50
Simon Ullmo Females, 12 to 13, Kil	60 00@ 63 00
Simon Ullmo Females, 14 to 15, Kil	70 00@ 72 00
Simon Ullmo Females, 16 to 17, Kil	73 00@ 75 00
Simon, 18 Kil., ℔ doz	61 00@ 63 00
Simon, 20 Kil. ℔ doz	65 00@ 67 00
Simon. 24 Kil. ℔ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ℔ ℔	1 00@ 1 15
California Kip, ℔ doz	40 00@ 48 00
French Sheep, all colors, ℔ doz	8 00@ 15 00
Eastern Calf for Backs, ℔ ℔	1 00@ 1 25
Sheep Roans for Topping, all colors, ℔ doz	9 00@ 13 00
Sheep Roans for Linings, ℔ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ℔ pair	5 00@ 5 25
Good French Calf Boot Legs, ℔ pair	4 00@ 4 75
French Calf Boot Legs, ℔ pair	4 00@ — —
Harness Leather, ℔ ℔	30@ 37½
Fair Bridle Leather, ℔ doz	48 00@ 72 00
Skirting Leather, ℔ ℔	33@ 37½
Welt Leather, ℔ doz	30 00@ 50 00
Buff Leather, ℔ foot	17@ 23
Wax Side Leather, ℔ foot	17@ 23
Eastern Wax Leather	—@— —

RETAIL GROCERIES, ETC.

WEDNESDAY M., Nov. 11, 1874.

Butter, Cal. ch'ice	—	@	65
do common	45	@	—
Cheese, Cal., ℔	15	@	25
Lard, Cal., ℔	18	@	20
Flour, ex. fam. bl℔	00	@5	50
Corn Meal, ℔	3½	@	5
Sugar, wn. crsb'd	—	@	12
do lt. brown, ℔	7	@	10
Coffee, Hawley & Co family gr'nd, ℔	25	@	40
Coffee, green, ℔	25	@	35
Tea, fine blk, 50, 65, 75		@1	00
Tea, finst Jap, 55, 75, 90		@1	00
Candles, Admant'ine		@	30
Soap, Cal., ℔	6	@	10
Rice, ℔ ℔	10	@	12½
Yeast Powders, dz.	1 50	@2	00
Can'd Oysters, dz.	200	@4	00
Syrup, S F. Gol'n	—	@	75
Dried Apples	8	@	10
Dr'd Ger. Prunes	14	@	16
Dr'd Figs, Cal	9	@	10
Dr'd Peaches	10	@	12½
Oils. Kerosene	28	@	33
Wines. Old Port	3 50	@5	00
do Fr. Claret	1 00	@2	50
do Cal., dz. hot	3 00	@4	50
Whisky, O. B, gal	3 50	@5	00
Fr. Brandy	4 00	@10	00

FRUITS AND VEGETABLES.

WEDNESDAY M., Nov. 11, 1874.

FRUIT MARKET.			
Tahati, Or. ℔ M	—	@	—
Lorita, do	—	—	@ —
Osl. do	—	—	@ —
Limes, ℔ M	—	@20	00
Cal. Lemons, ℔ M	—	@	—
Australian do	—	@40	00
do Sicily ℔ b'x	—	@	—
Bananas, ℔ bnch	—	@	—
Cocoanuts, ℔ 100	6 00	@	8 00
Pineapples, ℔ dz	5 00	@7	50
Apples, ℔ box	40	@1	25
Cherrics	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	-	@	—
Strawberries ℔ ℔	—	@	30
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	5	@	6
Peaches, bskt	—	@	—
do, ℔ box	—	@	—
do ext Monntain, ℔	—	@	—
Pears, Bart't, bx	—	@	—
do Cooking	40	@	50
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel's ℔ 100	—	@	—
Muskm'l's ℔ 100	5 00	@10	00
Pomegran's ℔ 100	6 00	@ 7	00
Figs	—	@	8
Grapes, Bl'k H'g	75	@1	00
do Muscat	1 00	@1	50
do Malavo'e	—	@	—
do Sweetw'r	—	@	75
do Mission	75	@	1 00
do Rose of Peru	75	@	1 00
do Tokay	75	@	1 25
do Morocco	2 00	@2	50
do St. Peter	—	@	—
DRIED FRUIT.			
Apples, ℔ ℔	7	@	8½
Pears, ℔ ℔	10	@	11
Peaches, ℔ ℔	8	@	19
Apricots, ℔ M	10	@	12½
Plums, ℔ ℔	8	@	10
Plttcd. do ℔ ℔	—	@	15
do Extra, ℔ ℔	—	@	—
Raisins, ℔ ℔	5½	@	12½
Slack Figs ℔ ℔	5	@	—
White, do	10	@	15
Prunes	6	@	8
do German	14	@	—
Citron	@	27½	32½
Zante Currants	6	@	—
Dates	12½	@	—
VEGETABLES.			
Asparagus	—	@	—
Beets	—	@	1
Cabbage, ℔ 100 ℔ s	.50	@	75
Carrots, ℔ 100 ℔ s	.60	@	87½
Cauliflower, doz	.50	@	60
Celery, doz	50	@	65
Garlic, ℔ ℔	—	@	10
Green Peas	3	@	3½
Green Corn ℔ doz	.15	@	20
Sum'rSquash, box	—	@	1 25
Marro'fat Sq'sb, tn	8 50	@	10 00
Artichokes, ℔ doz	.40	@	75
String Beans, ℔ ℔	.5	@	6
Lima Beans	6	@	—
Parsnips	12½	@	15
Sbell Beans	7	@	10
Peppers, green ℔ ℔	.6	@	7
Okra, ℔ ℔	12½	@	15
Okra, Green	6	@	8
Cucumbers, box	.50	@	—
Tomatoes, hox	.62½	@	75
Egg Plant, box	1 00	@	—
Rbubarb	8	@	10
Lettuce	10	@	—

GENERAL MERCHANDISE.

WEDNESDAY M., Nov. 11, 1874.

BAGS.			
Eng. Stand Wht.	—	@	12
Detriok's Macbine Sewed, 22x36 E.	12	—@	12¼
do 22x36, do E W	—	—@	13¼
do 20x40, do A	—	—@	13½
Flour Sacks ½s	9½	—@	11½
" " ¼s	6	—@	7
Stand. Gunnies, double seam	15	@	15½
single seam	13¾	@	14
" Wool Sacks	60	@	67½
Barley Bags 24x36	—	@	14
do 23x40	—	@	14½
do 24x40	—	@	15
do 28x36	—	@	16
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in. gds	9½	@	10
do 45	10½	@	11
do 60	—	@	15
CANNED GOODS.			
Asst'd Pie Fruits in 2½ ℔ cans	2 75	@	— —
do Table do	3 50	@	4 00
Jams & Jellies	3 75	@	4 00
Pickles ½ gl	—	@	3 50
Sardines, qr hoxl	85	@	— —
do hf hoxes	3 25	@	— —
COAL—Jobbing.			
Anstralian, ℔ ton	10 50	@11	00
Coos Bay	—	—	@10 00
Bellingham Bay	—	—	@ 8 50
Seattle	—	—	@11—
Cumberl'd, cks	—	—	@18 00
do bulk	16 00	@17	00
Mt. Diablo	6 25	@8	50
Lehigh	—	—	@17 00
Liverpool	10 50	@11	—
West Hartley	9 50	@10	00
Scotch	10 00	@11	00
Soranton	—	@13	00
Vancouver's Isl	11 00	@11	50
Charcoal, ℔ sk	75	@	—
Coke, ℔ hbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	19	@	20
Costa Rica per ℔	19	@	22½
Guatemala	19	@	20½
Java	—	@	27
Manilla	19	@	20
Ground in os	—	@	27
Chicory	9	@	10
FISH.			
Pac. Dry Cod, new	5	@	—
cases	—	@	—
do boneless	11	@	12
Eastern Cod	—	@	—
Salmon in hbls	.9 00	@9	25
do ½ bbls	4 50	@4	75
do 2½ ℔ cans	—	@3	00
do 2 ℔ cans	.2 65	@2	75
do 1 ℔ cans	.1 75	@	—
Do Col. R. ½ ℔	..	@	—
Pick. Cod, bbls	.22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	8 00	@8	50
" Extra	—	@9	00
" in kits	.2 00	@2	50
" Ex mess	.3 00	@3	50
" Ex mess. ½ bs	—	@12	00
Sm'k Herr'g, bx	50	@	60
NAILS.			
Assorted size, ℔	4 37½	@7	50
OILS.			
Pacific Glue Co.	—	@	90
Pnre	—	@	—
Castor Oil, No. 1	—	@1	75
do do No. 2	—	@1	60
Cocoanut	60	@	65
Olive Flagniol	.5 00	@	—
do Possel	.4 75	@	—
Palm ℔	9	@	—
Linseed, raw	—	@1	05
do boiled	—	@1	10
China nut in cs	82½	@	88
Sperm, crude	—	@1	40
do bleached	—	@2	20
Coast Whales	60	@	—
Polar, refined	50	@	55
Lard	1 15	@1	30
Coal, refined Pet	37½	@	—
Oleophine	20	@	23
Devoe's Bril't	25	@	28
Long Island	20	@	23
Eureka	—	@	—
Devoe's Petro'm	20	@	23
Barrel kerosene	20	@	23
Olive	4 00	@9	50
Downer Kerose'e	—	@	37
Gas Light Oil	—	@	26
PAINTS.			
Atlan. W. Lead	6	@	10
Whiting	—	@	2
Putty	4	@	5¾
Chalk	—	@	2½
Paris White	2¾	@	—
Ochre	2	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@2	10
RICE.			
China No. 1, ℔ ℔	6¾	@	6¾
do 2, do	5½	@	5¾
Japan	—	@	6½
Siam Cleaned	5½	@	—
Patna	5½	@	5¾
Hawaiian	7¼	@	8
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@14	00
do Common	5 00	@ 7	00
Carmen Island	11 00	@13	00
Liverpool fine	—	—@22	00
do coarse	6 00	@—	—
SOAP.			
Castile ℔ ℔	10	@	11
Local brands	5	@	8
SPICES.			
Cloves	45	@	50
Cassia	26	@	27
Citron	—	@	30
Nntmeg	1 20	@1	25
Whole Pepper	18	@	19
Pimento	—	@	15½
Gr'nd Allsp'rd'z	—	@1	12½
do Cassia do	—	@1	50
do Cloves do	—	@1	50
do Mustard do	—	@1	20
do Ginger do	—	@1	00
do Pepper do	—	@1	00
do Mace do	—	@2	00
SUGAR, ETC.			
Cal. Cnbe per ℔	11½	@	—
Partz' Pro. Cube hbl or 100 ℔ bxs	—	@	11¾
do in 50 ℔ bxs	—	@	12
do in 25 ℔ hxs	—	@	12¼
Circle A crushed	—	@	11½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11½
Hawaiian	8	@	10½
California Beet	—	@	—
Golden C	—	@	—
do Reg'g grade	—	@	60½
Cal. Syrup in ols	—	@	70½
do in ½ hls	—	@	67½
do in kegs	—	@	75
Hawaiian Molasses	25	@	27½
TEA.			
Oolong, Canton, ℔	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do or Pingsuey	45	@	80
do Moyune	60	@1	00
Gunpo'der, Cant.	30	@	42½
do Pingsuey	50	@	90
do Moynne	65	@1	25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, laoqnered hxs, 4½ and 5 ℔ s	45	@	67
Japan do, 3 ℔ bxs	45	@	90
do pl'n hx, 4½ ℔	35	@	65
do ½ & 1 ℔ paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	55
Dark do	50	@	55
Dwarf Twist	65	@	70
12 inch do	60	@	70
Light Pressed	65	@	75
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Ohio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine cut che'g, gr	.8 50	@9	25
Fine cut chewing, bue's	.75	@	90
Banner fine cut	.9 00	@	9 25
Eureka Cals	—	@9	00
TURPENTINE.			
Eastern	65	@	70

LUMBER.

WEDNESDAY M., Nov. 11, 1874.

CARGO PRICES OF REDWOOD.

Rough, ℔ M	$16 00
Rough refuse, ℔ M	12 00
Rough clear, ℔ M	32 50
Rough clear refuse, M	22 50
Rustic, ℔ M	30 00
Rustic, refuse, ℔ M	24 00
Surfaced, ℔ M	26 00
Surfaced refuse, ℔ M	16 00
Flooring, ℔ M	30 00
Flooring, refuse, ℔ M	20 00
Beaded flooring, ℔ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref. M	16 00
Half-inch, Surfaccd, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ℔ M	12 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shingles, ℔ M	2 25

PUGET SOUND PINE —Retail Price.

Rough, ℔ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ℔ M	30 00
Fencing, ℔ lineal foot	1c
Flooring and Step, ℔ M	30 00
Flooring, narrow, ℔ M	32 50
Flooring, 2d quality, M	25 00
Laths, ℔ M	3 25
Furring, ℔ lineal ft	¾

REDWOOD—Retail.

Rough, ℔ M	20 00
Rough refuse, ℔ M	16 00
Rough Pickets, ℔ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ℔ M	30 00
Siding, ℔ M	25 00
Tongued and Grooved, surfaced, ℔ M	32 50
Do do refuse, ℔ M	22 50
Half-inch surfaced, M	40 00
Rustic, ℔ M	35 00
Battens, ℔ lineal foot	¾
Shingles ℔ M	2 50

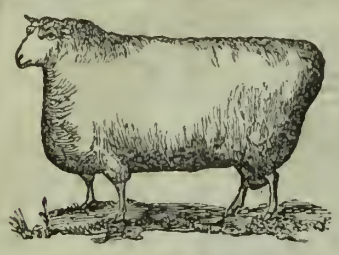
S. F. RETAIL MARKET RATES.

WEDNESDAY M., Nov. 11, 1874.

POULTRY, GAME.			
Spring Chickens	50 ea	@	—
Hens	75	@1	00
Eggs	45	@	50
do Ducks'	45	@	50
do Farallones	30	@	35
Turkeys, ℔ ℔	—	@	25
Ducks, large, pr	75	@1	00
do small, pr	37½	@	50
Tame, do	1 50	@2	00
Teal, ea	25	@	—
Geese, wild, pair	—	@	—
Tame, ℔ pair	.3 00	@4	00
Snipe, ℔ doz	.1 00	@1	25
do English	—	@3	00
Quail, per dozen	2 00	@2	50
Prairie Ch'k's, ea	—	@	—
Pigeons, per pr	50	@	75
Wild, doz	—	@2	00
Squab, doz	—	@4	50
Hares, each	37½	@	50
Rabbits, tame, ea	50	@	75
Wild, do, ℔ dz	2 00	@	—
Squirrels, ea	15	@	20
Beef, tend, ℔ ℔	—	@	15
Corned, ℔ ℔	8	@	—
Smoked, ℔ ℔	10	@	12½
Porterhouse St'k	—	@	20
Sirloin do	15	@	20
Round do	8	@	10
Pork, rib, etc., ℔	—	@	15
Chops, do, ℔ ℔	15	@	—
Veal, ℔ ℔	12½	@	15
Cutlet, do	15	@	20
Mutton-chops, ℔ ℔	15	@	—
Leg Mutton, ℔ ℔

Live Stock Notices.

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

Nurseries and Seedsmen.

SHINN'S NURSERIES,

NILES' JUNCTION,

Alameda County, - - California.

The attention of persons intending to set out Trees is requested to the well grown and large variety offered for sale by the undersigned at the above Nurseries. An examination of our stock will satisfy any one of the quality, being all that can be asked, and when the low prices we have fixed are taken into consideration, we believe we are offering the very best inducements for buyers to deal with us. For full particulars we refer to our circular for the approaching season, which will be sent, as requested, on application to either of the undersigned.

SHINN & CO.,
Proprietors.

Address James Shinn, Niles, Alameda County, Cal., or, Dr. J. W. Clark, 418 California street, San Francisco, Cal. 8v17-4mo.

SUPERIOR FRUIT TREES
TRUE TO NAME.

A fine collection of **Evergreen and Deciduous Trees. Australian Gum Trees** in variety, by the hundred or thousand. **Monterey Cypress** in quantities and sizes to suit all. **Orange and Lemon Trees** at reduced prices. A general variety of Nursery stock.

Also, Rhubarb and Asparagus roots.

T. CORLEY,
18v29-tf 315 Washington Street, S. F.

PEPPER'S NURSERIES.

(Established in 1858.) PETALUMA, CAL.

Green Houses and Tree Depot corner Washington and Liberty streets.

4 Green Houses. 3,000 feet of Glass. Fruit Trees a Specialty.

We offer for sale at lowest market rates a general assortment of Fruit and Shade trees, small Fruits, Vines, etc. Evergreen trees and Shrubs in great variety. Green House, Conservatory and Bedding Plants, Roses, etc.

We are now ready, Nov. 1st, to fill orders for trees and plants. Catalogue and price list furnished on application.

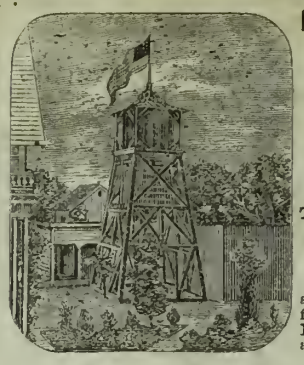
Address, W. H. & G. B. PEPPER,
19v8-tf Petaluma, Sonoma Co., Cal.

FREE to all applicants—my Nursery and Bulb Catalogues. F. K. PHŒNIX, Bloomington, Ill. 8v17-1m

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to urnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St.,
4v17-3m bet. Montgomery and Kearny Sts., S. F.



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the **Plains of Kansas, Nebraska, Missouri, Iowa and Illinois**, where no other mills have been known to stand any length of time. All we ask is a full investigation of the DEXTER.

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO.

4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.

The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept on the MERINO RANCH,



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. **City Office—315 California Street, San Francisco.**

SEVERANCE & PEET,
10v7-eow Importers and Breeders of Spanish Merino Sheep.

ALFRED S. MOORE. W. L. THWING

ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.

7v8-3m

Grange Notices.

NOW READY.

The Grange Illustrated,
Or, Patron's Hand Book.

A WIDE AWAKE BOOK FOR WIDE AWAKE READERS

Full of Vital Importance to All—of Special Interest to Every Patron.

Complete in all its parts, embracing Origin and History of the Order, Constitution and By-Laws, Rules of Order, Regulations, Aims and Purposes, New Elements, Perpetuity, Sphere of Woman, Social Meetings, Festivals, Exercises, Infinences, Intellectual, Social and Financial Co-operation, Household and Farmers' Everyday Wants, etc, etc. In short, a COMPLETE HAND BOOK, suited to the wants of every Patron, and supplied at a price within reach of all. The work, royal octavo, 300 pages, fully illustrated, elegantly bound, price **$2.00.** Sent post-paid. Address

GRANGE PUBLISHING CO.
27 Clinton Place, N. Y.

Authorized Agents of National Grange, to supply Granges with their libraries and Patrons with their reading matter. 19v8-2t

The Sewing Machine
—FOR THE—
GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

Office of the State Grange, P. of H., San Francisco, Oct. 27th, 1874.

To the Members of the Grangers Fruit Association of California:

Notice is hereby given that the regular semi-annual meeting of the said Association will be held on

Wednesday, the 11th day of November, 1874.

at 2 o'clock P. M., at the office No. 6 Leidesdorff street San Francisco.

A. W. THOMPSON,
Secretary.

California Farmers' Mutual Fire Insurance Association.

Office, 320 California Street, - - - San Francisco.

Directors:

A. WOLF, G. P. KELLOGG, I. G. GARDNER
J. D. BLANCHAR, W. H. BAXTER.

Finance Committee:

I. C. STEELE, A. WOLF, A. B. NALLEY.

Trustees:

J. M. HAMILTON, Lake Co | I. C. STEELE, San Mateo Co
J. C. MERRYFIELD, Solano Co | A. B. NALLEY, Sonoma Co
G. W. COLBY, - - Butte Co | O. S. ABBOTT, S'ta Barb'a Co
H. B. JOLLEY, - Merced Co | A. W. THOMPSON, Sonoma Co
A. WOLF, San Joaquin Co | E. W. STEELE, S L Obispo Co

J. D. BLANCHAR, Pres't. W. H. BAXTER, Sec'y.

This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

Commission Merchants.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce
—AND—
COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,
EGGS,
POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

H. K. CUMMINGS. 1858. H. H. RALSTON. 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the producer. 4v23-1v

Davis & Sutton, Commission Merchants,

For California Fruits; also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A Lusk & Co., Pacific Fruit Market, San Francisco, Cal. 3v9-1v

Snow Shoeing in California.

People who come here from abroad are generally free to acknowledge that there are more things in California than were dreamt of even in their dresmy philosophy. They sit crouching at their firesides in Europe, or on the Eastern portion of this continent, and wish for the wing of the swallow, that they might fly "where the roses are blossoming all the year long;" and in their impatience to get here they do not await the acquisition of the festhery appendages alluded to above, but fly hither by he aid of the less poetical steam-power.

When they arrive here—especially those who come by water—they are somewhat startled, if not downright incredulous, when they hear accounts of life in the snow regions of California. The same startling effects, and the same evidences of incredulity, are manifested by many who have been here long enough to claim the honor of being "regular Californians." They evidently suspect that a game of some sort is being sprung upon them when they are told that, while they are partaking of strawberries and cream in San Francisco in mid-winter, other California ladies and gentlemen, within 36 hours' ride from our favored city, are "scooting" over snows 30 feet deep on snow-shoes 16 feet long. The gentlemen use foot-gear of this size, but the ladies attach their delicately formed feet to number sevens—only 7 feet long.

There is something in the presence of enduring snow that develops in human nature the spirit that not only successfully encounters the obstacles which it places in its way, but finds in its presence a source of much hearty enjoyment; and miners and others, who remain up in the mountains during the winter season, find in the snow-shoes a means of rapid transit for purposes of business and pleasure. Ladies take part in the snow-shoe races frequent in these regions, some of them being remarkably daring and rapid "scooters."

Presuming that a large portion of our readers have never been in the snow-shoe regions, and wishing to give them a definite idea of the dimensions and style of this foot-gear, we communicated with a miner in the upper part of Nevada county, where deep snows and lengthy snow-shoes abound, and received from him the following account of their dimensions, rates of speed, etc.:

People who have never been in the snow regions of California generally believe that we use what is termed the "Canadian" or "Indian shoe." This is a mistake; the kind we use is the Norwegian style. They are from 7 to 16 feet long. The seven feet ones are for ladies and boys; those 16 feet long are for snow-shoe racing. The common traveling shoe is from 8 to 11 feet long. They are shaped like a sleigh runner, but are thinner and wider. They are generally 3⅝ inches wide at the front, and 3¼ inches at the rear end. The foot is attached just two thirds of the distance from the forward end, and is kept in its place by a strap nailed to the side of the shoe, and coming over the toe of the foot. A small block is fastened to the top of the snow shoe, so that the hollow of the foot rests upon it, and is at such a hight that when the toe is stuck under the strap the foot has to be bent slightly, to have the heel touch the shoe. The shoes are from 1⅛ to 1¼ inches thick where the foot rests on them, and taper both ways to ⅛ inch at the rear end and to the place where the turn commences in front, which is 18 inches from the point of the shoe. The toes of the shoe are pointed; not for any supposed benefit except in making them lighter. They are grooved on the bottom, so as to prevent slipping on a side hill when the snow is hard.

The fastest time I ever made on snow-shoes was about a mile a minute; and the longest jump about 20 feet; but I have been thrown a distance of 50 feet, and like a bullet at that. It would not have been very healthy for me had the snow not been soft.

A NEW FOSSIL MAMMOTH.—The bones of a huge animal have been discovered on the farm of Orman Tuttle, in Seneca township, Lenawee county. These bones were discovered ten feet below the surface, and a tusk taken out is eight feet long and weighs 150 pounds. The ribs are of immense size, the shortest being over six feet long. One of the thigh bones has been taken out, and it is estimated that the hight of the animal must have been 20 feet, and its length 30 feet. Its teeth are larger than a man's two fists, and a foot in length. What sort of animal this huge monster must have been remains for the comparative anatomist to determine.

TO RESTORE BURNT PICK POINTS.—A correspondent to the *Scientific Manufacturer* says, "To restore the burnt steel point of a pick, drill, or any similar tool, do not touch it with a hammer, but while it still emits sparks plunge it into cold water and let it remain there until cold. Then reheat to the proper degree and work it. It will then be found as good as before it was burnt."

LAKEPORT is excited over quicksilver discoveries at Clear lake.

Tempering Steel.

Tempering is the romance of the smith's shop; it has an attraction about it that characerizes every process that is mysterious, especially any process connected with, or belonging to mechanical manipulation. A strange and perhaps fortunate habit of mind is to be greatly interested in what is not understood, and to disregard what is capable of plain demonstration.

An old smith who has stood at the forge for a score of years, will take almost the same interest in tempering processes that a novice will. Give an old smith a piece to temper that is liable to spring or break when the risk is great, and he will enter upon it with the same zeal and interest that he would have done when learning his trade.

No one has been able to explain why a sudden change of temperature hardens steel, nor why it assumes various shades of color at different degrees of hardness; even the most critical researches into the chemistry of steel have offered no rational explanation. We only know the fact, and that fortunately steel has such properties. Every one that uses tools should understand tempering them, whether it be for iron or wood work. Experiment with tempered tools is the only means of determining the proper degree of hardness, and as smiths except with their own tools have to rely upon the explanations of others as to proper hardening, it follows that tempering is generally a sonrce of complaint with those who use tools hardened by others.—*Jour. Franklin Institute.*

MICROSCOPE.—According to Prof. Abbe, of Jena, the limit of capability of a microscope in showing the structure of tissues and the character of minute objects has nearly, if not entirely, been reached, higher power than those now in use giving rise to optical phenomena which are likely to completely mask the structure and character of the object under examination. Thus it may happen that while different structures give the same microscopical image, like structures will give different images; and while systems of the fine lines and the like may appear ever so distinct and well marked in the microscope, we are not entitled to regard such appearances as of morphological significance, but merely as physical phenomena from which nothing can be inferred except the presence of such structural conditions as are incapable of producing the diffraction effects obtained. These observations apply more especially to the marking of certain diatoms and striated muscular fiber. According to Prof. Abbe, by no microscope can parts be distinguished if they are so near to each other that if the first bundle of light rays produced by diffraction can no longer enter the object simultaneously with the undiffracted cone of light.

WOOD-SAWING BY WHITE HOT WIRE.—We mentioned, some months ago, that a person in New York had invented and patented a process for sawing wood by a wire kept white hot by electricity. The matter seems recently to have attracted the attention of the Abbe Moigno, editor of *Les Mondes*, who speaks of the invention as follows: The wire receives the same reciprocating motion, which is commonly given to the saw, and thus burns its way through the wood. It is practicable, according to the inventor, not only to cut logs into planks or heavier forms of lumber by this means, but also to give curvature to the cut, and to produce fantastic forms of every description, since the saw, being without breadth, adapts itself to such purposes better even than the band or ribbon saws. Inasmuch as the wire burns tis way instead of cutting, it leaves the surface of the wood charred; but this is an effect entirely superficial, and occasions no injury to the material. It would seem as if, however, there were an important question of economy here to be settled, and we shall wait before pron uncing an opinion on this application of science until we hear from it further.

A MODEL AND EXPERIMENTAL FLOUR MILL.—Prof. Isham Walker, of Lexington, Tenn., suggests that various State organizations of millers and the National Association unite and subscribe funds for the building—at Chicago, Illinois—of a model school flour mill, at a cost of $150,000. He shows that such an institution, supplied with the best examples of modern machinery, and exhibiting the latest improvements and examples of practical science in milling, would be of immense instructive advantage to millwrights throughout the country, while the stockholders, he thinks, would realize handsome dividends every year.

If Prof. Walker's idea is a good one as applied to flour mills, and we think it is—how much more valuable would it be applied to quartz mills. An experimental quartz mill, properly managed, with full publication of its results, would be worth millions to the Pacific coast, every year.

NEW BOX-MAKING MACHINE.—A novel and most ingenious machine was exhibited in operation at the recent monthly meeting of the Franklin Institute, viz: Heyl's machine for making paper boxes. This invention performs with marvelous celerity all the movements of the human operator, and turns out boxes of all desired sizes ready for use. The machine is capable of turning out from 60 to 100 boxes per minute, according to the size of the box. The machines, though but recently brought to public notice, are already kept busily at work filling orders, and there can be little doubt that they will bring about a speedy revolution in the box trade.

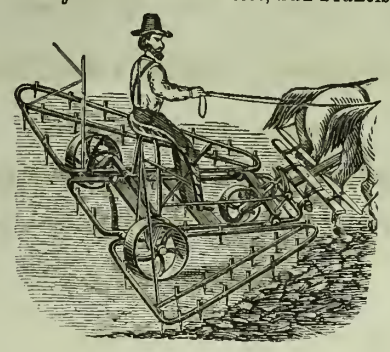
Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed hy no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of hut three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of hut one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

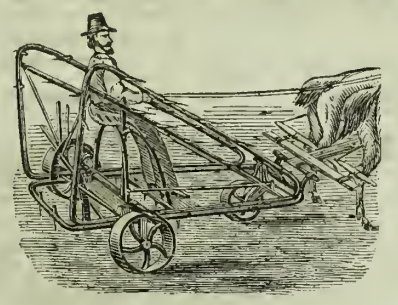
FOURTH—This Harrow is made in three sections, connected hy loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board hut 3 feet long and 2¼x4 inches, let on the tops of the levers of the wings, this can he made a stiff Harrow, and the driver hy lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can he done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected hy exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

THE TREADWELL SULKY



GANG PLOW.

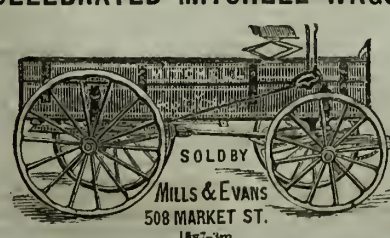
Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50; old style, $25. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

18v27-tf San Francisco.

THE

CELEBRATED MITCHELL WAGON



18v7-3m

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

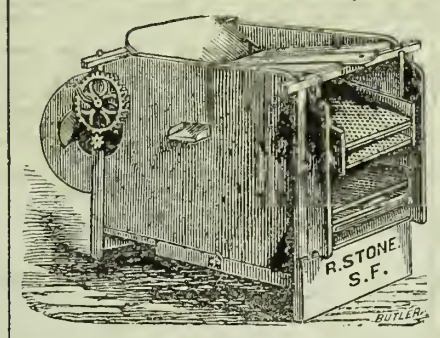
The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

THE PATENT
Novelty Mill and Grain Separator



Is one of the greatest improvements of the age for cleaning and separating grain, while it combines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

For further information, apply to

R. STONE,

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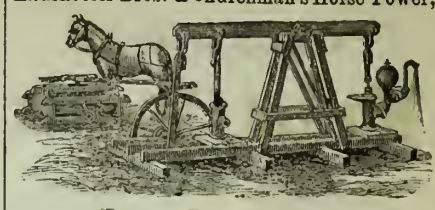
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Hints to be Remembered.

A note dated on Sunday is void.
A note obtained by fraud, or even from one intoxicated, can not be collected.
If a note be stolen it does not release the maker—he must pay it.
An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.
A note by a minor is void.
Notes bear interest only when so stated.
Principals are responsible for their agents.
Each individual in partnership is responsible for the whole amount of the debts of the firm.
Ignorance of the law excuses no one.
It is a fraud to conceal a fraud.
The law compels no one to do impossibilities.
An agreement without consideration is void.
Signatures in lead pencil are good in law.
A receipt for money is not legally conclusive.
The acts of one partner bind all the others.
Contracts made on Sunday can not be enforced.
A contract made with a minor is void

FROM AN INVENTOR.

PLACERVILLE, October 3d, 1874.

MESSRS. DEWEY & CO.—*Gentlemen:* Yesterday I received from you my Letters Patent for my Hydraulic Mining Lamp, and I herewith tender you my grateful acknowledgements for the energy and promptness which you have displayed in working said invention through the Patent Office for me; and shall in the future, as well as the past, recommend all parties having new inventions, to go direct to the office of Dewey & Co., and ask for Mr. Boone, in the Patent Department, and if he cannot procure a patent for them they will find it useless to try further. Yours Respectfully, C. B. BROWN.

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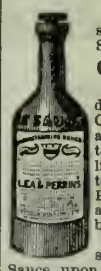
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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, NOVEMBER 21, 1874. [Number 21

Seasonable Hints.

The early rains have been a misfortune in some districts by destroying the dry feed of the pastures; but on general principles it is a great advantage to have the time for plowing so much extended that the farmer can, if he chooses, take a few weeks for the preparation of what is properly the work of the season. Plowing may be done so much in advance this year the ground will have time to sweeten, a very desirable preliminary to the planting of orchards and ornamental trees. Every farmer who is creating a home should intend to plant all the public roads which touch his property with shade trees, and if he cannot do it all at once, let him begin with a few near his building site, and add to his plantations year by year. The embowering shades around Locust farm house, at Walnut Creek, show what pleasantness a little care and forethought at the right time will secure. Make a beginning, the trees will grow while the family are asleep, and year by year the noble forms of the arborial kingdom will be adding grace, and giving unconscious instruction to all your lives. Have a few boxes of earth near your house by the well or spring, into which the chance seeds you gather from various sources may be planted, and you will be surprised to see how fast a collection will be made, and a bald, uninviting ranch, grow into a "country seat."

Having decided to plant a border or roadway with shade trees, the sooner the ground is worked the better. Don't put off this work till the crops are in—or until you get the trees. If you do they will not be half planted. They never are when the job is done up at once. Nature will not put her seal of approval upon any work which does not follow her methods. Therefore run two or three furrows along the line intended to be planted, and follow each with a second furrow, or better still with a subsoil plow. Then mark off the position for the trees, say sixteen feet apart, digging a hole at each point, at least three feet in depth, and in digging throw the bottom soil further and further away from the hole, that none of it may be fed to the roots of your trees. If the subsoil is clayey, or otherwise impervious to moisture, it is an excellent plan to bore down from the bottom of your hole with a post augur as far as it will reach. I have seen such holes nearly full of water long after the surface appeared dry, showing why some thrifty trees perish after three or four years' vigorous growth, from water rolling off the roots. Good underdrainage is essential to the growth of forest trees.

The digging of the holes being finished, it is well to look over the nursery catalogues and think what is going to be the most profitable or ornamental. Our trees will be allowed to grow in their own form and likeness, open on all sides to the air and sunshine, if we plant them sixteen feet apart, in ten years we must cut out half, in twenty we must cut again, in case we select from the Australian giants, as we probably shall. In twenty years the gum trees will make a noble avenue, and as no amount of topping will long restrain their disposition to rise above earthly things, in forty years, if untouched with the knife, they will show grand silvery trunks, with shimmering masses of foliage too high for shade trees, but giving picturesque beauty to the landscape. This applies more to the eucalyptus globulus or blue gum, the cheapest and commonest species. But in planting an avenue, or even one side of a public road, the effect would be more agreeable if several kinds of trees were used, some decidous, as maples, sycamores or elms. And if every third or fourth tree was round headed or spreading, thus filling the line with foliage at the ordinary hight of our native trees. Different species of eucalyptus may be used, but they are all evergreen, and do not make the charm of variety complete. Eucalyptus engenoides, the mountain blue gum, is a fine tree to plant along a road, or near gates, it can be arched and worked into ornamental forms. Along my interior drives or farm roads I should plant walnut and fig trees; the walnut is one of the finest avenue trees in the southern part of the State. In a group of trees, the clean, white limbs of the fig or buckeye are charming, when relieved against a background of dark evergreens, such as laurels or oaks. Our California laurel deserves to be planted wherever the soil is moist enough; there is no foreigner which can compete with it in the beauty and value of its timber. Of the eucalyptus or gum trees, I should plant two different kinds, and ten to one of the blue gum, because it is soonest available for posts or other uses, and I should prefer to cut it in thinning out. Eucalyptus peperita, or peppermint gum, odorata, acmenoides or white mahogany, pendula, or weeping gum, amygdalina, or cinnamon bark, which is said to reach 450 feet in its native wilds. Lancelota and virminales ought to be in every good collection. The readers of the RURAL PRESS will remember Dr. Gibbons illustration of the right and wrong way to plant gum trees, and what he said about trimming then, something like a year ago. The article ought to be pasted up were it can be read and re-read through the planting season. All the species of eucalpytus which I have named grow from 175 to 400 feet in hight. It only requires a moment's thought to see that they are not appropriate for door-yard trees or house shelters. One of the prettiest trees to grow at a distance of a few rods from one's house is acacia melanoxylon. A calamifolia is a rapid grower. Implexa is a fine tree with leaves like a Turkish scimetar in shape. Linearis is a graceful, willow-like species.

Perhaps "Seasonable Hints" might include a word about the planting of city lots. Nearly all lots are over planted, and there is too little individuality exhibited in the selections.

It has always seemed to me that a mistake is made in growing grass in close proximity to our dwellings. The moisture required to keep it thriving is not wholesome after sunset. A few choice shrubs, carefully tended, and washed free from dust, a rustic basket, or two filled with gay climbers or trailing plants, with fine, dry gravel close to the building, is a good sanitary, if not æsthetic sense. When roses are grown against the house, they should be thrown out at least a foot by wire supports. A single city lot can always exhibit some fine plants in flower by making judicious selections, yet never look huddled or confused. J. C. C.



PASSENGER PIGEON.

The Passenger Pigeon.

The passenger pigeon, or wild pigeon, of America, ranges far to the north and south of the United States, and westward to the Rocky mountains; but is very rarely met with, except in communities of millions or billions, requiring for their roosting-place an immense forest, the trees of which are soon crushed and blighted by their weight. This extraordinary gregariousness is wholly inexplicable.

The home, or roosting-place of this pigeon, is selected with reference to the abundance of beech and oak mast in the vicinity; that is to say, within a few hundred miles; for it is alleged of them that they fly at the rate of a mile a minute. Indeed, although they digest rice in twelve hours, food of this kind, which must have been procured in the fields of South Carolina or Georgia, has been found undigested in the stomachs of passenger pigeons killed in New York. They do not regard climate, except as it affects the supply of food; and only change their place of resort on this account, notwithstanding that men with nets and guns capture and destroy them, or rake their lodging trees with poles, burn sulphur under them, cut down the trees, and by various other devices slaughter them by thousands. Sometimes they remain in a region of country for years, and are then absent from it as long, or until their new range evinces a scarcity and their former one becomes abundant.

In the evening the air is sometimes darkened by these birds, as by an eclipse of the sun; a rushing noise is heard, in the midst of which the sound of a gun cannot be distinguished; and the air is put in motion by the flutter of their wings.

As the supply of food alone determines the migrations, they do not occur at any particular season. The power of flight enables these birds to traverse and survey an astonishing extent of country in a very short time; their power of vision seems to be as great, enabling them to perceive with certainty the resources of the country with respect to the food they seek. Thus, in passing over an inviting field they at once descend near the earth, but as promptly ascend to take a more extended range, when a sterile region is beneath them.

Their period of breeding is not influenced by season; the place is selected with reference to the contiguity of food and water. Forest trees of great hight are chosen, and upon these a hundred nests are often built, frail structures composed of a few dry twigs crossing each other, and supported by forks of the branches.

CLOVER SEED DAMAGED.—Among the crops that were "caught out" by the recent rains was that of clover seed. The damage is reported to be so serious as to not only be a great loss to the owners of the crop, but will undoubtedly cause a scarcity of the product. We find the following statement in the Sacramento *Record* in regard to the damage to the clover seed crop: Thousands of acres of this crop on the Sacramento river was still standing uncut, and thousands more had been cut, but not gathered up when the first rain came two weeks since, and all this has been more or less damaged, and much of it very nearly ruined. Even where the crop was standing in the field uncut the damage is much greater than would be supposed. Clover seed sprouts very quickly when exposed to moisture, and we have noticed that the seed in the ripe pods were so swollen as to burst the pods and allow the seed to fall to the ground even before the rain discontinued. Thus a very large portion of the seed was irrecoverably lost. The moisture dissolved the vegetable glue that held the pods together on much of that which did not fall out, so that they will open and spill their seed the moment the jar of cutting is commenced. The clover that had been cut and was lying on the ground was even in a worse condition, and the loss in such cases will be even greater than where cutting had not taken place. It may be safe to calculate that clover seed will be scarce and dear this year.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

From Vine Hill.

EDITORS PRESS:—We receive your most interesting and valnable paper weekly. We always hail it with much pleasure, expecting something good, and are never disappointed in that respect. Hearing that Mr. Chas. T. Bell, a correspondent of your paper, was stopping neai here, we thought that we would have something from his delightful pen in regard to Vine Hill or Santa Cruz, to grace the columns of the PRESS. We have been waiting very patiently, and have finally concluded that he must be preparing some raro treat for your readers. And as there are a great many charms and attractions in the conntry (especially for certain correspondents), we suspect that he is blending plessnre with work, and therefore we will have to wait a little while longer; meanwhile, perhaps, a few crnmbs from Vine Hill wonld be acceptable from another more humble writer. If so I will try and gather a few for the waiting ones.

For the benefit of some of your readers, who do not know where Vine Hill is, I wonld say it is one of the prettiest and most delightful places imaginable, and is situated eight miles north of Santa Crnz, two miles east of the San Jose and Santa Cruz stage-road, though they are trying to put this road through Vine Hill, and probably will snceeed in doing so. And then Vine Hill, you will be open to the view of all passers by; and won't they admire yonr stately loveliness, as they pass through, and see your "vine clad hills!" Ah! Spain and Italy beware; or you will soon have to yield your "palms of beauty" to a younger, but not less beautiful country. Vine Hill comprises a tract of land five or six miles square, and this is divided into some 13 or 14 d fforent vineyards, the principal one being the Vine Hill vineyard, owned by the enterprising Mr. G. M. Jarvis. The Sugar Loaf vineyard of J. W. Jarvis, Prospect Hill, vineyard of C. N. West, and Bay View vineyard of the Lay Bros.

You can here find every variety of scenery; lofty mountains, rolling hills, valleys, deep cañons, creeks and little babbling brooks. From some parts of the hill can he seen Santa Cruz city; and from all parts the beautiful bay of Monterey, and the Monterey mountains for a lovely backgronnd. All varieties of grapes are raised here; wine, raisin and table grapos. Come here in the grape season and see the vineyards, the vines covered with a beautiful foliage (in the early part of the grape season) of green, red, scarlet and variegated leaves. But, mind you, this foliage is not what you are to see; just push aside the leaves, lift up that branch, then look! Ah, there is what wo wish yon to see. I do not wonder at your look of surprise or your exclamation of Oh, just look! For you will see such masses of large sweet grapes as you never dreamed of. No! if we could tell of the immense qnantities of grapes prodnced here, yon could not believe it trne until you could see for yourself. There has been a larger yield of grapes this year than ever before, thousands of tons. But the unusual early and heavy rain this year has ruined tons and tons of them, which seriously affects all this year, but as it is nnusual to have such a storm so early in the season, it is hoped that they will not again loose such large quantities.

The Jarvis Brothers produce large quantities of wine and brandy, besides the wine from the other vineyards. There are several fine large buildings on the Vine Hill vineyard. The Lay Brothers have been bnilding a fine residence on their place. Some say this is because they think of getting married. We hope so, but think it a mistako, as they seem to be incorrigible bachelors. We would here state that there are quite a number of bachelors here; nice men who have fine places, and all they seem to need now is a good wife to make them happy. Now here is just the place for the old maids, as they are called, and widows to come to, as perhaps they might get just the right one. At least, there is nothing like trying, they say. Old maids are a very scarce article in this part. Readers, please pardon this digression.

The famous magnetic springs are situated on the southern part of the Vine Hill. The proprietor, Mr. E. G. Fisk, has erected a commodious hotel for the benefit of those who wish to spend the snmmer here, or test the merits of the spring water. Each place here has some peculiar attraction of its own. Almost every home has in it either an organ or piano. Flowers are cultivated, rare pictures adorn the walls of some of the homes, and the RURAL PRESS is taken in nearly every family. Still we think it wonld be better if the people, one and all, would pay even more attention to their mental culture. There was an attempt made in the spring to organize a debating society, but as there was but little interest manifested, or almost none at all, it proved a failure. The people here, like a great many elsewhere, think too much of the money to be made, and show; and too little of that peerless gem the mind and soul. Do not think by this that we are all heathens; oh, no—not quite—but I *do* think that there might be a great improvement. I think if any one wants to prove the truthfulness of the description of Vine Hill, it would be pleasant for them to visit here. Then they could judge for themselves. I think that they, like several who have expressed their views, wonld say it is the "Garden of Eden." Then you would perhaps ask are we happy. Was Adam and Eve happy? We answer yes; they were, until the serpent entered the beautiful garden and tempted them, and they yielded. So all may be happy wherever they are, if they do not yield to the snares set for their feet by the evil one. Perhaps I shonld make a few comments on Santa Cruz, but as these crumbs are perhaps getting rather dry, and as I may possibly feel like giving a few notes from Santa Cruz some other time, if acceptable to the PRESS and its intelligent readers, I will say nothing of it now. SULIOPH.

Prospect Hill, Santa Cruz, Nov. 9th, 1874.

Agriculture in Egypt.

EDITORS PRESS:—I think it wonld pleaso many of yonr readers to see a letter of Alexander Delmar on Agriculture in Egypt, dated October 28th, and published (or at least I read it) in the Chicago *Inter-Ocean* of Nov. 5th. He closes a long and very interesting letter thus:

"The United States is to-day the granary of Europe; but snch are the conditions of commerce and such the potency of commercial capital that this proud distinction brings with it loss instead of profit.

"Take this year for example. There is scarcely more than a fair average crop harvested in this country, while England, owing to her increase of population, is as short as usual. France has none to spare. Middle and Eastern Europe has a good crop, but little for exportation, and that little is as inaccessible to England as Minnesota. Turkey is starving. Egypt, with no stock on hand from last year, and the Nile has just passed the crisis of a threatened overflow. Yet the reality of low ocean freights, and the appearance of (thanks to the canards of British agricultural writers and bearish American newspapers) overabundant crops in Europe, have reduced the price of wheat in this country below the cost of production. However, let the farmers hold on, for in my opinion there is a good time coming yet."

It will be remembered that Egypt, in 1873, sent 2,943,588 bushels to the English market.

MRS. E. S. CARR.

PHYLLOXERA—A REMEDY.—EDITORS PRESS:—I send you what I believe to be a certain remedy for phylloxera in grape vines. Dig enough about the roots to make the soil soft and mellow; then mix about a foot below the surface, broken bones or oyster shells, and about an onnce of sulphur. Just before the buds begin to swell take a small gimlet and bore a hole about half way through the vine, and put in as much sulphur as yon can press in; then plug the hole with a piece of grape vine, to keep the sap from running out. This is all that is needed to make the vine healthy.

M. W.

FROM HILL'S FERRY.—EDITORS PRESS:—We have had a fine rain, ehongh to set the farmers plowing and sowing. Some predict a dry winter on account of such early rains, but it is to be sincerely wished otherwise for this part of the conntry. For five years now there has been but one crop raised on the west side of the San Joaqnin. This year there was about a fourth of crop. E. H. ROBINSON.

Hill's Ferry, Stanislaus Co.

THE RAIN IN POTTER VALLEY.—EDITORS PRESS. The late rains have put the soil in fine order for the plow and harrow, and both have commenced work. The grass is putting on the green, and if the rain holds off a week or two Potter valley will be well pleased.

C. I. H. NICHOLS.

Potter valley, Mendocino Co., Oct. 24th, 1874.

THE MICROSCOPE.—The question as to the limit of capability of the microscope is investigated by Professor Abbe, of Jena; and he is led, by a series of physical deductions, to the remarkable result, that this limit is already as good as reached by our best microscopes, and that all hope of a deeper penetration into the material constitution of things than snch microscopes now afford must be dismissed.

MR. STANLEY'S special mission to Africa has begun well. He writes that he has been pleasantly received by the Sultan of Zanzibar, and was actively engaged in completing preparations for his journey to the interior of the continent.

A MONSTER AMERICAN LOCOMOTIVE.—The Pennsylvania Railroad Company claims to own the largest locomotive in the United States. She has twelve driving wheels and weighs 75 tons.

HORTICULTURE.

Botany as an Aid to Horticulture.

To the man or woman who is engaged in a struggle for life, the study of any of the natnral sciences is nsually considered worse than nseless; and, if the individnal have no higher aspirations than simply to labor that he or she may eat and drink, the proposition will probably hold good. Yet, if it were possible to teach the elements of some of the sciences in our common schools, there is no doubt that the effect on the rising generation would undoubtedly be seen in a largely-increased fertility in resources in the ordinary cares of life.

One of the great troubles in the study of sciences is, that it seems impossible to get our educators out of the old rut that there is but one road to learning—through Rome. They esteem the study of Latin and even Greek indispensable before those sciences wherein classical names are used to designate species, orders, families or things, can be pursued. While this may be right in the case of the student who pnrsues the study of a science to its end, it is fallacious so far as the student is concerned who studies a science as an aid to his particular calling, when that calling is one not requiring deep scientific research.

For instance, the farmer and horticulturist should understand something of entomology and botany. Every one does, in fact, acquire more or less knowledge in this direction, for if we learn to distinguish a fruit, a flower, a tree, a variety of grain or grass, and correctly name it, we know something of botany; and so, if we are able to distinguish and correctly name an insect, we know something of entomology. Still, we should be able to do more than this. We should understand the history and habits of plants and insects, beneficial and noxious; and all this may be easily acquired by the average boy and girl without interfering seriously with the ordinary studies of our country district schools. The trouble is that the average teachers know nothing of these things themselves. Why not? since the generic names necessary to a common comprehension may be acquired while pursuing a study, just as a child learns to spell or read.

There is no doubt that the study of botany would give the farmer, and especially the horticulturist, more pleasure than any other study that could be pursued. It would give an intimate acquaintance with those things that are daily dealt with. It would make him acquainted with the various characteristics of every shrub, tree, grain, grass, vegetable, fruit, flower or plant that meets our eye, and through these, the character of the soil they occupy.

This acquaintance will enable us, not only to appreciate the beauties of the flower on every hand, but also give zest to life in a variety of ways. We shall be more likely to make our homes pleasant through the cultivation of flowers and curious plants—to add to the comforts of home by the cultivation of fruits. It will cause us to plant trees for shade, and for shelter of our animals. It will increase a taste for further study, and this, again, will necessitate the purchase of books that will tend to broaden the mind in various directions. At all events, if it serve but the one purpose of making home more attractive, and thus lessening the increasing tendency of our youth to waste time in village saloons, or even more questionable places of amusement, it would pay the cost a hundredfold. It is a question that interests parents especially. All that is needed is a persistent effort in the school districts. The time is ripe. It need not cost the dismissal of our present teachers if they have the sense to second the movement by increased study themselves, for "Where there's a will there's a way."—*Western Rural.*

Strawberry Culture.

It is a good time now to look over old strawberry beds, and also to plant out new ones. Make the ground deep, say spade or plow it at least eighteen inches, and at the bottom of each spade or plow depth put in two or four inches of coarse straw manure. If you have the young plants npon your own place they can be readily transplanted, and the work is best done after 4 o'clock P. M. of the day. If the plants are sent you from a distance, as soon as received wet the bundle or package and lay it in a cool place, the cellar say, for a day. Then at night, or near night, dig freshly a piece of ground, open the package of plants, see that the plants are all young, use no old last year's plants; see, also that all are full-grown leaves; then lay these in by the bed, as gardeners term it, *i. e.*, each separate plant with its roots spread ont, and laying npon a bank of fresh earth at an angle about like that of a country house roof. Cover qnickly so as to just leave the crown of the plants level with the earth. Cover the whole with a mulch two inches thick of straw, rushes, etc., and then give one good watering. Leave two days; then proceed in the after part of the day to plant out, setting each plant eighteen inches one from the other, and when setting, make with your hand or trowel, a little mound in the earth like a bowl, bottom npward, set the base of the crown on this center point, spread each root out singly and cover with the good soil; press the earth with your fingers ontspread, so that only their points will reach the roots and mingle or cause the earth and roots to adhere. Don't tread on the grounnd arounnd the plants, or pack the earth with fist or mallet. Spread upon the whole snrface and over the plants two inches deep of straw, bog hay, rnshes, etc., and yon may be snre of having a good crop of frnit next season. —*Tidings, Oct. 31st.*

THE TEMPERATURE TO GERMINATE SEEDS. Seeds of hardy flowering plants reqnire a temperatnre in the soil of about 50° or 60° to germinate well, and tender plants 75° and npwards. These facts should be borne in mind by those who would succeed with annual flowers, and the seeds be sown at corresponding periods in spring.

BEES.

New Bee Enemy.

In answer to your call in yonr last issue, I consider the mosqnito-hawk no insignificant enemy to the bee.

They generally commence jnst at or a little before sunset and take them on the wing high np in the air as they are concentrating at the hive.

Some of them play arounnd the hives, snd as it gets late enongh for all "honest bees" to be at home, they become more numerous arounnd the hives and actually pick the bees off which are clustered around the entrance. They only last a few weeks and are not continuous as they cease for a while and then appear again. They devonr bees with grest rapidity and hnndreds of these can certainly deplete a few hives injuriously.

My neighbor, Mr. Rice, lower down the river, reports them as more numerous than here.

With a hand full of switches I struck down over 500, and think I saved bees enough to pay me, and besides it was a pleasant recreation and the enjoyment at the same time of a kind of *sweet* revenge.

There are different species of these insects and the large bee-eater will behead the smaller species and devour them in a trice.

Many bees have been lost this season from robbers and most all those who keep them here are entirely ignorant of the cause of loss or the remedy.—*J. B. R., in Our Home Journal.*

Italian Bees and Clover.

A correspondent of the *Country Gentleman* says, in conversation with a gentleman who is largely interested in keeping bees, he stated that one great advantage that the Italian has over the common bee is that it can gather honey from the red clover, which the common bee cannot do, as its proboscis is not long enough. It occnrs to me that if this be so, persons raising clover seed might find it an advantage to keep a few stands of Italians, as it is stated by some naturalists (Darwin for one) that we are indebted to the common bumble bee for fertilizing the bloom of the red clover, as in its search for honey it presses the pollen into the flower where it can reach the pistil; and that in places where local causes have destroyed the bumble bee, it is nearly impossible to grow red clover successfully. Now, as the bnmble bee is found in comparatively small colonies, it might be well for some of our clover seed growers to try the experiment as to what effect the introduction of a few stands of Italians would have on the increase of seed above the average. What do yon think of it? We do not nnderstand all the balances of natnre; yet we know that in many cases we are indebted to the insect world in such affairs as this, and while many species only compensate in this way for the damages done in others, this insect seems to promise only good.

HONEY IN NEW YORK STATE.—Mr. Qninby is authority for the following statement: The Cherry Valley *Gazette* gives Mr. Hetherington the credit of being the largest honey producer in the State. From what I know of the prodnct I should say much the largest. It says: Mr. Hetherington shipped one day last week a car load (ten tons) of choice white honey. He had previously sent away abont three tons, besides two tons of strained honey. There are yet several lots that have not been brought in, so his this year's crop cannot fall much short of 20 tons. One of his partners that had the care of 177 hives of bees last spring, obtained in surplus over 17,000 ponnds—box and extracted. He took the pains to weigh accurately the prodncts of one hive, that seemed to be doing better than the others. He commenced June 29th, and obtained five pounds; July 4th, eleven pounds; Jnly 8th, thirty pounds; July 16th, thirty-one pounds; July 23d, fifty-eight pounds; July 25th, fifty-seven pounds; July 29th, sixty-five pounds; August 1st, sixty-five ponnds; Augnst 5th, seventy-two pounds; August 8th, forty-six ponnds; Augnst 26th, thirty-seven pounds. Total, 582 pounds in about two months.—*Rural New Yorker.*

YIELD OF HONEY.—M. A. E., of Kansas, gives the following as his average for the past three years: 1871.—Average per colony 40 pounds; average sales 22 cents per pound; average valne of honey per colony, $10 (box honey). 1872.—Average per colony, 43 pounds; average sales, 22 cents per pound; value of honey per colony, $9.46 (¾ box, ¼ extracted). 1873. —Average per colony, 16 pounds; average sales, 25 cents per pound; average value of honey per colony, $4 (¼ frame ¾ extracted). The most box honey taken any one year from any one hive, 98 ponnds.

Good Health.

Transfusion of Blood.

An Interesting Surgical Experiment.

An interesting experiment was performed on Friday last in Fall River, Mass., by Drs. Julius Hoffman and Louis Weyland of this city. Herman Dubois had suffered from consumption for five years, and had become very weak and debilitated. Physicians advised him to seek a warmer climate, but he had not sufficient strength to avail himself of this chance of relief. Dr. Hoffman had transfused blood from animals, dogs and lambs, to the human subject with success in six cases, and it was determined to make the experiment upon Mr. Dubois. Dr. Hoffman described the operation as follows:

A healthy, active lamb was procnred and taken to the room where the patient reclined. The animal was laid upon its side. An incision was made on one side of the larynx, exposing the carotid artery. When this artery was fully exposed a ligature was tied around the vessel, shutting off completely tho blood current. At a distance of about an inch and a half below the ligature a powerful pair of forceps was applied to the artery, compressing the vessel perfectly. Thus there was a space between the ligatnre and the forceps which could be opened without danger of hemorrhage. A small incision was made into the artery in this inclosed space. Then a glass tube slightly bent was inserted into the artery. A small isthmus of constriction had been made in the part of the glass tube inserted into the artery, which enabled the tube to be securely tied into the vessel. After the tube had been secnred in the lamb's artery, everything was made ready for work npon the patient. In Mr. Dubois' arm the vein at the bend of his elbow connecting the basilic and cephalic veins was exposed. A bandage was tied around below the proposed incision to prevent a flow of venous blood from the wonud. After exposing the vein by an incision an inch long, forceps were placed above and below, shutting off the blood current from a space about half an inch long. The lamb's neck was then brought close to the patient's arm, and the pressure of the forceps upon the lamb's artery relaxed. The blood rushed through the tnbe, expelling all the air. Then the opposite end was skillfully inserted into the patient's vein and the pressure of the forceps upon the lamb's artery was removed. The bright blood leaped through the tube and entered the system of the patient. The stream was kept up for one minute and 40 seconds. Then the compression was removed and the tube removed. Yesterday I heard from Mr. Dubois, and he has sufficiently recovered his strength to enable him to visit a warmer climate this coming cold weather, with good prospects of regaining his health. The lamb is also alive and doing well. A lamb used in the same manner in a former experiment in this city is still alive, and is now tied in a stable in an adjoiuing street. The human subject was so much benefitted that he spent the summer in the Catskills, and is now in Baltimore.—*N. Y. Tribune.*

The Pulse.—Every intellectual person should know how to ascertain the state of the pulse in health; then by comparing it with what it was when he is ailing, he may have some idea of the urgency of his case. Parents should know the healthy pulse of each child, as now and then a person is born with a peculiarly slow or fast pulse, and the very case in hand may be that peculiarity. An infant's pulse is one hundred and forty; a child of seven, about eighty; and from twenty to sixty years it is seveuty beats a minute, declining to sixty at four-score. A healthful grown person's pulse beats seventy times in a minute; there may be good health down to sixty; but if the pulse always exceeds seventy, there is a disease; the machine is working too fast; it is working itself out; there is a fever or inflammation somewhere, and the body is feeding on itself, as in consumption, when the pulse is quick—that is, over seventy—gradually increasing with decreased chances of cure, until it reaches one hundrod and ten or one hundred and twenty, when death comes before many days. When the pulse is over seventy for months, and there is a slight cough, the lungs are affected.

Breathing Through the Nose.—The pernicious habit of breathing through the mouth while sleeping or waking, is very hnrtful. There are many persons who sleep with the mouth open, and do not know it. They may go to sleep with it closed, and awake with it closed, but if the mouth is dry and parched on waking, it is a sign that the mouth has been open duiing sleep. Snoring is a certain sign. This habit should be overcome. At all times, except when eating, drinking or speaking, keep the mouth firmly closed and breathe through the nostrils, and retiro with a firm determination to conquer. The nostrils are the proper breathing apparatus—not the mouth. A man may inhale poisonous gases through the mouth without being aware of it, but not through tho nose.—*Science of Health.*

Amputating the Tongue.—A singular surgical oporation was performed at Los Angeles, a few days ago, ou Adolfo Leibas, a boy twelve years old. He had hypertrophy of the tongue, which organ protruded four inches from his mouth. It was cut off so as to leave a natural sized tongue. The operation was a snccess, and now the patient can speak.

Infanticide by Opium.

One of the best informed physicians in England, Dr. Mitchell, employed in the public health service, some time ago published a mass of testimony obtained by him from numerous medical witnesses, showing the almost universal resort to opium in order to benumb and stupify children, even those of the tenderest age, a very common preparation for this purpose being a so-called cordial made of treacle and opium. So general, it appears, is the use of this mixture, that customers go to the apothecaries, and, without any hesitation, ask for a dose of it "to give to the baby next day, as they are going out to work." Chemists frankly admit that they make and sell these opium decoctions by the barrel and hogshead full.

This baneful usage prevails not only in the colliery districts, but also in manufacturing and non-manufacturing places; and it is stated by one physician that in the Nottingham, Derby and Leicester districts the habit of administering opium to infants usually begins when the child is three or four months old. And still another witness asserts that the opium cordial is given on the very day of birth, being in readiness for that event. The inevitable result of this terrible custom is, of course, that a great number of infants perish, either suddenly from an overdose, or, as more commonly happens, by slow, painful, insidious disease. Compared, therefore, with this form of infanticide, the kind practiced by the Chinese may be said to be merciful.

Useful Information.

How Bar-room Liquors are Made.

There may be seen daily, on Chestnut street, says the Philadelphia *Bulletin*, a man dressed in faultless apparel, with a great diamond upon his breast, vainly endeavoring to outglitter the magnificent solitaire on his finger. In a German University he learned chemistry, and not even Liebig knows it better. His occupation is the mixing and the adulteration of liquors. Give him a dozen casks of deodorized alcohol, aud the next day, each of them will represent the name of a genuine wine or a popular spirit. He enters a wholesale drug store bearing a large basket upon his arm. Five pounds Iceland moss are first weighed out to him. To raw liquor this imparts a degree of smoothness and oleaginousness that gives to imitation brandy the glibness of that which is most matured. As astringent called catechu, that would almost close the mouth of a glass inkstand, is next in order. A couple of ounces of strychnine, next called for, are quickly conveyed to the vest pocket, and a pound of white vitriol is as silently placed in the bottom of the basket. The oil of cognac, the sulphuric acid, and other articles that give fire and body to the liquid poison, are always kept in store. The mixer buys these things iu various quarters. They are staples of the art.

The First Electrical Machine in America. A friend of the late Dr. Priestley (Mr. Hugh Bellas) wrote: "In the summer of 1800 I called on Dr. Priestley to return some books I had borrowed, when he told me he had just received a very curious present from Europe, which he would show me. He took me into his laboratory and pointed to a small pile of plates of silver and zinc, in alternate layers, with pieces of wet flannel and interspersed, each plate about about the size and form of a common playing card. A piece of small wire was inserted at the top, and another piece near the bottom, and the other ends of the wire were brought together, and there underwent decomposition. 'Now, this is called the pile of Volta,' said the doctor, 'and here is the electric fluid destroying the ends of the wires. Put the joint of your thumb to these points and you will feel a slight electric shock. You need not be afraid; it will not be severe.' I did as he directed, and received successive slight shocks upon repeated applications to the points." This was the first electric machine brought to America.

Dyspeptic Hunger.—If a man is hungry within an hour, more or less, after a regular meal, he is dyspeptic beyond question, and it shows that the stomach is not able to work up what he has eaten, so as to get nourishment out of it; but, to eat again, and thus impose more work, when it could do nothing for what had already been eaten, is an absurdity; and yet all dyspeptics who eat when they are huugry do this very thing, and thus aggravate and protract their sufferings.

The engraved cylinders for calico printing are required to be of pure copper, and their unsoundness, when cast in the usual way, was found to be so serious an evil that it gave rise to casting the metal under pressnro.

Bossin's indelible ink is made of two parts of powdered acetate of copper, four parts of salammoniac, one part of lampblack, and twenty parts of water, well mixed together. They make a good indelible iuk, which, however, must always be well shaken before using.

If a person in a house on fire has the presence of mind to apply a wet cloth or handkerchief to the mouth and nostrils, a passage can then be effected through the densest smoke without any serious inconvenience.

Botanical Photography. — Leaves of any kind may be beautifnlly photographed by the following simple process: Place five cents' worth of bichromate of potash in a two-ounce bottle of plain soda water, and when most of it has been dissolved pour off some of the clear liquid into a plate and thoroughly saturate a piece of ordinary writing paper iu it. Then lift out the paper and allow it to become almost entirely dry in a dark room. Thus your "plate" is prepared. The leaf should then be placed upon the now bright yellow paper, a piece of soft black cloth and several thicknesses of newspaper under the latter, and the whole inclosed between pieces of glass of the same size and held together by clothes-pins. Expose to the snn so that the light will strike full upon the leaf nntil the paper has turned a deep browu; theu take the paper from the fiame and put it in clear water, which must be changed every few minutes until the yellow part becomes perfectly white—and the photograph remains.

To Keep Flies From Horses —M. Perret, a French pharmaceutical chemist, has discovered a very simple and economical method of saving horses, particularly when they are not in motion, from being tormented by flies. It consists in merely rubbing them with a little concentrated oil of laurel, which is extremely disliked by the flies. The oil should be especially applied to the parts where the flies usually settle. With about threepenny worth of this oil a horse can be anointed for three days. There is not the slightest danger in using it, and, indeed, its slightly stimulating action is beneficial to horses, and keeps their coat in good order. The expedient may also be usefully replaced by a solution of sixty grammes of asafœdita mixed with one glass of vinegar and two of water. The strong odor of asafœdita drives away the flies, and, if horses be well washed with this, not a fly will settle on them. No apprehension need be felt in using the asafœdita, which has no deleterious properties.

Strength of Different Materials.—A quarter-iuch rod of the best steel will sustain 9,000 pounds before breaking; soft steel, 7,000 pounds; iron wire, 6,000; iron, 4,000; iuferior bar iron, 2,000; cast iron, 1,000 to 3,000; copper wire, 3,000; silver, 2,000; gold, 2,500; tin, 3,000; cast zinc, 160; cast lead, 50; milled lead, 200. Of wood, box and locust the same size will hold 1,200 pounds; toughest ash, 1,000; elm, 800; beech, cedar, white oak, pitch pine, 600; chestnut and maple, 650; poplar, 400. Wood whicu will bear a heavy weight for a minute or two will break with two-thirds of the force actiug a long time. A rod of iron is about ten times as strong as hemp cord. A rope an inch in diameter will bear about two and a half tons, but in practice it is not safe to subject it to a strain of more than about one ton. Half an inch in diameter, the strength will be ouequarter as much; a quarter of an inch, onesixteenth as much; and so on.

Sawdust Brandy.—A German chemist has succeeded in making a first-rate brandy out of sawdust. We are a friend to the temperance movement and we want it to succeed, but what chance will it have when a man can take a rip saw and go out and get druuk with a fence rail? What is the use of a prohibitory law if a man is able to make braudy smashes out of the shingles on his roof, or if he can get delerium tremens by drinking the legs of his kitchen table? You may shut an inebriate out of a gin shop, and keep him away from taverns, but when he can become nprorious from boiled sawdust and dessicated windowsills any effort at reform must necessarily be a failure. It will be wise, therefore, if temperauce societies will butcher the German chemist before he goes any furthor.—*Exchange.*

Dr. Elsner states that the accidental use in his household of the water which had been employed to boil potatoes for cleansing silverware, led to the unexpected result that this was much superior in its cleansing action to the polishing powders so generally employed. It was found that by simply rubbing the article with the fine deposit of potato flour, it took an excellent polish, without the disagreeable necessity of subsequently using the brnsh to remove the material, as is necessary where powders are employed instead.

Marking Tools.—Much tronble can often be saved by marking tools with their owner's name, which can be easily done in the following manner: Coat over the tools with a thin layer of wax or hard tallow, by first warming the steel and rubbing on the wax, warm, nutil it flows, and let it cool. When hard, mark your name through the wax with a graver and apply aqua-fortis (uitric acid); after a few moments wash off the acid thoroughly with water, warm the metal enough to melt the wax, and wipe it off with a soft rag. The letters will be found etched into the steel.

A Huge Encyclopedia.—A literary curiosity is now for sale at Peking. It consists of a copy of a gigantic work composed of 6,100 volumes, entitled "An Imperial Collection of Ancient and Moderu Literature." This huge eucyclopedia was commenced during the reign of the Emperor Kanghe (1662-1722) aud was printed at the Imperial printing office, where a complete font of copper type was cast for the purpose.

Sea moss is superceding corn in the manufacture of whisky. In Sweden in 1872, there were 105,408 imperial gallons of whisky manufactured from moss, said to bo of superior quality.

Domestic Economy.

Expensive Habits.

A great deal of nonsense is written nowadays about the expense of living. For instance, in a schedule taken from a "poor but deserving" man's actual expenditures for a week, was the item of one pound of coffee, and this man's expenses were held up before the public to show that the working class (the very poor of course) could hardly live on the money received. Now, I know people of moderate means who live well and only use one pound of coffee a month, and from my own experience in housekeeping I conclude the poor man mentioned above has not a New England girl for a wife.

It is because poor people, especially poor men's wives, are ignorant and will not try to learn, that everything they earn is eaten up. Aside from the rent, it is cheaper living in New York city than in the iuland towns and cities (I speak from experience, having tried both) and if city girls, both rich and poor, would only pay a little more attention to household duties, or, if they were ignorant when married, would try to learn something afterward, and get up a little enthusiasm over their breakfasts and dinners, or make the most of everything, instead of moaning and groaning because their precious, lily hands must be soiled a little, we should, I believe, hear less about poverty. In every household it is the wife who can let the money slip through her fingers for "necessities," as the husband thinks, and in not making palatable dishes from what is "left over." If you cannot do this, if you know of nothing, and can invent nothing but "boarding house hash" to make of your cold meat, then you had best break up your home and "be genteel" and board. I have often admired the ingenuity shown by many city women in remodeling and making over their wardrobes, and have often wondered why they did not apply the same skill in the culinary department. Girls of the poor and medium classes, reared in New York, as a rule make dreadfully shiftless housekeepers. All they seem to think of is a fine dress to their backs and a diamond ring for their fingers, as many of them have, truly.

There are many New England girls here; some of them are rich and some of them are poor; but, go where you will among them, you will find cleanliness, thrift, economy, and a knowledge of what is going on in the world arouud them. They are not afraid of work, and they take pride iu a well-ordered house. Somehow their blessed mothers, who may be even now living in comfortable poverty up among the Connecticut hills, have instilled such habits into them, and have taught them so much of life and living, that when they marry and have children of their own they are prepared to bring them up to be men and women, not fops and fashionable ladies, thank God. Perhaps I, a New England woman, have no right to say this; but I think I have, for I have known many of my clan, and I take a just pride in their virtues.

It is the penny saved more than the penny earned that enriches; it is the sheet turned when the first threads break that wears the longest; it is the damper closed when the cooking is done that stops the dollars from dropping into the coal bin; it is tho lamp or gas turned low when uot in use that gives you piu money for the month; it is the care in making the coffee that makes three spoonfuls go as far as a teacupful ordinarily; it is the walking one to six blocks, instead of taking a car or omnibus, that adds strength to your body and money to your purse; it is the careful mending of each week's wash that gives ease to your conscience and length of days to your garments; and last of all, it is the constant care exercised over every part of your household, and constant endeavor to improve and apply your powers to your work that alone give peace and prosperity to your family.—*Springfield Republican.*

Are you fond of your coffee? An official investigation has just been made in Paris as to the materials of which this "delicious beverage" is made. There are five principal compounds:

1—Burned bread and coffee grounds.

2—Powdered chiccory, sand and brick dust.

3—Chiccory and burned bones.

4—Chiccory burned, mixed with butter and colored with Prussiau red.

5—Burned cabbage roots and boiled horse liver.

Baked Indian Pudding.—Boil one quart of milk, and while boiling stir in corn meal till quite thick and well scalded; sweeten with molassos to taste, say one cup. Put in a baking dish, pour on one quart of cold milk, drop several pieces of butter on as many points, add salt, and put in the oven and bake from one and a halt to two hours. A little experience will get it just right. This pudding has the merit of cheapness as well as ease of making, and great excellence; eaton without sauce, and cold or hot.

Soup Balls.—Take one pint of sweet milk; when boiling hot stir in dry flour until it is stiff. When cool add one egg and enough flour to allow yon to form it into balls; add a pinch of salt. Abont ten minutes before serving your soup drop the balls in; they will be very light and will not fall after being lifted.

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms: Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, stl at No. 6 Liedesdorf street. W. H. Baxter, State Secretsry, at Grsngers' Bank, 415 Catifornia street, S. F.

Grange Clubs for the Rural.

The Secretsry (or some other Patron) is invited to act as club agent for the Pacific Rural Press in every Grange. Circular and sample copies sent free. Five or more names will constitute a club, at the rate of $3 a yesr. No new snbscriptions will be tsken without payment in sdvance. We will pay the postage after Jan. 1st, 1875. Alt club subscriptions in Granges should end on the last day of June or December. Old subscribers may join the club by paying the Secretary up to club dates. Every Patron farmer should read s reliable sgricultural paper. We need the support of alt on this coast. Help the Secretsry (or club agent) to make up a large tist in your neighborhood. Don't delsy.

NOTICE.

From and after this date, all moneys due to the Stste Grsnge by Suhordinate Granges should he forwarded to the Grsngers' Bank of Calif ornis, No. 415 California street, Ssn Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. CARRINGTON,
Treasurer State Grsnge.

November 4th, 1874. 19-v8-tf

Extra Copies of the Pacific Rural Press

Containing Grange addresses, resolutions, obituaries, etc., will he furnished post-paid at ten cents per copy. Grangers wishing numerous copies should send the order for them with the MS.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters snd Secretsries will sppear in this department on the first Saturday of each month.

Grangers' Business Association.

As one of the results of the meeting of the State Grange last week, and with the view of most effectually carrying out the resolves of that meeting, an Association has been formed to be known as "The Grangers' Business Association of California." The Directors for the first three months, or until the first annual meeting. are: J. M. Hamilton, J. C. Merryfield, G. W. Colby, A. B. Nally, J. M. Thompson, A. D. Logan, H. M. Leonard, William McPherson Hill, O. Hubbell, G. P. Kellogg and D. Inmsn.

This Association is to be incorporated under the laws of California for the term of fifty years. Capital stock, $1,000,000, to be divided into 40,000 shares at $25 esch—10 per cent. payable on the 1st day of Jannary, 1875, and the tslsnce in installments of not over 10 per cent. to be called in not oftener than in intervals of three months esch. All the funds of the Asso'iation to be paid into the Grangers' Bank of Californis.

Objects of the Association—to deal in all kinds of agricultural implements and general merchandise; also for the purpose of manufacturing, warehousing, general forwarding, shipping and commission business. The Association will incorporate so scon as one-quarter of the capital stock has been subscribed.

In Memoriam.

Hall of Funk Slough Grange, Oct. 17th, 1874:—The undersigned committee, appointed to draft resolutions expressive of the feelings of Funk Slough Grange, No. 99, P. of H., on the death of Sister S. E. McDow, respectfully snbmit the followiug:

Whereas, It has pleased the Great Master of the Universe to strike from our roll of membership the nsme of our esteemed Sister, S. E. McDow, by removing her from our midst, therefore be it

Resolved, That we recognized in Brother McDow a pstient husband and father, that in tendering our sympathy to him snd family for their great loss, we desire to add the hope that a kind Providence may long sustain him in life and health, and aid him in performing his increased duties to himself and child.

Resolved, That we mourn with profound regret the severance of the first link in our fraternal chain. That while we deplore the toss of our Sister and shall miss her in our deliberations and social gatherings, still we humbly bow in submission to the will of the Master above, feeling well assured that our loss is our Sister's gain.

Resolved, That s copy of this preamble snd these resolutions be sent to the bereaved family, and copies be forwarded to the Pacific Rural Press and Colusa *Sun* for publication, snd these resolutions be spread upon the minutes of this Grange. Unanimously spproved.

J. A. Sutton,
Geo. B Harden,
J. G. Wolfe, Sec'y. } Com.

From Farmersville Grange.

Editors Press:—Our Grange is in a prosperous condition, and all of the members seem to feel wide awake to tho advsntages of onr noble Order. We are, in connection with Farmersville school district, building a school honse with a Grange Hall overhead; the building is to be two stories high, and 32x56 feet; the contracts are already let, the building to be completed by January 1st, 1875, so we hope to have it ready for installation the first week in January next. Hope soon to send you a list of subscribers from our Grange, several of the members having promised to send through the Secretary. F. G. Jefferds.

Farmersville, Tulare Co., Nov. 10:h, 1874.

Meeting of the State Grange.

A called meeting of the Cslifornia State Grange was held in this city, on Thursday morning of last week, to take into consideration the matter of the recent suspension of the firm of E. E. Morgan's Sons—the Grange shipping agents—and to take snch measures as might be found advisable for the continnance of shipping on Granger's account and the furtherance of other interests of those connected with the Order in this State. Abont two hnndred Masters and Past Masters were present, to whom Worthy Master Hamilton briefly explained the objects of the meeting, and asked thst the brothers should take the whole matter into consideration, and adopt such measures as in their judgment would be for the best interests of the Order.

D. H. Arnold moved that a committeo of five on the "Good of the Order" shonld be elected, whose duty it should be to carefully listen to such debates, expositions aud suggestions as should be presented, in reference to the matter for which the Grange was called together, and at the close thereof, report such plan for action for the future as they might deem best and most conducive to the good and harmony of the Order. Brothers D. Inman, W. K. Estelle, R. G. Deane, J. W. Kearney and William Sims were chosen to constitnte this committee.

The Worthy Master then stated that an expert had been employed by the Executive Committee to examine the books of E. E. Morgan's Sons; that said expert had already been several days engaged in this work, and thst he would be ready on that or the next subsequent day to report the condition of the books of the firm, what they showed in reference to its dealings with the Patrons of Husbandry and the amount which Morgan's Sons owe to each individual Patron at the time of their suspension.

The main business before the Grange being thus held in abeyance, the brothers proceeded to occupy the time in discussing the conditiou of affairs generally and in devising business projects for future operations. Much valuable informstion wss elicited during these discussions, and some important initialory steps were taken which cannot fail to tell favorably npon the future business prosperity of the Order, and upon agricultural producers generally. The snbject matter of these discussions snd the practical steps taken cannot be given here, but will be communicated to the various subordinate Granges through the proper channels.

Friday—Second Day.

At the opening of the afternoon session on Friday, the Worthy Master annonnced that the report of the expert on the books of E. E. Morgan's Sons was then ready to be presented. it having been placed in the hands of the Secretary of the State Grange. The Secretary, Brother W. H. Baxter, then read:

First—A detailed report of all moneys which had been received by the firm on shipments of wheat and from other sources, during the current business season.

Second—A detailed report of disbursements, showing how much had been paid to shippers as sdvances; also for freight, insurance, office and personal expenses.

Third—A list of all persons who had shippod, but not received advances.

After this report had been read and discussed a recess was declared, dnring which the expert was called in and questioned upon further details and matters which seemed in the minds of many present to need further elucidation. The chief book-keeper of the firm was also called in and questioned.

This examination was received ss satisfactory in every particular, and showed most conclusively that the failure was brought about by circumstances entirely beyond the control of either the firm of Morgan's Sons or the Executive Committee, and solely by tho unwarrantable actions of outside parties, and their failure to live up to expressed and reiterated pledges. It was also made apparent that the bnsiness of the Executive Committee of the Order, to be successful and satisfactory, mnst be kept entirely to itself, and that no middleman can be safely allowed, either directly or indirectly, to come between the Granger and the railroad or ship.

Saturday—Third Day.

Grange met pursnant to adjournment and opened in due form.

The Committee on the Good of the Order presented their report, not only upon the special matter for which the Grange had been specially called together, but also embodying suggestions and propositions looking to the final adjustment of all business matters connected with the Order, which was on motion adopted. The adoption of this report was followed by a full and free discussion of all topics relating to the wellfare of the Order, each one feeling that our cause is one of justico and right, and with strengthened hearts and hands, and a firmer determination than ever before that we should go forward in the work we have undertaken. In view of the above finding and feeling, Bro. Edward Hallett offered the following preamble and resolutions:

Whereas, The last meeting of the State Grango in Stockton passed, unanimously, a resolution indorsing the course of Brother Wslcott, of the honse of E. E. Morgan's Sons, thereby causing much adverse newspsper comment; and, whereas, after carefnl examination, the conrse of that brother and the Executive Committee has been fully snstained by a searching examination of the books of the firm by experts, and by personal cross-examination of the parties in open Grange ; therefore,

Resolved, That we offer our sympathy to Brother Walcott in his late misfortune, and repeat and reiterate onr indorsement of the integrity of the conrse pursued by him.

Resolved, That we have full confidence in the capacity and integrity of our Executive Committee; which, on motion, was unanimously adopted by a rising vote of the Grsnge.

Adjonrned.

The State Grange Meeting—Shoulder to Shoulder.

In another column will be found the proceedings of the State Grange, Patrons of Husbandry, at their meeting held in this city last week, so far as it is proper they shonld appear. The result of thst meeting, called nnder most depressing influences, has been highly satisfactory and assuring. The cloud which had gathered and brooded so ominously over the Order, and especially over the head of its chosen executive and agent, has been most happily dissipated, and the bright sunshine of prosperity again sends forth its life and health giving influences which cannot fail to promote and enliven every Grange throughout the State. The nnexpected check which we have received has taught us a most important lesson in regard to what is considered "honorable" among even high-toned business men outside of our Order. The blow that was aimed at our destrnction has proven a petard that cannot fail to hoist its owner, and the opportnnity to deliver another will not be again presented. The resolutions indorsing brother Walcott and the Executive Committee were the result of the fullest and most complete investigation into their recent acts, and were passed with a most emphatic unanimity.

The Reported Losses.

We msy be allowed to state in this connection that the reported losses to the members of the Order throngh the suspension of E. E. Morgan's Sons, is much less than has been supposed—if, indeed, it will eventually amount to anything whatever. It is mostly in the natnre of a delay of payments, ss there is good reason to believe that the assets which have been turned over, will mostly, if not quite, meet every liability; but as even delay of payment will be a hardship to many, it has been resolved, at least so far as needy members are concerned, that such losses or delays shall be fully met at once by voluntary contributions. It was not found necessary to take any special action of the Grange in reference to the matter. Voluntary action alone was found all sufficient, and to show the fraternal spirit manifested we may say that some of the heaviest shippers among those who have not received their advances and who are able to wait for them, were the first to come forward and lend a helping hand to those who had lost their all. An order that can so bind together its members in paternal love cannot be ephemeral in its existence or inoperative in its efforts. It was also noticed that the actual sufferers among those present were those who were most enthusiastic in exhonerating Mr. Walcott from blame in the matter. We may also state in justice to Mr. Walcott that he has, unasked, avowed his determination to make good out of his future earnings, dollar for dollar, each and every amount which is now due to shippers for grain on which advances have not been paid or may not yet be secured from assigned assets. He regards all moneys subscribed by the brothers to make up losses, as simply loans advanced on his account to be refunded in the future. The entire matter, as it stands, reflects the highest credit upon every one within the Order, and cannot fail to add greatly to its strength and prosperity, both within and without the gates.

What Farmington Grange is Doing.

Editors Press:—Accompanying the list of officers elected for the ensuing year, I send you a short sketch of the standing of our Grange. We are located in one of the most fertilo spots of San Joaquin valley, sixteen miles east of Stockton. Our Grange meets in the village of Farmington, direct on the line of the Stockton and Oakdale railroad, in which town we have this season erected a brick warehouse of four thousand tons capacity, now almost filled with Granger wheat which we expect to hold for a more liberal market; in connection with this, we are pnshing to completion a hall in the same building, 40 by 50 feet, for the use of the Grange and all other orders that may wish to rent it. If this is the first you have heard of us, you will notice that we are good workers but rather poor talkers, and our number is but 46 members all told, but is composed of the best material.

E. O. Long, Sec'y.

Grangers' Fruit Growers' Association.

The regular meeting of the Fruit Growers' Association was held at Grange headqnarters, Nov. 11th, 1874. Called to order at 1 o'clock P. M.; W. McPherson Hill in the chair, A. W. Thompson, Sec'y.

Reading of minutes of last meeting omitted. On motion, a committee of five on order of business was sppointed. Messrs. Shinn, Thnrber, West, Nash and Wilcox were appointed as this committee. After due deliberation they reported the following order of business

First—Election of officers.

Second—Consideration of the subject of establishment of fruit agencies, and tho establishment of depots for the sale of fruit in San Francisco and elsewhere.

Third—Ways snd means.

Fourth—Saving of surplus fruit by drying, etc.

The report was adopted and Committee discharged.

The Association therenpon proceed to elect officers with the following result:

Wm. McPherson Hill, Pres.; James Shime, Vice Pres.; A. W. Thompson, Sec.; John Llewelling, Treas, and A. P. Smith, D. M. Harwood, J. V. Webster, J. M. Thompson and W. B. West, were elected Board of Directors for the ensning year.

During discussion on second order of business, a motion was carried to adjourn till 7 o'clock P. M.

Nov. 11, 1874, 7 P. M.—Convened pursuant to adjonrnment. Vice-President Shinn in the chair.

Mr. Coates, a gentleman connected with the *Granger's Guide*, at the request of the meeting on English immigration, spoke on the price of labor from that source, etc.

On motion, a vote of thanks was passed to Mr. Coates for information imparted by him.

The regnlar order of business was resumed and after a lengthy discussion, the following resolution was nnanimously adopted :

Resolved, That it is the sense of this meeting that the time has now arrived when it is proper and onr duty as Patrons of Husbandry and Fruit Growers, to attend to our business in the sale of onr products in the markets of California and elsewhere, snd that we, the Grangers' Fruit Association of California, will now address ourselves to the task of establishing proper agencies, depots and other means to that end.

On motion, adjourned to meet at same place at 7 o'clock P. M. on the following evening.

Nov. 12th, 1874, 7 P. M. Meeting convened pursuant to adjournment. President Hill in the chair, W. A. Sanders chosen Secretary *pro tem*.

The chair announced the consideration of ways and means as the snbject for the evening.

J. C. Holman offered a resolution that a committee of five be appointed to draft a plan of incorporation and report at the next meeting. Carried, and Bros. Wilcox, Holman, Shinn, Nashad and Hicks were appointed as such committee.

J. Llewelling offered a resolution that a committee of three be appointed to look out and report npon a place for a depot in this city for sale of fruits, vegetables, etc. The resolution was adopted, and Bros. Llewelling, Earl and J. M. Thompson were appointed as such committee.

The snbject of saving surplus fruit by drying, preserving, etc., was then taken up, and pending its discussion, the meeting adjonrned till 6:30 o'clock on the the following evening.

Nov. 13th, 1874, 6:30 P. M. Met pursnant to adjonrnment. President Hill in the chair, A. W. Thompson Secretary. Minutes of preceding two meetings read and spproved.

The Committee on Incorporation reported in favor of forming an incorporation nnder the laws of the State, with its principal place of business in S. F., to deal in all kinds of fruits, to csn and preserve the same, and deal in all kinds of articles germain thereto, and to transact a general commercial business with a capital stock of $250,000, shares $25 each, payable in 10 per cent. installments, the first to be due January 1st, 1875, and like assessments thereafter, not oftener than once in three months, and with its first Board of Directors as follows: Wm. McPherson Hill, John Llewelling, Leonard Goss, J. Strentzell, I. A. Wilcox, E. R. Thurber, J. Shinn, W. W. Smith, W. B. West, M. C. Hicks and J. V. Webster.

The report was adopted, and the Secretary directed to prepare articles and agreement for subscription to said capital stock. The nsme of "California Grangers' Fruit Association" was recommended for the corporation. Adjourned, subject to the call of the President.

Grangers' Mutual Life Insurance Co.—At the late State Grange meeting, C. W. Moaley, J. Earl and A. W. Thompson, were appointed to furnish the Executive Committee plans for a Mnlual Life Insnrance Company. The committee are actively engaged, and we hope ere long to report an incorporation that can be recommended for surety, and the wants of our farming community better than any other yet devised.

Notes of Grange Travel—No. 4.

[Written for the RURAL PRESS by J. W. A. WRIGHT.]

EDS. PRESS:—At 3:30 P. M., in company with Bro. Dean, Grange Deputy of Contra Costa Co., and his estimahle wife, I took the steamer "Parthenius" for

Antioch.

Saturday, the 22d of Aug., was a truly memorable day for this place and for our fellow Patrons of Antioch and Poiut of Timher Granges.

On that day, the "El Dorado," a 1,600 ton ship, the first that was ever allowed to load with grain at that point, sailed safely over the middle of the straits of Corquinas with 1,200 tons of wheat. I say "the first that was ever allowed to load," for, heretofore everything possible has heen said and done by interested parties to discourage the loading of ships so far from Oakland and San Francisco. Up to the last moment the most direful misfortunes were predicted for ship and cargo. Enough anxiety was produced to make her insurers insist that she should not load to draw more than 17 feet of water for fear of accident. So she took aboard only about 1,200 tons and completed her load in the bay.

She sailed out in perfect safety and the experiment proved that she could have done so as safely drawing 20 feet.

So much for one of the many triumphs of the Grangers of California through the invaluahle services of A. F. Walcott and his shipping firm. All honor to him forever for his friendship and fidelity to our cause, and all honor to the hrave men who took the risk with him and loaded the "El Dorado" and nineteen other ships to sustain our great cause of

Direct Shipments to Europe.

Beyond question the Patrons of Husbaudry of California should surround their mode of direct shipments by every possihle safeguard, and handle at least a portion of their wheat in this way every year.

Were it not profitahle, why in the name of common sense are our grain dealers now anxious to gohhle up all the wheat and ships they can, and to go on doing the very thing which they try to make us farmers believe will he ruinous to us?

Rest assured, if the system pays them, it can be made to pay those who raise the wheat even hetter. As a practical example, I have figured carefnlly on the difference between 100 tons of wheat placed in warehouse for advances, when wheat is worth $1.50 in San Francisco, and the same placed on shipboard at our rates, I assure my fellow Patrons and can prove it, that even after five months on shipboard, should they sell it at a price corresponding to $1.50 in San Francisco, the 100 tons shipped would realize more than $300 ahove the 100 tons stored. Figure on it carefully and see for yourselves. On a shio's cargo of 2,000 tons this would make a difference of more than $6,000. On 60 ships at least $300,000 could be saved. With an increased priee iu Liverpool think what the saving would be.

Don't let oar opponents deceive and frighten you in this matter.

But to return to the subject of

Grange Visits.

Few hours on this round of duty have been more pleasantly spent in this well attended meeting of Point of Timbers and Antioch Granges. Bro. Dean and Walton, Masters of these Granges were present, and also Brother Nathaniel Jones, Master of Walnut Creek Grange and his wife showed their zeal in our cause by ooming all the way across Mt. Diablo Mountains to enjoy the day with us. There I saw a part of the good work of the Grange illustrated. Farmers and their wives who for ten years and more had been living within 15 or 20 miles of each other, there met and became acquainted for the first time.

Ah! fellow Patrons, let us never forget uor neglect the social heart-warming features of our Order. It is indeed a brotherhood. Let us keep it so in every way. In its work let us strive to sink selfishness as much as in us lies. We are hnman, it is true, but effort to be better will make us hetter. After finding a pleasant home with hrother Wills, of Antioch, for most of two days, I accompanied Brother Jones and wife across the mountains to their delightful country residence near La Fayette P O., preparatory to the meeting of Walnut Creek and Danville Granges, at Danville.

But I oannot take leave of Antioch without alluding to its future importance as the terminus of a navigable canal from Tulare lake, 180 miles southeast, and a prohable railroad from the C. P. R. R. The fact now proved that large ships can load at its wharves and get out easily drawing 20 feet or more, now establishes its future mission beyond a doubt.

I must also call attention to the

Excellent Sulphur Springs

Near La Fayette. Nathaniel Jones has one on his plaee of as fine sulphur water as I have ever tasted.

It is only 15 miles from Oakland by a good road, and I know of no more pleasant summer resort for a family tired of city life for a few weeks or months. It is situated in a beautiful little valley filled with the attraction of country life, including fine fruit, and there you can drink and bathe in sulphur water to your heart's content. The time can be varied also by visits to the coal mines and summit of Mt. Diablo, the former now some 800 feet deep, the latter nearly 4,000 feet ahove the sea. I visited hoth, and can testify that

Any Lover of Nature

Is richly repaid by doing so. An excellent carriage road of easy grade is now completed to the very summit of Mt. Diahlo. Yon can reach the highest point and returu without getting out of your carriage if you wish. Near the summit is an excellent hotel, kept by a Mr. Hall, who formerly kept the Tip Top house on Mt. Washington. There is perhaps no pleasanter short trip for recreation from San Francisco for the small expense of $15 or $20, than to go to Haywards, take stage to Mt. Diablo, return by the same route, or descend to the opposite side and take steamer for the city at Antioch, New York or Martinez.

At Danville, on the 24th, the attendance was good, and we had a first-rate meeting. Bro. Wood, the Worthy Master, took me home with him, and a happy home it is, indeed. He and his good wife illustrate well the principles of our Order, in surrounding themselves with the comforts of life and making their farm as nearly self-sustaining as any I have seen in California. Next day in their company and with half a dozen other members of Danville Grange, some horse back, some iu spring wagons, I enjoyed a trip to the

Summit of Diablo,

Which, to try to express it all in a word, was splendid. People do not often spend a day in which is condensed more pleasant chat, laughter and sight-seeing than we did that day.

The air was somewhat hazy and made the field of vision rather limited. Still the view of the Golden Gate, San Francisco, San Pablo and Suisun hays, Sacramento and San Joaquin rivers, their great valleys, and the smaller valleys of Livermore, San Ramon and San Pablo was indescribably grand. Indeed, it is said that on a clear day the eye can scan from Mt. Diablo about as great an extent of surface as from auy point in the world. Other points are of course, much higher, but their view is more confined to mountain ranges. A very striking fact is the distinct manner by which the meridian and base lines of Diahlo are marred by perfectly straight lines of fences due north, south, east and west.

The enjoyment of that day will always be a green spot in memory. Many thanks to the friends with whom it was enjoyed.

But this letter is getting too long, and I must close by a brief allusion to the good meeting and harvest feast we had at the Merced Grange, No. 7, on Saturday, the 29th. It was a good turn out at a busy time, and for one, I enjoyed it well. Brother Jolley, past Master, and Bro. Elliott, Master, were both there. Sister Rodgers presided as Overseer, and I tell you what, she presided well. It was the first time I had ever seen one of our Sisters tried in that position. This is one of our oldest and hest working Granges. They have shown their faith in our work by shipping a large amount of wheat through our agent. When the house of E. E. Morgan's Sons failed through the scheming of our enemies, Merced Grange was the first to pass resolutions, acknowledging of how much service A. F. Walcott has been to our cause, expressing their earnest sympathy in his misfortune, and pledging themselves to stand by him to the last.

So. fellow Patrons, may we ever stand by our Brothers in misfortune. Let us never forget the sentiment of our song, "Cling to Those who Cling to You."

Yours traternally,
J. W. A. WRIGHT.

Steamer "Orizaha," Oct. 31st, 1874.

Unfair Implication.

We notice in a circular now hefore us, addressed to the "Stockholders of the Northwestern Shipping and Storage Association, Patrons of Hushandry," of Oregon, the following sentence: "Having had experience hy the failure of E. E. Morgan's Sons, which shows them (the stockholdors), that the only way for our Order to secure their own interests and protect themselves from losses by the reckless speculations, cupidity and sharp practice of others is to take active measures to secure a sufficient fund to enahle them to purchase from first hands," etc.

Brother A. J. Dufnr, Presidout, who signs the above circular does injustice, at least by implication, to brother Walcott, of the house of E. E. Morgan's Sons, inasmuch as the inference is that he and his house has been guilty of the "reckless speculations, cupidity, sharp practice, etc.," spoken of. If brother Dufur will refer to the report of the proceedings of the California State Grange, as published in an adjoining column, he will see that the closest scrutiny of his books fails to show anything of the kind. On the contrary, they do show that he has acted with the most scrupnlous integrity and fairness in all of his business transactions. The cause of the suspension of the house is found in no wrong or reckless act of Mr. Walcott; bnt is attrihutable solely to the fact that outside parties failed to fulfill pledges solemnly made.

Election of Officers.

MANCHESTER GRANGE, No. 150, MENDOCINO Co.—B. F. McClure, M.; T. J. Stewart, O.; A. B. Kendall, L.; W. F. McClure, Sec'y; M. C. Curley, S.; John Lane, A. S.; Joseph Sheppard, C.; D. F. Cain, T.; Miss Nannie Lane, Ceres; Miss Mary McClure, Pomona; Miss Ella Cain, Flora; Miss Sarah Stewart, L. A. S.; Lewis Morse, G. K.

SONORA GRANGE, SONORA, TUOLUMNE Co.—George C. Soulsby, M.; Riley Gilkey, O.; J. F. Ralph, L.; J. B. Latimer, S.; E. N. Twist, A. S.; Wm. Kelly, C.; M. W. Brooks, T.; R. F. Williams, Sec'y; S. Allen, G. K.; Mrs. E. Brooks, L. A. S.; Mrs. E. Ralph, Ceres; Mrs. F. A. Finney, Pomona; Mrs. E. Gilkey, Flora.

WASHINGTON GRANGE, No. 228, SAN JOAQUIN Co.—S. W. Sollars, M.; L Leeman, O.; A. A. Vansandt, L.; S. O. Sollars, S.; D. R. McIntire, A. S.; W. B. Stamper, C.; C. H. Little, T.; M. L. Cook, Sec'y; John Harris, G. K.; Mrs. A. E. Blyther, Ceres; Miss E. Harris, Pomona; Miss Rose Sollars, Flora; Mrs. E. Leeman, L. A. S.

SAN PEDRO GRANGE, No. 162.—From D. D. DeNure, Sec'y. W. H. Vinyard, M.; A. C. Fooshee, O; J. F. Woolley, L.; J. H. Conrad, S.; A. M. Neece, A. S; J. Y. Savier, C.; Louis Pfeiler, T.; D. D. DeNure, Sec'y; D. W. Pierpont, G. K.; Miss Carrie Hicks, Ceres; Miss Mary Glouner, Pomona; Mrs. C. A. Gilger, Flora; Miss Minnie Alexander, L. A. S.

KELSEYVILLE GRANGE, LAKE Co.—From T. Ormiston, Sec'y. D. P. Shatuck, M.; R. K. Ralison, O.; James Tryar, L.; A. White, S.; G. W. Piner, A. S.; J. H. Jamison, T.; J. H. Renfro, Sec'y; R. D. Merritt, C.; C. A. Piner, G. K.; Wm. Harris, Trustee; Miss Emma Harris, Ceres; Miss M. E. Piner, Pomona; Miss Ely Stonebreaker, Flora; Mrs. L. P. Ormistou, L. A. S.

DEEP CREEK GRANGE, No. 136, FARMERSVILLE, TULARE Co.—From F. G. Jefferds, M. A. W. Matthewsou, O.; T. J. Brundage, L.; H. H. Harlow, S.; A. J. Buckman, A. S.; D. Wood, C.; B. Miles, T.; W. G. Pennebaker, Sec'y.; B. Ballard, G. K; Mrs. Nellie Jefferds, Ceres; Miss Josephine Buckman, Pomona; Miss Alice Van Horn, Flora; Mrs. C. Miles, L. A. S.; Mr. C. Van Loan, Trustee.

FARMINOTON GRANGE, No. 185, SAN JOAQUIN Co.—Wm. St. John Rodgers, M.; J. R. Henry, O.; C. H. Patterson, L.; J. J. Cross, S.; Chas. Rodgers, A. S.; J. E. Groves, C.; E. O. Long, Sec'y.; L. W. Andrews, G. K.; Mrs. A. Anthony, Ceres; Mrs. M. S. Andrews, Pomona; Miss J. P. Owens, Flora; Mrs. C. E. Schroder, L. A. S.

HEALDSBURG GRANGE, SONOMA Co.—B. B. Capell, M.; I. C. Laymance, O.; Charles Alexander, L.; Samuel C. Bice, S.; Linn Bledsoe, A. S.; Aaron Hassett, T.; W. N. Gladden, Sec'y.; P. S. Peck, C.; W. H. Gordon, G. K.; Mrs. Eva Vaughan, Ceres; Miss Lizzie Allen, Pomona; Miss Sophia Bledsoe, Flora; Miss Alice Alexander, L. A. S.

SALIDA GRANGE, STANISLAUS Co.—J. P. Vincent, M.; J. F. Kerr, O.; D. A. Davis, L.; L. O. Brewster, S.; W. H. Chance, A. S.; W. R. Icanherry, C.; A. H. Elmore, Sec'y.; Mrs. M. J. Wilson, T.; B. F. Parks, G. K.; Mrs. J. J. Reyburn, Ceres; Miss Belle Fagan, Pomona; Miss Mary Carver, Flora; Mrs. Wm. Shomake, L. A. S.

HALL OF VALLEJO GRANGE, No. 113.—S. S. Drake, M.; G. H Greenwood, O.; E. Frisbie, L.; C. J. Mosley, S.; G. Rounds, A. S.; B. B. Brown, C.; A. T. Robinson, T.; C. B. Deming, Sec'y; M. Carroll, G. K; Mrs. H. G. Deming, Ceres; Mrs. C. Hunter, Flora; Mrs. L. C. Greenwood, Pomona; Mrs. L. Wilson, L. A. S.

LA HONDA GRANGE, SAN MATEO Co.—From Mrs. Julia. C. Woodhams, Sec'y, October 27th: Maurice Woodhams, M.; Charles B. Sears, O.; C. C. Rodgers, L.; Henry Steinberg, S; Henry Wilbur, A. S.; R. T. Ray, C.; Isaac N. Baker, G. K.; Oscar J. John, T.; Mrs. Julia E. Woodhams, Sec'y; Mrs. Martha Ray, Ceres; Miss Emma L. John, Pomona; Miss Delia C. John, Flora; Mrs. Ettie E. Sears, L. A. S.

COTTONWOOD GRANGE, No. 116, MERCED Co.—S. L. Crittenden, M.; A. Ewing, O.; S. True, L.; S. Ewing, S.; A Packard, A. S.; M. Coil, C.; C. Johnson, T.; Miss Nora Dougherty Sec'y; John Haile, G. K.; Miss Lahra True, Ceres; Miss N. Dougherty, Pomona; Miss L. Babcock, Flora; Miss L. Tinnin, L. A. S.

DANVILLE GRANGE, No. 85, CONTRA COSTA Co.—Chas. Wood, M.; J. J. Kerr, O.; J. Hoag, L.; D. N. Sherburne, S.; D. A. Caldwell, A S.; R. O. Baldwin, T.; J. B. Sydnor, Sec'y; A. J. Young, C.; Wm. Bell, G. K.; Miss M. Lynch, Ceres; Miss L. Flourney, Pomona; Miss Emma Hays, Flora; Miss E. Norriss, L. A. S.

ANTIOCH GRANGE, ANTIOCH, CONTRA COSTA Co.—M. A. Walton, M.; W. J. Smith, O.; Josiah Wills, L; D. S. Hawkens, S.; Seth Davidson, A. S.; H. B. Jewett, C.; G. W. Kimball, T.; J. D. Darby, Sec'y.; A. Sellers, G. K.; Mrs. P. Benedict, Ceres; Mrs. D. Smith, Pomona; Mrs. A. Wills, Flora; Miss T. Walton, L. A. S.

EDEN GRANGE, HAYWARDS, ALAMEDA Co.—Thos. Heller, M.; Liberty Perham, O.; Joel Russel, L; Geo. Baxter, S.; O. Dennis, A. S; J. W. Bryant, C.; John Malin, T.; Wm. Pierce, Sec'y.; — Webster, G. K.; Mrs. Liberty Perham, Ceres; Mrs. John Marlin, Pomona; Mrs. Anway, Flora; Mrs. Wm. Pierce, L. A. S.; Leonard Stone, T.

Social Development in the Grange.

La Honda Grange, San Mateo Co.

EDITORS PRESS:—We had a full attendanco at our Grange meeting on the 21st nlt., which took place at the residenoe of our W. M. As it was the day of onr annual election, and as there were three members initiated in the fourth degree, the hrothers and sisters had provided an ample harvest feast, and from the way eatahles aud drinkahles disappeared, an outsider would have thonght our appetites were whetted by assisting our new hrothers in riding the traditional goat. I think the harvest feast one of the pleasant features of the Grange.

Whenever we meet, break hread, and as the Arabs say take salt together, we can the more easily feel that we are hrothers and sisters. We feel our common need of our fellow heings' aid and society, and are more willing to make allowances for each other's peculiar notions and beliefs, as a brother remarked on Saturday, that he did not take the Bihle for his gnide, as others did; that he did not believe in it, nor in prayer, and that the whole ritual was permeated with that spirit; but he said he respected the belief of others, and that he did not intend to throw away the Grange because there were some features in it that he did not like or believe in, and I say—amen.

I think it has heen a great beuefit to our bachelor neighbors. It gives a standing in a community of farmers, where people are slow to get acquainted with new comers, especially with bachelors. In the Grange they meet around a common ceuter, and feel that they have a common interest. I heard an unmarried man say last night that he had not enjoyed as much sociability in the five or six years that he has lived in this neighborhood, as he has in the three months daring which he has belonged to the Grange. It fills a waut the farming community has long felt.

After reading the communication of Sister C. A. C., from the State Grange, I regretted more than ever, my inability to be present; and intend to do as she did, make all my arrangements for tho year, with the aim of being present next year, if possible. If this is "enthusiasm," then my wish is that we could "enthuse" every matron in California with the wish to do likewise. I am glad the Brothers had so much to do that they had to have a "helping hand from the Sisters," and I know it was a willing hand.

"It is not to be supposed that there were no difference of opinions amoug this body of independent thinking farmers." I am glad there were differences of opinions. What would life be ii we all thought alike? "Differences of opinion is the life of trade." Then why may not farmers have as many and as diverse opinions as any other class? It is said hy a certain writer, "Plant a rose-tree and the thorns appear before the flower." So with the Grange. Outsiders see the thorns, but do not wait to see the beautiful and fragrant rose, But we, who are Grangers, must look with the eye of faith, even as Moses did from the summit of Mount Nebo, upon the plains of the goodly lands which were flowing with milk and honey, and if like him we never reap that for which we have toiled, we can feel that we have been a guide through the wilderness of doubt and distrust which the Grauge must of necessity pass through. Our children and children's children shall gather what we have sown broadcast over the land. More enthusiasm some will say. Not so, for we have the will to make it living truth. If men's deeds live after them, so surely will the fruits of the Grange movement live and thrive after its founders have mouldered into dust, and have become part and parcel of the soil they loved so well together with those they have labored so hard to ennoble.

From the sea coast to the Sierras go up blessings on the movement, and hearty good wishes from every village and hamlet where the name of Grange is heard, farmers' wives should hail it as an emancipation from the dull, dreary, plodding lives of toil which many lead in California. It brings them together, and gives them the right to vote, hold office and speak on any subject before the Grange. The Grange of La Honda sends greetings to the sister Granges all over the State and God speed.

VIDA.

[The above, with the accompanying notice of election of officers of La Honda Grange was inadvertently delayed in publication—EDITORS PRESS.]

J. E. W. CAREY, Secretary of Point of Timber Grange, sends us a resolution passed October 31st, favoring the encouragement of home enterprise, by affording publishers on this coast every facility for competing with Eastern publishers, in supplying text hooks for our public schools.

THANKSGIVING.—The market stalls of this city are being filled with turkeys for Thanksgiving. They seem to be larger and fatter this year than usual. Wheat is cheap.



La Jolla.*

[Written for the PRESS by ADAM PERE.]

La Jolla! O, thou hast charms for me—
La Jolla! down by the western sea.
Oft have I strolled through thy mazy halls—
Oft gathered shells from thy dripping walls.
Thou'rt a favored spot where land and deep
The vows of friendship, sacred keep.

There the landscape feels no frigid blast,
There no torrid sun his fierce rays cast;
But the gentle zephyrs ever fling
O'er the Ides of March the mantle of spring.

A spot where the turtle's sweet refrain
Blends with the linnet's livelier strain,
And the joyous trill of the mocking-bird
With the piping note of the lark is heard,
And the dreamy owl toots his morning lay
To the floecy herds as they homeward stray.

There crystal stars peep through brilliant blue;
There sunset's sky shows a gorgeous hue.

La Jolla! La Jolla! The sea nymph's bower,
Thy walls adorned with the seaweed's flower,
There the stout porpoise through thy portals pass,
And the sportive seal o'er thy arches leap;
There the downy gull builds her mossy nest,
There the pelican drops on the wave to rest.

La Jolla! La Jolla! with thy echoing caves,
With thy halls of art—thy sparkling waves—
Thou dost possess a charm for me—
La Jolla! down by the southern sea.

*La Jolla (pronounced La Ho-ya) is a seaside resort about fifteen miles distant from San Diego, Southern California. The constant action of the water on the sandstone shore has wrought cavernous openings of the most fantastic designs; with a pedestal here, a statue there—causing the beholder to almost believe that the sculptor's art had been employed in fashioning these curious carvings. At low-tide these caves are easy of access, and hence are much frequented by pleasure parties. A. P.

A HUSBAND SOLD.—Some years since, when all the world was mad upon lotteries, the cook of a middle-aged American single gentleman drew from his hands her earnings of several years. Her employer was anxious to know the cause, and she told him that having repeatedly dreamed that a certain number was a great prize, she had bought the whole ticket. He called her a fool for her pains, and never lost a chance to tease her on the subject. She seemed to take his taunts in good humor, saying it would turn out right by-and-by. One morning he opened his paper at breakfast and saw it announced that the very numbers that Bridget had dreamed and bought had drawn the great prize of a hundred thousand dollars! Bridget was summoned, and the wily gentleman proceeded to inform her that he had long valued her as a friend, and being desirous to settle himself for life, he would be willing to make her his wife, if she had no objections. Bridget had always thought him a dear, good man, and would be glad to do anything to please him. So he finished his breakfast, told Bridget to put on her best things, the parson was sent for, and made them one that very morning. After it was all over, the cautious husband said to his bride, "Well, Bridget, you have made two good hits to-day; you have got a good husband, and now bring me the lottery ticket you and I have laughed so much about, and let us see what the number of it is." "Please don't laugh any more about that; I knew there was nothing in them dreams, and I sold it to the butcher a month ago!"

CONSERVATIVE.—A story is told that in one of the Dutch settlements, where they adopted the primitive custom of carrying the corn to the mill across the back of a horse, one family from time immemorial had been in the habit of placing the corn in one end of the bag and a stone in the other to balance it. One day, the son, in adjusting the bag, found that it might be balanced without the stone; and, overjoyed at the discovery, brought his father to see; but old Hans, solemnly and wrathfully decided against such new-fangled ways; he had always carried the stone to the mill, his father had always carried the stone to the mill, his grandfather had always carried the stone to the mill, and why should he set himself up to know more than they? From such argument there could be no appeal; old Barebones was saddled with the rock as before, and the world still moved on.

FEW men have a readier excuse for their homage than the Grecian sage, who, being asked why philosophers always ran after rich men, while rich men never courted philosophers, replied: "Because the latter know they want money, while the former haven't sense enough to know they want wisdom."

A RECENT writer says that a lady may be known by the tones of her voice. A coarse, unrefined woman never has a smooth, pleasant utterance. The voice can be cultivated so that harshness and roughness will disappear. The trouble is that most people are careless and slovenly about speaking, and fall into bad habits.

Broken Ties.

[Written for the PRESS by JOHN TAYLOR.]

In our experience in life, how oft the heart is made to bleed by the almost daily recital of hearts broken, homes broken into shreds, ruined and blasted hopes, despair—for the time being—reigning supreme.

While the gay and unthinking of humanity flutter awhile in the world of fashion, like the moth around a candle, in turn to pass out of sight and rememberance, to give place for others to occupy their position. One household is called upon to mourn the loss of its head, by an accident, so called, and in a moment a darkness has fallen upon that home worse than Egyptian. A darling son on the brink of manhood is blotted out of existence and consigned to the grave before the loved ones can fully realize their loss, and then despair sends the living—in many cases—to the same flowery bed. The sun rises and sets utterly indifferently to the trials of woe sent up, as tie after tie is being rudely severed, and the sound of sobbing mixes with maniac laughter.

The young man about to leave the parental roof to mingle in the world's strife, creates an interest and parental anxiety which the world cannot fully understand. Ties are strong, which have been woven from infancy to manhood. All the heart hopes for future greatness and goodness becomes centered in the heart's fountain at the hour of parting, fear for temptation and its consequences rankle like a canker-worm amidst blessings and tears. Ye thoughtless young men who visit saloons, gamble, drink, smoke and otherwise live fast, weigh the weary days and nights of parental anxiety on thy account, and wear in thy bosom the look of hope and anxiety depicted on thy parents' brow at parting, and then go to thy pleasures and folly, rewarding years of care and toil by a life of riotous living; how a home is made to smile, and ties cemented by the absent ones keeping up a fraternal correspondence, and exerting an influence in the world for good. Witness a family seated around the fireside, while the father reads a letter from the absent son and brother, how hopeful the prayers, how pleasant and refreshing is sleep after such a conference. Contrast this heavenly scene with one of a contrary nature. The son of promise bids adieu to a home which only occupies his affections as a place—home ties easily broken, and moral resolves easily undermined. The great world presents its alurements, the virtue and good being of the soul is not made so apparent. The gilded dens invite. The paths to vice are many, the road to ruin broad, "And thousands walk therein." What is home to such a one when ensnared within the talons of vice and immorality, home ties are soon all broken; father, mother, sisters and brothers seem to be forgotten while treading the downward road to ruin. No matter if the grave cover up the grey hairs, prematurely made by broken fraternal ties, ruined hopes and ingratitude. Philosophy may prate of taking the world as it comes, but philosophy has not yet sounded the depths of home's affections, or strength of ties which bind man to man and man to woman. It is only the reflective, sympathetic and observant, which can enter the holy precincts of love and hopes domain, a domain which allies mankind with the gods, realizing that these God-given faculties survive beyond the grave, trusting that broken ties sometimes very rudely sundered, will again be eternally written in the summer land, where opportunities will be given for the prodigal son to return. There is a constant sundering of ties going on in the world, and oft a re-uniting of family associations, which bring to earth a taste of heavenly joy, adding years of youth to the aged sire and mother matron. Think of it ye absent son or daughter. Make glad the hearth of home by meekly fraternal epistles. Keep ties fraternal, unbroken by breathing love and affection, and make your life correspond, so that the household may be united in heaven.

BEGINNING LIFE.—When a man begins life, heaven is like a picture on the ceiling of a cathedral. He has to bend his neck out of shape to see it. Before long it seems to him like a good place in which to get away from hell, a kind of insurance office. Then it becomes a matter of sentiment. But at last, when the real toil of life comes, and God's love shows itself in his discipline, and the yoke is heavy on his neck, his suffering interprets heaven for him as he never saw it before. What a dry place heaven is to many until a father goes there, and a mother! Then it becomes popular. To many a man the door of heaven is shut until his little child goes up to open it for him. So we build our own heaven out of our griefs and pleasures, but we know that everything will be far better than we have sketched it.—*Beecher.*

No more frizzes, ladies, except with those who must hide some defect. The hair is combed straight back and tied in a Chinese queue low in the neck without ornament, or formed into a small coil, also low. The hats are low crowned, and, not being mounted on a mass of false hair, rest gracefully on the actual heads of the fair wearers. This is the present style, and we are glad of it.

TENDER HEARTED persons who have read of the fierce raids of Texan steers through the streets of St. Louis, will be pleased to learn from the market reports that "there is a better feeling in Texas cattle."

How a Little Girl Overreached General Scott.

During the latter years of his life, General Scott was very much pestered by curiosity hunters for his autograph, and at times pitfalls were prepared to catch the old General. One of these is thus interestingly described by the Washington correspondence of the Chicago *Post*:

I have an album which contains this inscription on one of its title pages:

"Treason is the greatest crime."

WINFIELD SCOTT.

"Washington, D. C., August, 1861."

The name is written in the stiffly feeble characters so well known, but the motto is traced in a much bolder and more forcible hand. The album is the property of a New York lady, who visited the city at the extra session of Congress in 1861. She was very anxious to get the old General's autograph, but soon learned that it was not an easy thing to do. She, however, lit upon the expedient of sending her little girl, of about ten years, right to his office during business hours. The charming creature told the orderly she must see General Scott, and would not be put off with any plea of business, but waited half an hour till her request was finally taken to the Adjutant. Of course, she was admitted to his presence, though he had no intention of allowing her to see the General. She persisted, however, and said she must see him. The officer finally pointed out the door which led to his room, and told her she could go in if she dared. She took him at his word, and in an instant stood within the door. Speaking of it afterwards, she said she was afraid when he first looked up, "but as soon as he saw it was only me he said right pleasant, 'Well, little girl, what do you want?' And I told him my ma wanted him to write his name in her book; and he looked sharp at me, and then smiled a little bit, and shook hands with me, and asked me how my ma was, and I told him; and I told him my pa was in the army, and my ma was all alone with me; and then he just kissed my cheek, and wrote in ma's book, and said 'Good morning' to me, and I came out and nobody didn't hurt me at all."

CHEER HIM.—At a fire in a large city, while the upper stores of a lofty dwellings were wrapped in smoked, and the lower stories all aglow with flames, a piercing shriek told the startled firemen that there was some one still in the building in peril. A ladder was quickly reared, until it touched the heated walls, and diving through the flames and smoke a brave young fireman rushed up the rounds on his errand of mercy. Stifled by the smoke, he stopped, and seemed about to descend. The crowd was in agony, as a life seemed lost, for every moment of hesitation seemed and age. While this shivering fear seized every beholder, a voice from the crowd cried out "Cheer him!" and a wild "hurrah" burst from the excited spectators. As the cheer reached the fireman he started upward through the curling smoke, and in a few moments was seen coming down the ladder with a child in his arms. That cheer did the work. How much can we do to help the brave ones who are struggling with temptation, almost fainting in their efforts to do good to others! Don't find fault with you brother in his trial, but cheer him. Give him a word that shall urge him on the way, and if you can't help him in any other way, give him a cheer.

THE ENGLISH WOMAN'S "BODY."—A writer in the *Aldine*, exhibiting some of the differences between the vernacular of the Americans and English, states that the waist of a dress is by the latter denominated a "body." We were much started," she says, on receiving our first washing bill to find that we were charged with "low bodies" and "loose." Not supposing there were any such "questionable shapes" in our party, we found they were only high and low-necked under-waists. Again, she relates that a young American lady, on a visit to a country house, was put in a room previously occupied by one of the family, but which had the uncanny reputation of being haunted. The young lady had subdued her nervousness sufficiently to fall into a light slumber, when there came a gentle tap at the door, and a sepulchral voice whisperod through the key-hole, "I want to come in and get my body."

A PRETTY FANCY.—When day begins to get up to heaven at night, it does not spread a pair of wings and fly aloft like a bird. It just climbs softly up on a ladder. It sets its red sandal on the shrub you have watered these three days, less it should perish with thirst; then it steps on the tree we sit under, and thence to the ridge of the roof; from the roof to the chimney, to the tall elm, to the tall church spire, and then to the threshold of heaven; and thus you can see it go up as though it walked up red roses.—*Jeremy Taylor.*

NOTES FROM NATURE.—A movement which has been for some time on foot for establishing in London a School of Medicine for women, is now so far matured that the school was announced to be opened for the winter term on Oct. 12, in commodious premises, 30 Henrietta street, Brunswick Square. The full staff of lecturers has not yet been appointed. A fair number of students are already enrolled. It is intended to build a detached dissecting-room in the garden attached to the house.

"WHO knows what to-morrow will bring forth?" "Why, the day after, of course."

Children's Playthings.

The little son of an acquaintance, at whose house I was calling, took me into the extension room back of his mother's parlor, to show me his playthings. The little room was fitted up handsomely with damask lounges and curtains, and abounded with all manner of costly playthings. He ran along carelessly from one thing to another, showing me this and that, until he picked up a treasure, wich he presented with great animation, saying, "And here is a gate big feather!" It was a good sized turkey quill which he had found in some of his travels; and not even his curious green turtle, which could move its head and legs, could compare with this wonderful possession.

I could not help thinking how little it takes to satisfy our early ambitions, and how useless it is to expend large sums for children's toys, when simple home-made ones give them really far more plessure. My little friend Kate has a rather sorry specimen of a cloth baby, which has trudged around with her ever since she could walk; but no attractive gifts of china or india-rubber headed dolls can make her desert her old favorite. For children a little older, playthings that exercise the ingenuity are best, and give the most lasting pleasure. Ritcher says, "Do not color the Easter eggs for your children, but let them paint them themselves. Teach them self-reliance even in amusements." A box full of common blocks, such as you can pick up under any carpenter's bench, will afford much enjoyment if you first give a little instruction in house-building, bridge-making, and the like.

There are hundreds of simple toys which are easily made with the scissors and a little needle work, such as those we see in country fairs, and which mothers could readily learn to make, if only a pattern or a few directions could be obtained.

Above all, if you have an "out-doors" to your home, let your children enjoy it every fair day. There they will find sources of amusement enough, without aid from any one, while the rosy health which the pure air gives them, and the consequent freedom from ill temper and unhappiness, will free your bosom from much anxiety and make your home glad and cheerful.—*Home Magazine.*

LEGENDS OF THE APPLE.—The apple, which, as we all know, is the first fruit mentioned in the Bible, has been the occasion of various superstitions. In Arabia it is believed to charm away disease, and produce health and prosperity. In some countries the custom remains of placing a rosy apple in the hands of the dead that they may find it when they enter Paradise. The Greeks use it as a symbol for wealth and large possessions, thus attesting their esteem for the fullness and richness of its qualities. In northern mythology the apple is said to produce rejuvenating power. Germany, France and Switzerland have numerous legends regarding this fruit. In some it is celebrated as the harbinger of good fortune, causing one's most earnest desires to be fulfilled; in others its beautiful properties are shown forth as bringing death and destruction; others again speak of it as an oracle in love affairs; this is especially the case with the Germans, not only in their numerous tales, but in some surviving customs. In England, as well as in our own country, is known among school girls the popular use of the apple seeds in divining one's sweetheart. The peeling is also used as a test in this delicate matter.

A HUMOROUS old man fell in with an ignorant and rather impertinent young minister, who proceeded to inform the old gentleman in positive terms that he could never reach heaven unless he was born again, and added." "I have experienced that change, and now feel no anxiety." "And have you been born again?" said his companion, musingly. "Yes I trust I have." "Well," said the old gentleman, eyeing him attentively, "I don't think it would hurt you to be born once more."

KISSES.—Eight diversities are mentioned in Scripture, viz: The kiss of salutation, Sam. xx. 41, 1 Thess. v. 26; valediction, Ruth ii. 9; reconciliation, 2 Sam. xiv. 33; subjection, Psalms ii. 12; approbation, Proverbs ii. 4; adoration, 1 Kings xix. 18; treachery, Matt. xxvi. 49; affection, Gen. xiv. 15.

THE NEW BONNET AGAIN.—"Wife, do you know that I have got the pneumonia?"

"New monia, indeed! You're the most extravagant man I ever did see—to go and lay out money for such trash when I want a new bonnet so much!"

CHARM OF MANNER.—There are some people who possess an inexpressible charm in their manners, a something which attracts our love instantaneously; without wealth, position or talents, still a dignity hovers around them, and ennobles every action.

A LADY was examining an applicant for the position of maid-of-all-work, when she interrogated her as follows: "Well, Mary, can you scour tin ware with alacrity?" "No, mum; I always scour it with sand."

WOMAN SUFFRAGE.—An amendment to the Constitution of Michigan was voted for at the recent election, providing for woman suffrage, which was "overwhelmingly defeated."

SOMEBODY has written a book entitled "What Shall my Son Be?" Upon which some one else frankly replies: "If the boy is as bad as book the chances are that he will be hanged."

The Father's Lesson.

Grown people should have more faith in, and more appreciation of, the sentiments and feelings of children. When I read—some months since, in a telegraphic despatch to one of our morning journals from Baltimore, if I remember rightly—of a mother who, in punishing a a little child for telling a lie—which, after all, it subsequently transpired he did *not* tell—hit him with a slight switch over his temple, killing him instantly—a mere accident, of course, but yet a dreadful casualty, which drove reason from the throne of the unhappy mother—when I read this, I thought of what had occurred in my own sanctum only a week or two before; and the lesson which I received was a a good one, and will remain with me.

My little boy—a dark-eyed, ingenous and frank-hearted child as ever breathed, though, perhaps, "I say it who ought not to say it," still I *do* it—had been playing about my table, on leaving which for a moment I fonnd, on my retnrn, that my long porcupine-quill-handled pen wa gone. I asked the little fellow what he had done with it. He answered at once that he had not seen it. After a renewed search for it, I charged him, in the face of his declaration, with having taken and mislaid or lost it. He looked me in the face and said:

"No, I *didn't* take it, father."

I then took him in my lap, enlarged upon the heinousness of telling an untrouth, told him that I did not care much about the pen, and, in short, by the manner in which I reasoned with him, almost offered him a reward for confession, the reward, be it understood (a dear one to him), of standing firm in his father's love and regard. The tears welled up into his eyes, and he seemed about to "tell me the whole truth," when my eye caught the end of the pen protrnding from a portfolio, where I myself had placed it, in returning a sheet of paper to one of the compartments. All this may seem a mere trifle to you, and perhaps it is, yet I shall remember it for a long time. —*Lewis Gaylord Clark.*

Chinese Private Life.—The Chinese have a large screen before the doorway, which gives privacy sufficient for their need. The window sashes are closed either by a sort of jalousie or thin matting. They do not surround their domesticities with the same mystery and secret precautions with which we envelop the proceedings in Europe. Human nature, they argue, has to sleep, and here is the mat on which it stretches itself? Why conceal it? It always wants to eat, and it satisfies its appetite, no matter how many eyes are gazing. Tell a Chinese cook you are hungry and he will immediately fetch his fire and cooking utensils, his provisions, and cook under your very nose. He has no idea of concealing his operations in some far away back region, yclept kitchen. He squats down anywhere, makes a fire on or in anything, a basin, dish or pot; there is no limit to his invention. He will cook in the middle of the street, or in the center of his guests in a restaurant. Upon one occasion, when on board a junk, I observed a man cooking his own and his neighbors' food together in a tub and an earthernware saucer containing the charcoal. Wonderful creatures they are, these despised Chinese, with deftness of finger and ingennity of patience unsurpassed by any nation under the sun.—*Temple Bar.*

Dean Swift, hearing of a carpenter falling through the scaffolding of a house which he was engaged in repairing, dryly remarked that he liked to see a mechanic go through his work promptly.

It is with little-souled people as it is with narrow-necked bottles—the less they have in them the more noise they make in pouring it out.

"I want to know," said a creditor. fiercely, "when you are going to pay me what you owe me?" "I give it up," replied the debtor, "ask me something easy."

Somebody advertises a preparation for keeping a lady's hands free from chaps. A report that she has no money would do the same thing.

A good way for parents to encourage cremation, says a cynical person, is to leave the matches where the children can get at them.

Labor is the duty man owes to society; rest is the duty he owes to his person; recreation is the dnty he owes to his mind.

"He has left a void that cannot be easily filled," tonchingly remarked a bank director of an absconded cashier.

The more a woman's waist is shaped like a hour-glass, the quicker the sands of her life rnn out.

Marriage is often said to be a lottery; but Caleb declares his belief that it is a game of cribbage.

"Sambo, did you ever see the Catskill monntains?" "No, sah; but I've seen um kill mice."

Pleasure is like treacle. Too mnch of it spoils the taste for everything.

Things are shadows, but the chase after them is real exercise.

Miracle is the pet child of faith.—*Goethe.*

Young Folks' Column.

Little Things.

Suppose the little flowers should think
That they are much too small
To be of any use to us,
And so not bloom at all;
How much that's pleasant we should lose;
For as we pass them by,
Every little flower that blooms
Is pleasing to the eye.

Suppose the little raindrops thought
That they were much too small
To be of any use on earth,
And so not rain at all!
Then the fruits would never grow,
Nor roses in the bowers;
For all the little raindrops help
To make refreshing showers.

And so shall little children think
That they are much too small
To be of use to others here,
And do no good at all?
Ah! dearest children, think not so,
For little acts of love
Are pleasing in the sight of God,
And counted up above.

A Word to Little Girls.

How to be loved. Who is lovely? It is the little girl who drops sweet words, kind thoughts and pleasant smiles as she passes along—who has a kind word of sympathy for every girl or boy she meets in trouble, and a kind hand to help her companions out of difficulty—who never scowls, nor contends, never teases her mates nor seeks in any other way to diminish, but to increase their happiness. Would it not please you to pick up a string of pearls, drops of gold, diamonds and precious stones as you pass along the street? But these acts that I have named are the true pearls and precious stones, which can never be lost. Take the hand of the friendless. Smile on the sad and dejected. Sympathize with those in trouble. Strive everywhere to diffuse around you sunshine and joy. If you do this, you will he sure to be loved. Dr. Doddridge one day asked his little girl why it was that everybody loved her. "I don't know," she replied, "unless it is that I love everybody." This is the true secret of being loved. "He that hath friends," says Solomon, "must show himself friendly." Love begets love. If you love others, they can not help loving you. So, then, do not put on a scowl, and fretfully complain that nobody loves you, or that such an one does not like you. If nobody loves you it is your own fault. Either you do not make yorself lovely by a sweet, winning temper, and kind, winning ways, or you do not love those of whom you complain.

A Dog's Love for his Old Home.—There was once a man by the name of Huso, living in in Garrard county, Ky., who had a dog that followed him and his family to Missonri, and, being dissatisfied, returned to his former home in Garrard. Not finding his old friends, he howled and moaned for weeks; and then, after a long starving, he went back to his master in Missouri. On his return, when in sight of the house, he lay down to rest, but when he saw one of his playmates he ran with a great whining, and raised his foot to the boy as if to tell him "how-do." He then ran iuto the house and repeated the same motion to them all, and then stood gazing in their faces, as if to relate his starving, his long tramp and sore feet; how he had been treated, his troubles, how his heart throbbed on account of his dissatisfaction, and mutely begging to return to the old home. He then proceeded to ramble around and look at everything in the house and on the farm. Still not pleased, he lay down close to the door to slumber and rest. In his sleep he would howl and lick his feet, which were very sore. He was kindly cared for, but that could not assuage his grief. As soon as he got well he hade them adieu to return again to his old home in Kentucky. He made his second trip back, and went to his old bed-place, but found it destroyed. He lay down, howled, and licked his bleeding feet, and died, doubtless, of a broken heart.—*Exchange.*

Beginning Well.—If a boy has gnmption and pluck, two good qualities common to Yankees, and to natives of the United States, he can surmount any difficulties. A boy in Iowa is bound to make his mark in the world. A boy only fifteen years old, in Black Hawk county, Iowa, whose father died three years ago, leaving his widow and son an eighty-acre farm, bnrdened with a $1,000 mortgage, has taken the whole and sole charge of the farm, hiring help only in seed time, harvest time and threshing, paid off the mortgage, purchased a harvester, a sulky, a plow, a wagon, and a set of harness, b sides a sowing-machine for his mother, and is now out of debt. He is a member of the Cedar Valley Agricnltural Society, and attends school three months each winter.—*Ex.*

A Word to Boys.—Begin in early life to collect libraries of your own. Begin with a single book; and when you find or hear of a first-rate book, obtain it if you can. After a while get another, as you are able, and be sure to read it. Take the best care of all your books; and in this way, when you are a man, you will have first-rate libraries in your heads, as well as on your shelves.

The Detroit boy, as usual, more cnnning than honest, has spread out four quarts of peannts npon a false head in a barrel, and sold the barrelfnl to a grocer for $1,25. A deep boy, that—in one sense.

The Vineyard.

Putting Out Vines.

The time is coming to secure cuttings and for planting vineyards. In selecting cuttings, get only strong, vigorous canes, and, so far as possible, leave a little of the last year's growth of wood on the end, because cuttings should be taken before the vineyard is pruned, otherwise this cannot be done. The old wood seems to sprout quicker, and forms better roots than when the slips are cut off without it. We do not advocate sprouting cuttings the first year before putting them out; it is twice the trouble, and they are no more apt to grow than cuttings. Tie the cuttings in small bunches and dig a trench in warm, sandy ground, burying the lower ends of the cuttings up to within a few inches of the tops. Keep the ground wet until you are ready to plant. They will grow if planted in March, but it is better to plant in February, or according to the season.

The ground should be well plowed and harrowed. Put the cuttings about seven feet apart each way, and on the exactness of the distance and straightness of the rows will depend the beauty of the vineyard. There is nothing so good in laying out a vineyard as wire ropes, having red ribbons tied seven feet apart, to denote where the vine is to be set. Take three of these wires, with iron stakes at each end. Set a row of large stakes across the field by sight, and then measure the length of the wire and set another row. Then, with the ends of two of these wires, set by the first two large stakes, drive the other end stakes down so as to stretch the wires, having the last end in range with the large stakes on the far side of the field. Then stretch the remaining wire across from these two wires, and drive the stakes opposite the red ribbons on the other wires. With a man at each end, the wire may be moved in a minute and both plant towards the center. In this way the rows will range every way, and may be cultivated four different ways. In regard to planting, there is nothing better than a crowbar. Make the holes large, shove the cutting down well and stamp the dirt around it. If the bottom of the cutting is not firmly imbedded, the little roots come out, and instead of taking hold of the ground, curl around the stalk and die. After planting, we would recommend that from two to three buds be left above the ground according to the variety. Many writers say only one; but there is this advantage in having two or three, that should one bud put out, and be nipped by the frost, which is often the case, the other bud below it will receive the sap and take its place. Where it is intended to stake a vineyard, the better way is to drive the stakes first, while the ground is soft, and then set the cuttings in beside them. The stakes also form a shelter from the hot sun and from frost.—*Sac. Valley Agriculturist.*

Improving Wines.

The process of Pasteur for improving wines (says J. M. Merrick, in the *American Chemist*), by gently heating them, is well known and practiced in France. I have not heard of its application in this country, nor have I been informed that the use of neutral tartrate of potash is here in vogue to remove by precipitation a suitable fraction of the excessive amount of tartaric acid present in the juice of our native wines. I call the attention of the readers of the *American Chemist* to these two well-known methods, because I have practiced both on a small scale and can testify to their practical value.

In the autumn of 1871 I made from Concord grapes of my own raising a cask of about 120 gallons of wine, adding a pound and a half of sugar to each gallon of juice. This gave a beautiful clear wine, of not unpleasant flavor, containing, by my analysis, made in June, 1873, 17.5 per cent. of alcohol. The fault with it was that it was undrinkably sour, good judges asserting that it had gone over so far that it could not be cured. On analysis I found it to contain a little more than one per cent. of free acid, mainly tartaric. In September last I added about seven pounds of neutral tartrate of potassa to the cask, and the result was gratifying. The color of the wine is lightened, the flavor uninjured, and the hardness and sourness diminished, so that the work of four or five years seems to have been done in as many months.

Mr. E W. Bull of Concord, Massachusetts, the originator of the Concord grape, has produced a seedling from the Concord, called Cottage, and from this new grape the past season I made about one gallon of wine, which, a week ago, was harsh crude and not palatable. By the addition of a trifling (unweighed) amount of neutral tartrate of potassa, and by heating the wine to about 50 deg. C., its character has been so changed and improved that no one recognizes in the present mild, high-flavored and not acid wine, the former harsh crude and repulsive product.

Native Wines.—The New York *Bulletin* estimates the annual production of native wines at 20,000,000 gallons, as follows:

California, 5,000,000; Ohio, 3,500,000; New York, 3,000,000; Missouri, 2,500,000; Illinois, 2,500,000; Pennsylvania, 2,000,000; Iowa, 400,000; Kentucky, 300,000; Kansas, 200,000: Indiana, 150,000; North Carolina, 40,000; Michigan, 40,000; West Virginia, 350,000; Virginia, 30,000; Texas, 30,000; New Mexico, 30,000; New Jersey, 25,000; Wisconsin, 25,000; Maryland, 25,000; South Carolina, 25,000; Alabama, 20,000; Connecticut, 20,000; Mississippi, 15,000; Tennessee, 15,000; Arkansas, 15,000; Georgia, 15,000; Louisiana, 10,000; Delaware, 5,000; District of Columbia, 5,000; Massachusetts, 5,000; Nebraska, 5,000; Oregon, 5,000; Washington Territory, 5,000; other States and Territories, 5,000. The market value of these wines is estimated at $14,000,000.

The New Mint.

The old mint on Commercial street, in this city, was closed about the first of the present month, and on the 12th inst. the new mint building on the corner of Mission and Fifth streets was opened for the reception of deposits. The work of removing the machinery from the old to the new mint has been completed, and General La Grange has taken possession of the new quarters. The "old mint" was built in April, 1854. It cost $300,000, and it was for some time regarded as a complete institution of its kind, until the increased yield of precious metals demonstrated the need of of a larger establishment and the introduction of the trade dollar proved its inadequacy to supply the wants of commerce in this direction.

The new building, which has a front on Fifth street of 217 feet, and on Mission of 160 feet 6 inches, stands on a concrete foundation of four feet in depth, and is what is called a two-story and basement. The basement walls are built of Folsom granite and are four feet thick. The exterior of the other stories is built of froe stone, steel colored, or what may be more properly designated a light gray. They are three feet thick. The hight of the basement story is 12 feet in the clear, the first story 18 feet and the second 16 feet. The extreme hight of the parapet wall is 56 feet. The pediment is 19 feet high. The two main chimneys tower above the roof 68 feet, and are richly ornamented with cast iron to a hight of 24 feet. The frame of the roof is iron, which is covered with copper and tinned on both sides. The building forms a square around an interior court, 43 feet 9 inches by 42 feet 6 inch.

The appropriation for this mint was $1,500,000 and on its completion there was $30,000 left, a somewhat surprising fact in these days. There are four engines in the building and four boilers. The machinery was all made in this city by H. J. Booth & Co. The boilers are each 48 inches in diameter and 15 feet long. Each boiler has a steam drum 36 inches in diameter and 10 feet long, and a mnd drum 20 inches in diameter and 7 feet long. The water is fed to each and all the boilers with two of Knowles' steam pumps; diameter of steam cylinders 10 inches, and of pumps 3½ inches; length of stroke, 6 inches. In addtion to the feed pumps each pair of boilers are supplied with a No. 6 Giffard's injector, as an additional security in case of accideut to the feed pumps.

The largest engine, No. 1, is of the vertica beam type, with bed-plate 6 feet 4 inches wide 20 feet 4 inches long and 24 inches deep, and weighs 22,000 pounds. The main shaft is 10 inches in diameter and 19½ feet long. The band pulley is 15 feet 2 inches in diameter and 32 inches face, turned inside and out, and weighs 16,000 pounds. The fly-wheel is 18 feet in diameter and weighs 20,000 pounds, and is turned on its face and edges. The cylinder is 20 inches in diameter and 45 inches stroke. It has a steam jacket cast around the outside to prevent the condensation of steam, and is cased with felt 1½ inches thick and covered with black walnut, held in place with silver bands 3 inches wide. This engine is 150 horse power. Engine No. 2 is a horizontal engine with a 12 inch cylinder, 24-inch stroke, and is nsed for running the drawing and pnnching machines, machine shop and grinding room. The third engine is used to run the machinery of the sweep cellars, and is a first-class design of a vertical engine. The cylinder is 8 inches in diameter and 12-inch stroke. Engine No. 4 is used for the assay office. The cylinder is 6 inches in diameter and 18-inch stroke.

Everything in and about the mint has been arranged in first-class permanent style. The machinery is not only strong and durable but elegant in design and finish. The various departments in the mint are perfectly fitted up and all the various appliances are the best of their kind. The building is very strongly built and is the largest and most elegant mint building in the world.

An Ingenious Invention.—Mr. Atkins, Burmingham, England, has invented a process which admits of the filling of articles of brass with molten iron. The balance weights for chandeliers, pillers, columns and imperial weights may he made, advantage being taken of this process, at a much diminished cost. It is simply necessary to immerse the brass shells in water, and the molten iron is then poured in. The shell cannot, of course, obtain a higher temperature than 212 degrees, the boiling point of water, while the temperature of its contents may be about 3,000 degrees. In making imperial weights the shells are imbedded in iron filings, the high conducting power of which is thns turned to account. This process, simple thongh it be, is, from a commercial point of view, one of great importance as will be readily understood.

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SAN FRANCISCO:

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MISCELLANEOUS.—The New Mint; An Ingenious Invention, 327. Glass-Lined Tanks and Cisterns; A Striking Sundial; Luminous Apparitions or False Lights, 330. Hammers; American Weather Forecasts, 331.

OAKLANDERS' LOCAL OPTION MEMORIAL.—On Saturday of this week a memorial drinking fountain will be dedicated in Oakland. The fountain will be situated at the junction of San Pablo and Telegraph avenues, near the City Hall. Its cost, including its mounting with an appropriate statue, will be upwards of $800. Temperance organizations of San Francisco and other places will join those of Oakland in commemorating. Letters have been received to the number of 125 by the committee on invitations from parties who intend being present from different parts of the State. Able speakers will be present. A grand concert will be given in the evening by noted singers and the Harmonic Society of Oakland. An immense number of tickets have been sold. The entire proceeds will go for erecting fountains in different parts of Oakland. The Contra Costa Water Company generously supply the water free. It is stated that this will be the first temperance monument ever dedicated in the United States.

The Hop Crop of '74.

During the hop-picking season an article appeared in our paper which considerably overestimated the prospective hop crop. At the present time the crop has mostly passed out of the hands of the producers, and is now in those of consumers and dealers, or has been shipped to distant markets; consequently a more accurate estimate may be formed of the extent of the yield. We find by inquiring of various reliable parties that 5,000 bales is as close an approximation to a correct estimate as we can obtain. From our intercourse with hop-growers we were led to expect a much larger yield; and were prepared for an estimate a third larger; but we accept the report of 5,000 bales as reliable. This, we find, is a gain of about 1,000 bales over the crop of '73. Of these 5,000 bales, about 1,500 only are wanted for home consumption.

Dealers speak favorably of the late crop, both of the product itself and the manner in which the producers have placed it upon the market. They declare that it will do much towards establishing the reputation of California hops in the markets of the world. Observation and experience have proven that the peculiarities of the soil, as well as of the climate of California, are particularly favorable to hop culture; furnishing in remarkable abundance the materials which produce a rich, oily, fine flavored hop. An examination of samples exhibited at some of the commission houses lately visited by us, gives assurance of the correctness of this view; and also that the growers understand their business. We have never seen hops more thoroughly prepared for market. In most cases the producers have used a heavier material for baling than is used at the East, and in this they have done well. Hops baled in this way will retain their flavor and color much longer than in light, thin material; thus retarding the depreciation in the value of hops which age produces. Such points tell in the commercial reputation of hops produced in any district.

So much for the hop crop of '74; it is order now to begin to think and talk about what the year '75 is likely to bring forth. Probably none of the agricultural products of California have given a better return to the producer for the present year than hops. It has not been a "big thing," but has given good, remunerative prices; and even this view presents such a contrast to the returns from other crops that, in the natural course of trade, we may look for something like a rush from some other departments of farming to hop culture. We have taken occasion in former articles on hop matters to point out the vicissitudes of this business; and although we do not believe that the hop crop in California is as liable to damage from vermin and mildew as in other hop growing localities, the danger from over production is probably greater here than in any other quarter; all enterprises—agricultural as well as others—being of a more shifting character than elsewhere. No serious danger is to be apprehended from this quarter during the coming year, as any increase of hop area that the profits of the late crop may induce, will not tell on the market until '76. It would be safe to expect an increase in next year's crop of a thousand bales over that of the present year; but there is nothing ominous in this prospect; and we hope to be able to present in next season's hop report as satisfactory a showing as we have given of this; but if the inconsiderate advice which has been sown broadcast through the country is followed as rashly as it is given, we shall expect to see the hop growers of California in a far worse predicament in the fall of 1876 than are the wheat growers at the present time. It is easier to go into anything than it is to get out of it; hence the propriety of looking before leaping.

Just What We Want.

A correspondent residing at Pleasant Grove creek, Sutter county, closes a letter on business matters as follows: "You will oblige a subscriber by giving us a notice in your valuable paper."

Now we wish to notify all such friends, no matter where their abiding place may be, that they would greatly oblige the RURAL PRESS by giving *us* "a little notice" of their places. We rather pride ourselves on the number and character of our correspondents. Our intercourse with them has been of a pleasant and profitable character, and we have no fears of evil reports from this quarter of treatment received at our hands. This circle should be extended. We want to hear from the byways as well as the highways of the agricultural world. It is of special interest to hear what is going on in those retired, isolated places that have no local papers to speak for them. Any information from such sources will be thankfully received and will be read with interest by people in all other quarters, for farmers like to know what other farmers are doing in other parts, and how fortune and the seasons are using them. Send in your "little notices."

Thanksgiving.

Between the present and the next issue of our paper the day of annual thanksgiving occurs; the proclamation of Governor Booth having appointed Thursday November 26th for this purpose. Never did the people of California have greater cause for rendering thanks. There have undoubtedly been years in which the people of this State have made more money than in the year now drawing to a close; but never were the substantial blessings of Providence more bountifully bestowed than during the year 1874. The year has brought with it no public disasters; California being as isolated from her sister States in this respect as she is in her geographical position; while everything conducive to health, abundance and general prosperity, has been granted in profusion. While we give thanks for these blessings let us see that they are made available by us to their fullest capacity to secure intellectual progress and social improvement.

The Governor in his proclamation calls upon the people "to abstain, so far as practicable, from their ordinary secular pursuits on said day; to assemble during some portion of it in their respective places of public worship, and by appropriate religious exercises manifest their gratitude to the Almighty for the blessings of the year, and their sense of dependence upon His will; and that they devote the residue thereof to family and friendly re-unions, to innocent enjoyment, generous hospitality, and the kindly remembrance of the poor and the afflicted."

We have a brief proclamation to make in behalf of the RURAL PRESS in connection with Thanksgiving day: In order to afford all connected with our paper an opportunity to keep Thanksgiving day in a proper manner, we shall endeavor to gain a day on our next week's issue; and if our subscribers receive their papers before the usual time they will understand the arrangement.

To Our Friends.

The readers of the RURAL PRESS can not fail to recognize and appreciate the efforts that the publishers of this paper are making to have it fully meet the wants and gratify the tastes of the community, as a first-class agricultural and family paper. Whenever any special want has been made manifest, in any department of agriculture, not only has the requisite information been obtained from reliable sources, but in many instances complete series of illustrations have been got up expressly for such occasions, in order to reduce the matter to a still more practical basis. Our present issue contains an illustrated article of this character, and other numbers of the PRESS of a recent date have given similar illustrated articles of great practical value, proving that even in pictorial matters we "mean business."

It is gratifying to know that this and other prominent points in the RURAL PRESS are duly appreciated. Our subscription list is rapidly extending; including city as well as country patrons. It is something to know that our paper is recognized as the leading agricultural journal of the Pacific coast, but we do not propose to rest here. With our increasing patronage we obtain means and facilities for still further improvement; and we herewith pledge ourselves to the friends and patrons of the RURAL PRESS, that all aid and benefits derived from their efforts in behalf of our paper, shall be strictly applied to its substantial improvement, and to extending its sphere of usefulness. There is a wide field open on this coast for such a journal, and we mean to "fill the bill."

FROM OLD FEED TO NEW.—Sheep owners inform us that the weather of late has been particularly favorable to their stock. The change from old to new feed occasioned by the early rains was unusually rapid, the interval which was apparently seriously dreaded being scarcely perceptible. Among the cheering accounts of the condition of things in different quarters, a correspondent writes us from Merced county as follows: "The rains having moistened the ground sufficient for good plowing, we are busy plowing and sowing. Summer-fallow is going in splendid. Plenty of good feed for sheep and cattle."

UNEQUAL DISTRIBUTION.—They had 17 inches of rain during the month of September in Sitka, Alaska. What a blessing it would be if we could "strike an average" between that part of the country and the San Joaquin valley; it would have the effect of settling the irrigation problem at any rate.

CAN'T FILL ITS ORDERS.—It is said that the San Lorenzo fruit-drying establishment has increased its force and is still unable to fill the orders. It is a great institution for this county, and it is utilizing thousands of dollars' worth of fruit which would otherwise be worthless.

IMPROVING.—Mr. P. Sumner, so basely assaulted in Oakland recently, is now able to walk.

Crude Advice.

Letters of inquiry sometimes reach us from Eastern people who, wishing to come to California, would like to be informed in regard to many things belonging to this country. We recently received a letter of this character from parties in Philadelphia, making inquiries about the price of land, the condition of the labor market, the character of the climate, and the probable chances of success and good health which the country offers to a young man of moderate means, industrious habits, but with somewhat impaired health. Cases of this character are so common that we have thought it worth while to address a few words to the parties referred to, which will be available perhaps to a class. In regard to the questions asked for your friend who wishes to immigrate to California, we would say that the publication entitled "The Resources of California," contains more of such information as is required in this case than could be obtained in any other way. What it says of the general advantages of California should, perhaps, be taken with some general allowances; but it is undoubtedly free from local partiality, which cannot be said of local papers; each one being supposed to represent an earthly Paradise. You are probably aware that the people of such little places, in any new country, are eager to secure new comers—especially if they bring along a little money—but when the money is gone then they are willing to have the immigrant go.

No one ought to locate in this country without coming to see for himself. The climate, the natural resources, and the people of different localities, vary so much that a man ought by all means to come and judge for himself. Any general estimate that we could give of the value of land in California would be of little avail to those wishing to purchase here. They should not be deluded with the offer of cheap land, as it is liable to prove worthless, especially to Eastern people. But we can assure our eastern friends that a little money will go a good ways in California; though a large portion of those who come here from the East sacrifice the money they bring with them in learning the ways of the country. In going through this training they may get disheartened, but if they have perseverance and adapt themselves to the ways of the country, we confidently believe that their chances are better here than in any of the Atlantic States.

In regard to the health of the partie for whom these inquiries are made, we would say that he could scarcely fail to improve by the change, especially if his complaint is of a pulmonary character.

Average Value of Farm Products for 1872.

The following table, taken from the Report of the Department of Agriculture for 1872, shows the average value per acre of the agricultural products in the different States of the Union, the Territories being generalized under one estimate. Possibly this, with other tables in the report, may withstand the closest scrutiny; but for our part we confess that this personal does not strengthen our faith in the infallibility of the statistician. We can account for the position which Nevada holds—the very highest on the list—by the supposition that the acreage under cultivation was extremely small, that it was put under cultivation to supply an urgent local want in isolated situations, to furnish prosperous mining camps with vegetables, etc., but we can hardly find suppositions even to explain how it is that Oregon stands not only above California in the value per acre of agricultural products, but above Michigan, Ohio, Wisconsin, Illinois and Indiana. Following is the table referred to:

States.	*Av. val. per acre.*	*States.*	*Av. val. per acre.*
Maine.....$14 16		Texas.....$12 84	
New Hampshire..... 19 50		Arkansas..... 18 60	
Vermont..... 17 87		Tennessee..... 12 70	
Massachusetts..... 31 10		West Virginia..... 15 04	
Rhode Island..... 34 00		Kentucky..... 15 54	
Connecticut..... 33 94		Ohio..... 14 57	
New York..... 22 94		Michigan 15 65	
New Jersey..... 27 96		Indiana..... 13 51	
Pennsylvania..... 20 80		Illinois..... 11 13	
Delaware..... 13 24		Wisconsin..... 14 28	
Maryland. 15 22		Minnesota... ..... 11 83	
Virginia..... 14 15		Iowa..... 8 49	
North Carolina..... 11 38		Missouri..... 11 99	
South Carolina..... 10 45		Kansas..... 8 92	
Georgia..... 11 68		Nebraska..... 7 75	
Florida..... 11 47		California..... 15 12	
Alabama..... 13 77		Oregon..... 16 70	
Mississippi..... 15 61		Nevada..... 44 30	
Louisiana..... 16 57		The Territories..... 26 17	

BIG SQUASHES.—Squashes, three of them, weighing 115½, 137 and 139¼ pounds, respectively, have been raised this year by James Arnold of Olmstead county, Minnesota. California will have to look out for her laurels.

RANCH SALE.—The Haynes' Ranch, near Bigg's Station, Butte county, consisting of 1,000 acres, has been sold to Samuel Ostroski, of Oroville, for $20,000.

ALMOND TREES.—A large number of almond trees will be set out this fall, along the warm belt, on the easterly side of Santa Clara foothills.

Preservation of Fruit for Winter.

A sufficiency of the fruit product of California is now an assured fact, and our producers are doing all that could be asked of them in regard to extending and improving varieties. The great desideratum at present, is a system by which our surplus fruit may be prepared for distant markets and be made available for home consumption during all seasons of the year. To accomplish this object we have, as the readers of the PRESS are aware, labored without stint. As another effort in this direction, we give the following communication by C. H. Dwinelle :

In this year of abundant and exceptionally fine fruit, we doubt not that many are wishing for some means of preserving it in its natural beauty and perfection beyond the time which it usually lasts. Even the large growers and dealers have, to a surprising extent, neglected this most important part of their business, and thereby failed to reap what should be their richest harvest, in selling fine fruit out of its usual season.

We purpose in this article to call attention to some of the methods used in this and other countries for preserving fruit and vegetables in their natural state.

By far the simplest way of keeping apples and pears for the Christmas market is to gather them in long piles upon the bare ground, between the orchard rows, and leaving them exposed to the elements. This seems, at first sight, a very careless way of doing business, but it is practised to a large extent by some of our most successful fruit growers. They say that the loss is less than when the fruit is stored in a close building, in the Eastern fashion, and that it does not shrivel up and become corky and tasteless. We know that in this way some of our late pears and apples can be brought into fine order for eating about the last of December. The time of keeping could probably be lengthened by making a light bed of straw for the fruit to lie upon, and sheltering it from the sun and rain without shutting out the air.

Packing in Sand

Costs more trouble than the above plan, and is also more effectual. The sand should be clean, and neither very moist nor very dry. Take any ordinary fruit-box, and begin at the bottom with a layer of sand, say an inch thick; then put in a layer of apples, taking care that they do not touch each other, nor the sides of the box; fill up all spaces, and cover the apples with sand and proceed as before until the box is full, placing the apples in the upper layers so that they may rest upon the sand-spaces between the rows, and not directly upon the apples below them.

We have eaten apples in February that are usually soft in October that had been put up in this way, and their only fault was that they were too hard to eat without being exposed to the air to become mellow. It is reported that a gentleman in Santa Cruz accidently left a box of apples, packed in sand, in his storehouse until this autumn, a year from the time of picking, and found them in perfect order.

This system is recommended for apples and pears, and could doubtless be used for some other kinds of fruit and vegetables. Sugar beet tops are kept for months in trenches, covered with earth to a considerable depth, and come out a dainty food for cattle in time of scarcity.

Of course, only the best of fruit should be packed and that should be picked before it softens at all, and handled with the greatest care. The boxes should be stored in a cool, dry, well-ventilated room—best of all a good cellar.

Grapes for Winter and Spring

Can be preserved at a small expense. In western New York the Isabella is kept in fine order by wrapping each bunch in paper, and then packing in a dry room where there is no danger of freezing nor heating. Care should be taken not to have the layers so thick as to crush the lower ones. The wrapping in paper can be done very quickly. Tear old newspapers into pieces of the right size, twist each piece into a rude cornucopia, place a cluster of grapes in this recepticle, gather the loose ends of paper and twist them tightly together and the work is done.

Hanging Grapes

Is much practised in some places. It is recommended that the clusters be suspended from near the tip, reversing the natural position. This causes the berries to fall back from the stem and separate from each other, thus decreasing the danger of rotting. It is easy to erect cheap frames in a fruit-room, with small hooks of flexible wire at suitable distances for attaching the clusters. A very economical and cheap rack can be made by fastening a rope to a timber or hook in the ceiling and again to the floor, so that it is in a perpendicular position, —see fig. 2. About this, hoops are suspended one above another, by means of strong cords tied to the hoops and coming to a common center on the rope.

Thomery and Ferrieres,

In France, are celebrated for their fine grapes, and the cultivators there have reduced nearly every detail of their management to a scientific nicety. They cut their grapes with a portion of the branch attached, (see fig. 4); this branch is placed in a small bottle filled with water, with a neck just large enough to admit it. The bottles are then placed in racks (see figs. 3 and 4) just far enough apart to prevent the clusters from touching. They should be looked at occasionally and if necessary replenished with water. Some advise putting a little charcoal into each bottle to keep the water sweet, but others claim equal success without this precaution.

There are two methods of securing the bottles on the racks. At Thomery the horizontal bars in the racks are made of narrow boards, with deep notches cut on each side, just large enough to admit the neck of the bottle, which is supported by the rim about its mouth.

At Ferrieres the bottles are supported between two strips of wood, about what would here be called heavy battens, which are kept an inch and a half apart by means of pieces of wood at each end. In the inner batten incisions are made for the bottoms of the bottles to rest in, and corresponding notches are cut in the outer ones. The grapes are cut in October and preserved in good condition until April.

Fig. 1.



Interior of Grape Room in Ferrieres, France.

The adoption of the above method at Thomery, immediately added $20,000 to $30,000 to the value of the annual grape crop of that village. Grapes hung in this way require less care than by the preceding plan. Any room in a well built house may be used, if the light is shut out and proper ventilation secured.

Careful Handling of Grapes

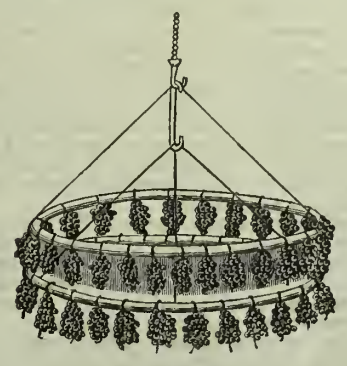
That are to be kept in their natural state, is of course absolutely necessary. None should be broken or loosened on the stem, and all imperfect berries should be removed with grape scissors.

Those who do not wish to take the trouble involved in any of the ways already described, may prolong the grape season several weeks by packing in clean, dry chaff, or even corn husks.

Preparing Grapes for Market

Is certainly not the least important part of the producer's work. To ship fine grapes in large, coarse boxes, as is done in California to so large an extent, would in France or New York be considered inexcusable carelessness. In fact, a deliberate throwing away of the result of one's labors. Fruit should be packed so that it will carry safely and be attractive when exposed in

Fig 2.



the market. In New York, many grapes are sent in circular paste-board boxes, holding from three to six pounds, which are filled as full as possible, so that there can be no moving about. These boxes are in turn put up in larger wooden ones for shipping. There is very little danger of grapes crushing under their own weight when packed this way, particularly if the smaller size of boxes is used.

Mr. Felix Gillet's description of the method of packing Chasselas grapes at Thomery, as published in the PRESS a few weeks since, may be quoted here: "They use small baskets which hold three or four pounds of grapes ; the bottom, sides and top of these baskets are filled up and lined with dried ferns. * * * The grapes are laid on that bed of ferns as nicely as possible, being very careful not to touch the grapes with the fingers. The grapes are then covered with a thick layer of ferns, and the whole well tied up with willow, soaked in water. Packed in that way the grapes arrive beautifully preserved and fresh in Paris, London and other capitals of Europe."

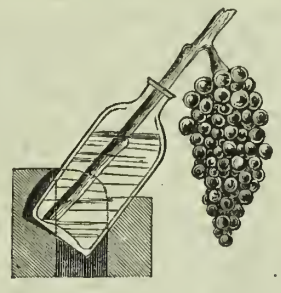
We do not believe that such packages would go begging even in San Francisco, in January and February.

It is to be hoped that our California growers will get into the habit of storing more of their fruit than they have done, so as to relieve the autumn market, and have some to sell when it is worth a good price.

The Professor's Chickens.

Professor E. writes for information concerning a disease which has lately made its appearance among his fowls, and which is proving of quite a serious character. From the description given we are of the opinion that the disease is a kind of influenza, probably at first produced by the inclement changes of weather, and possibly aggravated by insufficient accommodations. Fowls in a climate like ours are less hardy than in those of a more vigorous character, and need the same protection against our moderate changes of weather, that the fowls of the East need against the extreme changes to which they are subjected. Our friend should see that his fowls have clean, roomy, well ventilated shelter to which they can resort whenever they choose, and in which, on many occasions, they should be compelled to remain, whether they choose or not. Have these quarters well ventilated, but not from below. Amateurs—our friend admits that he is of this class — are quite apt to over crowd their poultry accommodations. They neglect to enlarge their buildings as their stock increases, and the chicken-coop thus becomes about as bad as a Chinese lodging house. A little red pepper mixed with the food would be beneficial to the fowls at this season of the year whether sick or well. After applying these sanitary measures, the affected fowls should be taken in hand, and if their throats are found to be cankered apply a wash of water, vinegar, and a little salt. If the eyes are inflamed and partially closed apply the same

Fig. 4.



wash to them. Experienced poultry raisers declare that fowls are not "like the rest of us" in all respects. Progressive medical science assures us that food urged upon the human appetite is worse than useless to the patient; whereas, fowls, it is believed, may be saved by forcing food upon them, in cases where the discomfort of eating would induce them to forego it altogether and starvation follow.

FIRST FRUITS.—Mr. Curtis, of this city, has brought to our office samples of several varieties of apples grown by S. H. Knowles of Anderson valley, Mendocino county. The lot from which these samples are taken is the first

Fig. 3.

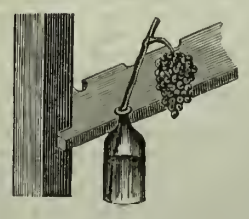


Fig. 5.



ever shipped from Anderson valley, but they give assurance of a successful career of apple growing. One of these, a *gloria mundi*, is a two pounder. The northern spyes, pippins, greenings and other varieties, were all large and well flavored. Anderson valley is situated about 12,000(?) feet above our bay level, and possesses the required temperature to produce a perfect apple. It is well watered and timbered and is about twenty-five miles long by about two miles wide and is healthy and abounds in game. We look for good things from thereabouts.

A Rational Want.

Every advanced stage in agricultural progress develops wants which were not recognized in the preceding stage; so that it may be said of Dame Agriculture, as of all the rest of us—the more she has the more she wants. The last quarter century has furnished a liberal supply of improvements in agricultural implements, but it leaves some wants unsupplied, which have existed for a long time; and has created others, which have really grown out of its own improvements. Some of these wants are urgent; among the most prominent of which we would mention a steam plow, adapted to farming on a small as well as on a large scale and a successful potato-digger possessing the same adaptability; and we have the same faith that these wants will be fully supplied in due time as we have that the seasons of plowing and potato-digging will come in their time.

But there are other needs growing out of our progressive economy which have not as yet assumed the form of definite wants. We have met with an expression of such a desire in an Eastern agricultural paper, under the head "Machine Wanted." The implement or machine called for is one by which indian corn—including stalks, leaves, cobs and grain—can be reduced, by grinding all together, to food for stock. This, it occurs to us, is a rational want. Corn stalks are of themselves healthful and somewhat nourishing food; but they need cutting and steaming to make cattle take to them properly and eat them clean; while the shelled corn is of itself extremely valuable to nearly all kinds of stock, but with some it is indigestible when eaten alone, and can scarcely be considered as perfectly healthful to any.

In localities where corn is abundant, an excellent feed for horses is made by grinding the cob with the grain. It is known that the cob yields only a very small percentage of the nutrition which this feed supplies; still it is not entirely destitute of this quality, and furnishes, besides, an acid ingredient to the food which aids materially in digestion, and also does away with the objectionable quality of compactness which the pure meal possesses. This furnishes a healthy, hearty feed, even for the working horse; and if we could add to this the leaves and stalks, cut close to the ground in the ordinary way to shock, it would supply a large amount of food of a desirable character. The tastefulness of the meal of the grain and cob would permeate the fibrous mass, and cause it to be eaten with a relish, thus preventing waste; while this coarse ingredient would produce the requisite distention of the animal's stomach, and give an assimilative and digestible character to the whole.

For dairy cows in winter, for mostly all kinds of young stock, and for working oxen, it would, no doubt, become a satisfying food, and be extremely economical to the owners of such stock. To the "skinflint" class of farmers a temptation would be offered, possibly, to "scrimp," by substracting a portion of the ears from the shock; and the slovenly might think that there would not be that necessity for the perfect ear that the corn of commerce demands; and would accordingly slight the cultivation of the crop; but for this purpose, as for all others, the crop should be cultivated up to its fullest capacity, and no scrimping allowed.

A HAND THRESHER.—In looking over some papers of the date of 1871, we met with a description of an implement called "Smith's Hand Thresher," which struck us as being possibly worth inquiring into. There are certain circumstances in farming under which a cheap, effective hand thresher, such as the one alluded to is represented to be, is very desirable. There are nooks and corners in the agricultural world, even in California, where in "the day of small things," farmers would be "mighty glad" to get a helper of this kind. We give below the item referred to. Can any of the readers of the PRESS furnish us with a more definite account of the machine ?

"In Troy, New York, there has been invented and put into successful operation, an implement called "Smith's Hand Thresher." The machine consists of a light but strong frame of wood, with iron fastenings, 42 inches long, 22 wide, and 36 high, weighing 200 pounds. The machine is within its frame. It is operated by hand, and the threshing is done in a superior manner. Forty-two bushels of oats were threshed by this machine in five hours' time. It is equally efficient in threshing wheat and rye. The price of the machine is not stated, but it can be made, we suppose from the representations, at a twentieth part of the cost of the large thresher."

THE LOMPOC LAND SALE.—The sale of town lots at Lompoc has been very successful. Up to Saturday last the sales amounted to $650,000, and the original owners of the rancho offered $350,000 for the balance unsold, which was refused.

A PORKER who in her day had been the mother of 127 pigs—16 the greatest number at one time—was recently killed in Royalton, Vt., aged 6 years.

BEEF CATTLE are now purchased in the ranges near Yroka at three cents per pound.

Sheep and Wool.

A Model American Merino.

At a meeting of the South Eastern Wisconsin Sheep Breeders' and Wool Growers' Association, the secretary, George Lawrence, Jr., of Waukesha, presented the following as his ides of perfection of an American merino:

No. 1. Carcass.—Unquestionably the first point to be regarded, because on the proper constitution or proper structure and connections of its parts depend the healthy, vigor, and hardiness of the animal. Plump, good size for the variety; the body should be round and deep, not over long, and both the head and neck short and thick. The back should be straight and broad; bosom and buttock full; legs not over long, well apart, straight, and strong, with heavy forearms.

No. 2. Folds.—Good, heavy neck folds, particularly on the ram; a short fold or two back of the elbow, and some small ones round the roots of the tail and on the breech, the latter running in the direction of lines drawn from the tail to the stile; and a good deep flank.

No. 3. The body and limbs should be densely covered with wool of as uniform a length as attainable; the wool should stand at right angles to the surface, except on the inside of legs; it should present a dense, smooth, even surface, externally dropping apart nowhere. Density and heaviness the leading considerations.

No. 4. Evenness of fleece.—Evenness of quality in every part of the fleece, so far as this can be attained, is one of the first points of a well-bred sheep. Fur is objectionable, and is the indication of bad blood, or a defective course of breeding.

No. 5. Fineness and softness of fiber.—Wool should be of equal dismeter from the root to the point of the fiber. Wool is said to be sound when it is strong and elastic.

No. 6. Style of fleece includes the combination of useful and showy properties, which gives value to choicest wool, viz: fineness of color, luster, uniformity and beauty of carving, and that particular mode of opening on the body which indicates pliancy and softness.

No. 7. Yolk.—A liberal quantity of yolk in its most fluid form, and a moderate quantity of external gum; but neither in excess, to spoil the value of fleece.

No. 8. Head.—The head should not be over long, with a good foretop, descending in a curve on the nose a little below the eyes, circling around the eyes a sufficient distance, so as not to obstruct the eyes; should be of good length and dense, and the wool standing at right angles with the forehead. The ears should be small, coated with thick, soft, mossy hair about half way to the roots, so as to give a feeling of thickness and softness, and the remainder of the outer surface should be covered with wool.

No. 9. Legs.—Should be well covered to the hock with wool of even quality, good length, and standing at right angles with surface. The armpit and scrotum are necessarily bare, but these cavities should be as small as the freedom of movement will permit.

No. 10. Belly.—Densely, well-covered belly, with wool of equal length, and equally as good in quality as any part of the fleece.

Amount of Wool Clips for 1874.

It would appear from the following in the New York *Economist*, that the clip of this season will be insufficient for the demands of the country. It is most probable that the uncertainty and instability of Tariff legislation, preventing manufacturers from knowing whether we are to be flooded with foreign goods or the contrary, prevents capital from being invested in manufacturing, and the uncertainty as regards the amount of demand for wool from manufacturers also prevents the natural increase of growing wool and keeping sheep for which this country is so remarkably adapted:

"There is and has been an unusually active demand for combing and delaine wools this season, and this has imparted considerable buoyancy to the market for clothing descriptions. The great stagnation in trade, the great ease in the money market, the plethora of money seeking for safe and lucrative investments, have acted like a charm in Boston in turning the superabundance of funds there into the wool business, which the banks hold as the best collaterals in the market. The dullness in the woolen goods trade has not blunted the acute minds of the men who are intimately interested in the Boston banks. They perceive a small stock of wool on the market of foreign descriptions, with none immediately in prospect; they are well aware that Ohio, and all the other States in the Union, apart from one, grew less wool this year than when our ports were open to the wools of the world. The Boston banks and dealers now hold the key to the wool market. The great bulk of the clip has passed into their hands before the eyes of the moneyed men of New York and Philadelphia. The wool trade of New York and the manufacturing interests are not blind to these facts. They must *bell the cat* now, make a flank movement, or lament the consequences. Everybody knows full well that the mills are not over-supplied, the farmers have none worthy of mention, and the wonder is where the new clip of wool is, or what has become of it. The tune about the stagnation in the woolen goods trade cannot be played much longer. Producers have it in their own power to take a firm, a bold attitude, as the supplies of the goods are not in excess of the wants of consumers. An advance should be established in prices all around at once, before the season's trade is lost, and the raw material goes on a kiting expedition, as it undoubtedly will later in the season, when stocks become beautifully less."—*Practical Farmer.*

Many of our farmers pay but little attention when cleaning wool to the kind of water used in the operation, but it will be seen that this should always be taken into consideration. Thus waters containing lime should be carefully avoided since this constituent combines with the suint, thus forming an insoluble soap which seems to produce unpleasant effects in the process of dyeing. For logwood and redwood dyes of like character, the effect appears to be unimportant; but when quercitron, fustic and madder are used, the result is quite different, and is often very deleterious.—*Exchange.*

The Dairy.

Deep And Shallow Setting of Milk.

A committee of the Solebury Farmers' Club, Bucks county, Pa., was appointed about two months ago to investigate and report on the above vexed question. Eastburn Reeder's new dairyhouse was selected as the best place for trial, and the committee consisted of J. L. Williams, Ezra Michener, J. Kitchen, R. K. Tomlinson, Moses Eastburn, Amos C. Paxson, and Oliver Balderson. Two of the committee visited the place during the week of trial to see that the experiments were properly conducted. The character of the committee we think fairly entitles this report to be almost a settler of the question "of deep and shallow setting of milk." They say:

"The pool for deep cans is 36 inches long, 12 inches wide, and 20 inches deep, holding 36 gallons of water. This pool is filled with the melted ice water flowing from the ice box in the top of the refrigerating or cooling cupboard, and when it is filled the surplus water is conducted in pipes to the drain, and passes out of the building. The melted ice water keeps this pool at a temperature of 58 degs. Four deep cans were expressly made for the purpose, 8¼ inches in diameter and 20 inches deep, capable of holding 5 gallons or 20 quarts of milk, if filled to the brim; but 18 quarts or 4½ gallons fills them 18 inches deep, which is quite as deep as they should be filled for convenience in handling. A "conical-shaped dipper," of the approved pattern, was also made for dipping off the cream from the deep cans, and likewise a large kettle, capable of holding 10 gallons, in which to mix all the milk used in the trial.

The trial commenced on Monday morning, August 10th, 1874. On account of a scarcity of milk in the mornings, but eight gallons were used at a time during the trial. Four gallons of measured milk were put in one deep can, filling it just sixteen inches deep, and weighing 34 pounds. The same quantity of this previously mixed milk by weight and measure was put in four ordinary tin milk pans (four quarts to the pan), and filling them three inches deep. This was repeated for 14 milkings one week, making a total of 476 pounds, or 224 quarts of milk, 16 inches deep, in 14 cans; and the same amount in 56 cans, three inches deep.

The water in the pool, as before stated, was at a temperature of 58 deg. When a can of warm milk was immersed in it, it raised the temperature to 60 deg.; but by the expiration of 10 or 12 hours, it would be lowered to 58 deg. again by the inflow of fresh ice water. A piece of ice was put in the pool after the first day, so as not to let the temperature be varied any more than could be helped. The pans of milk were set on a stone floor where the temperature was 60 deg. During the whole trial the temperature ranged as follows: In the pool, from 58 to 60 deg.; in the milk room, from 60 to 68 deg. Great care was taken to preserve this uniform temperature during the whole trial by admitting cool air at night and excluding the warm air during the day, which necessary feature is under complete control. The milk in both cans and pans stood 48 hours, when it was skimmed. The cream raised one inch in depth in the deep cans. The amount of cream obtained from the deep cans was 46 pounds, from the shallow pans 57 pounds. The last skimming was done on Tuesday evening, August 18th, when the cream was placed in a cooling cupboard and the temperature lowered to 54 deg. The churning was done Wednesday, August 10th. The 46 pounds of cream obtained from the deep cans were churned first—butter came in 30 minutes, and yielded 15 pounds 10 ounces. The cream from the shallow pans(57 pounds) was churned immediately afterwards—butter came in 50 minutes, and yielded 21 pounds 6 ounces. The result of this experiment, which was conducted as fairly as possible, indicates a gain of 5 12-16 pounds in favor of the shallow pans, or over 25 per cent.

In Ezra Michener's experiments, where the milk was set from 9 to 12 inches in depth in the deep cans, the greatest loss was 12 pounds to the hundred. In this trial, with the milk set 16 inches in depth, the loss is 25 pounds to the hundred, showing that the deeper milk is set the less cream will raise. Not to leave Hamlet out, we wish to *reiterate*, that all the milk used in this trial was carefully mixed in one large kettle each time before dividing, so that no difference in quality should get into the deep cans or pans. In the deep cans it took 14.4 quarts or 30.7 pounds of milk to make a pound of butter; and from the pans 10.5 qts., or 22.4 pounds, were only required to make a pound of butter.

The milk used in this trial was the product of three thoroughbred Jersey, two Gurnsey and three grade cows, and averaging over five pounds per cow, if all the butter had been obtained from the milk. The difference in the time of churning is attributable to the churn being overloaded with the cream from the shallow pans. The butter from the deep cans was pronounced by some to be a trifle the best, although both would rank as strictly first-class. The dairy house in which the experiment was conducted, has been so fully described that nothing more is necessary in that particular. It is especially adapted for convenience, and the making of gilt-edge butter, being both cool and dry. The floor had been washed on the morning of the 19th, and was perfectly dry by 11 o'clock. The cooling cupboard under the ice box is provided with slate shelves, on which the butter is placed to harden before being sent to market. The pool before mentioned is a very suitable place for keeping the cream before churning, as it should be kept at a lower temperature than the milk. It is not built so much under ground as to make it tiresome in carrying the milk in or out of it; in fact we, after giving it a critical examination, are unable to tell how it could be improved."—*Journal of the Farm.*

The Swine Yard.

Pigs and Their Diseases.

Pigs not only are among the earliest domesticated animals that were made the servants of men long before the historic era, but the same belong also to a class of animals—the pachydermata—that has been in existence much earlier than other of those classes of mammals of which our other domestic animals are members. Pigs belong to a class which is so old that a great many of its families became extinct at or before the earliest stone-age of the paleontologists, and which have left nothing behind except remnants of their fossilized bones. Of this class, only three families—the first comprising the elephants; the second, the rhinoceros, the hippopotamus and the tapis; and the third, the swine, of which our porker is the most important and most useful member—have survived and preserved their existence to our present times. This certainly proves that these three families, but principally the last named one, and especially one species of the same—our domesticated porker, which has spread over the whole globe, and has accommodated itself and its constitution and habits to almost every climate, condition, surrounding and manner of keeping—must possess the greatest vitality as a race, and be able to resist adverse influences in a remarkable degree. This becomes the more conspicuous if it is considered how much, as a general rule, our domestic pigs have to suffer under the influence of domestication, either by close confinement, frequently in a very dirty sty, or by gross neglect or bad care.

As to the diseases to which our domesticated pigs are subject, yes, there are several; but most if not all of them are from the consequence of domestication, and the carelessness, and the bad keeping bestowed upon them by their owners. It would lead too far, in a short article like this, to ventilate the causes of all the diseases; therefore I will mention only a few principal ones—principal in so far as the same are used as a bugbear to scare people who relish a slice of ham, or eat pork and sausages.

First—The measles. Pigs will not have measles—that is, will not harbor any cysticercus cellullosa, or cyst worm, from which develops the tape worm of man—if the same have no access to human excrements containing the eggs of a tape worm.

Second—Trichina spiralis. The best preventive against this parasite is to prohibit pigs as much as possible from eating animal substances, but principally slaughter-house offal of their own kind, especially in a country or a district where trichinosis has made its appearance; and to keep cats enough to wage a successful war of destruction against rats and mice, which are claimed to be those animals from which pigs, in many cases, get their trichinæ. Further, even if pork should be infested with trichinæ, the latter become perfectly harmless if the pork is well cooked, fried or roasted, and not eaten raw or half done.

Third—So-called hog cholera. Of this disease I shall have a few words to say at another time. At present it may suffice that the so-called hog cholera can be prevented by proper care and keeping, rational feeding, cleanliness, and by giving the pigs an opportunity to take, at least once a day, especially in the summer, a bath in clean, fresh and cool water.

Fourth—Scrofula, tuberculosis, and several skin diseases, are in nine cases out of ten, products of close, or continued in-and-in breeding (incest); and also, to some extent, of keeping the pigs in a narrow, filthy and badly ventilated sty. Close in-and-in breeding destroys the fecundity, causes the pigs to become stunted when weaned, produces a weak and sickly constitution, a tendency to scrofulous diseases, to skin diseases, and to diseases of the the respiratory organs, etc. Consequently, all these diseases can be prevented, or at least their occurrence can be made comparatively rare.—*Cor. Chicago Tribune.*

Effect of Extra Feed.—The *Farm and Fireside Journal* thus summarizes the results of some experiments in feeding pigs: During the warm weather 2¼ pounds of extra food produced one pound live weight. This would be a most extraordinary result if applied to all the food taken by the pigs; but they had all the good grass they could eat, and this food supplied the waste of the system, the animal heat, and kept the pig growing moderately, and this extra food was used solely to lay on flesh. Here is the secret of high feeding. The extra food digested all goes to profit, whereas the food that supplies animal waste produces no gain in flesh, and if no more is fed than to supply waste in the young animal, the food is all thrown away. Full feeding is the only profitable feeding, and this leads to early maturity and early profit. The most profitable feeding of pigs is before they are 10 months old. No profit results in keeping pigs to 18 months and two years old, except for breeding purposes; and besides, these 18 to 24 months hogs do not generally average more than 350 to 400 pounds, live weight, and 350 pounds may be reached in 10 or 12 months. Many millions of dollars' worth of grain is thrown away every year by half feeding or feeding principally in cold instead of warm weather.

Hogs Poisoned.—Mr. Daniel Huistt informs the Holt county *Sentinel* that he took home some 56 head of hogs sometime last week and kept them up for a few days, and then turned them into a small pasture where they remained over night. The next morning Mr. Huistt found 35 of the number down sick and as blind as bats, and frothing at the mouth. They had been eating crow-foot weeds, and it is supposed that is the cause of their sickness. Soft soap and grease were applied and the hogs have since got better.

A New Hog Disease.—The *Rural World* says a singular disease has broken out among the hogs in Morgan county, Ill., and is attended with considerable mortality. The first symptoms are swelling of the fore feet, generally the right one, and loss of appetite. The legs swell from the feet upward until the swelling reaches the body, when eruptions begin to show themselves mortification sets in, and death ensues in a few hours afterward.

Glass-Lined Tanks and Cisterns.

We have recently examined the application of an idea which may solve a difficulty felt in many trades. Mr. Hartley, a brewer, of Ormskirk, has suggested the use of a lining of glass to the vats employed for the fermentation of liquors, and has patented a means for attaching plates of glass to iron or other materials commonly used for the construction of such vats. The idea arose from his own requirements, as there is considerable difficulty experienced in perfectly clesusing wood, stone or slate, from the germs of organisms which accompany or induce putrefaction. With glass there is no such difficulty, and especially where no elevation of temperature is necessary this device of Mr. Hartley's appears to be satisfactory. The strength necessary to contain large bulks of liquid is of course given by the wood or iron basis of the vessel, while cleanliness is secured by the lining, which in many cases may be ordinary window glass, and in none need exceed three-eighths of an inch in thickness. Although primarily intended for the use of brewers, we do not see why the use of glass linings should not be extended, and it is likely to prove very valuable for house cisterns, as besides being more cleanly. A wooden cistern, glass-lined would probably cost much less than a zinc or leaden one, and offer no chance of corrosion or contaminstion.—*Iron.*

A Striking Sundial.—A sundial that strikes the hours is not seen every day, and many persons will doubt whether such a thing has ever had an existence. A dial of this description, however, has been invented and constructed by Abbe Allegret. It is simply a modification of what is termed the solar counter for registering the times at which the sun shines or is obscured. To effect this there are two balls—one black and the other yellow—fixed at opposite ends of a lever sustained by a central pivot. When the sun shines the black ball absorbs more heat than the yellow one, and the vapor of a liquid contained in the former is elevated to a higher temperature than that in the latter. As a result the vapor leaves the one ball, and being condensed in the other, this becomes the heavier, overbalances the equilibrium, and in doing so sets free a weight, giving motion to the requisite clockwork. In the sundial referred to, a pair of these balls is fixed at every hour-mark. When the shadow of the gnomon reaches any particular hour mark one of the balls is shaded, a preponderance of liquid enters the ball, the lever tilts, the mechanism is set going, and a gong sounded as many times as the number of the hour to be indicated. Of course, the sun must shine at the time of the hour mark being passed by the shadow, or the time will not be struck.—*Iron.*

Luminous Apparitions or False Lights.—These are not due, as was long supposed, to the products of animal or vegetable decomposition, but are caused by insects which possess organs that become luminous at the time of their sexual congress. It is now well known that the phosphorescence of the sea is due to the presence of immense numbers of microscopic animals.—*Journal of the Chemical Society.*

Hammers.

Few people in using a simple hand hammer ever think of it as an engine giving out tons of force, concentrating and applying power by functions which, if performed by other mechanism, would involve trains of gearing, levers or screws; and that such mechanism, if employed instead of hammers, must lack that important function of applying force in any direction the will may direct. The general characteristic of all forging machinery is that of a great force acting through a short distance. The conditions of short range and great force are best attained by what can be called percussion machines, which act by blows instead of gradual pressure; and hence we find that hand and power hammers are the most common tools of a smith's shop. A hammer head may by its momentum give a blow equal to a dozen tons, and absorb the reactive force that is equal to the blow; but if an equal force was to be exerted by screws, levers or hydraulic apparatus, a very strong abutment would be required to withstand the reactive force.

This principle is somewhat obscure, and the nature of percussion force not generally considered. Mr. J. Richards, of London, who is writing a series of articles on the principles of shop manipulation, for engineer apprentices, in *Engineering*, directs attention to percussive agents generally, and illustrates his subject by investigating the action of a simple hand hammer. He says that a simple hand hammer is in the abstract one of the most intricate of mechanical agents; that is, its action is more difficult to analyse than that of many complex machines involving trains of mechanism; but our familiarity with hammers makes us overlook this fact, and they have even been denied a place among those mechanical contrivances to which there has been applied the mistaken name of mechanical powers.

Let the reader compare a hammer with a wheel or axle, inclined plane, screw, or lever, as an agent for ooncentrating and applying power, noting the principles of its action first, and then considering its universal use, and he will conclude that if there is a mechanical device that comprehends distinct principles, that device is a common hammer. It seems, indeed, to be one of those things provided to meet a human necessity, and without which mechanical industry could not be carried on. In manipulation of nearly every kind the hammer is continually necessary, in order to exert a force beyond what the hands may do unaided by mechanism to multiply their force. A carpenter in driving a spike requires a force of from one to two tons; a blacksmith requires a force of from five pounds to five tons to meet the requirements of his work; a stonemason applies a force of from one hundred to one thousand pounds in driving the edge of his tools; chipping, calking—in fact nearly all mechanical operations oonsist more or less in blows, and blows are but the application of accumulated force, expended through a limited distance. As a mechanical agent a hammer concentrates the power of the arms, and applies it in a manner that meets the requirements of different kinds of work. If great force is required a long swing and slow blows accomplish tons; if but little force is required, a short swing and rapid blows will serve; the degree of force being not only continually at control, but the direction at which it is applied also. Other arrangements, if employed instead of hammers to perform the same duty, would from their nature require to be complicated machines, and act in but one direction or in one plane.

Machines or tools operating by percussive action, although they comprise a numerous class, and are applied in nearly all mechanical operations, have never received the amount of attention in text books that their nature calls for, nor their extensive use warrants. Such machines have not even been set off as a class and treated of separately, although the distinction is quite clear between machines with percussive action and those with what may be termed direct action, both in the manner of operating and in the plans of their construction.

American Weather Forecasts.—Mr. R. A. Proctor, who has lately been in America, speaks highly of the success of the Americans in weather prediction, which was discontinued in England after the death of Admiral Fitzroy. "The American papers publish daily, both in the morning and afternoon, the 'probabilities' as to the weather for the different sections of the eastern half of the United States. These announcements are now singularly accurate, the percentage of error being little more than ten or twelve, and constantly diminishing. Judging from all I heard, I believe that, notwithstanding the westerly situation of the British Isles with respect to the eastern continent, the system might be successfully introduced here. Of its success in America I can speak from experience. The probable weather for each day was a matter of considerable interest to me during my stay, especially during its latter half, as it chanced that I lectured nearly every day for the last three months of my stay in America (sometimes twice). I can only recall two occasions during all that time when the weather announcements were not strictly fulfilled by the event, and even in those cases the error consisted only in the announcement of a change in the weather a few hours before it actually occurred."

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Situated so remote from the seat of government, delays are even more dangerous to the inventors of the Pacific Coast than to applicants in the Eastern States. Valuable patents may be lost by the extra time consumed in transmitting specifications from Eastern agencies back to this coast for the signature of the inventor.

Confidential.

We take great pains to preserve secrecy in all confidential matters, and applicants for patents can rest assured that their communications and business transactions will be held strictly confidential by us. Circulars free.

Engravings.

We have superior artists in our own office, and all facilities for producing fine and satisfactory illustrations of inventions and machinery, for newspaper, book, circular and other printed illustrations, and are always ready to assist patrons in bringing their valuable discoveries into practical and profitable use.

DEWEY & CO.,

United States and Foreign Patent Agents, publishers Mining and Scientific Press and the Pacific Rural Press, 224 Sansome St., S. F.

Hints about Advertising.

If you have goods to sell farmers, how much better will it pay you to advertise in a farming paper, closely read by 15,000 intelligent farmers, than in miscellaneous daily or weekly journals with 30,000 readers, comprising only 2,000 farmers. A mining journal in California with 15,000 readers reaches more intelligent miners than any other 10 papers in the Union.

Purchasers are more likely to look for information in the advertising columns of a paper devoted to their special interests, than elsewhere, when ready to buy. Some will not read advertisements upon any other occasion, but seek the best paper when wanted.

If you happen to be the only advertiser in your line of business in a paper, all the better. But if several firms advertise the same, your own judgment will question whether you can best afford to go unrepresented.

Weekly journals are read most leisurely and carefully, and at a time when the subscriber is most favorably inclined to examine advertisements. The newspaper most specially representing your particular branch of industry is usually best entitled to your patronage, and the most profitable medium you can employ.

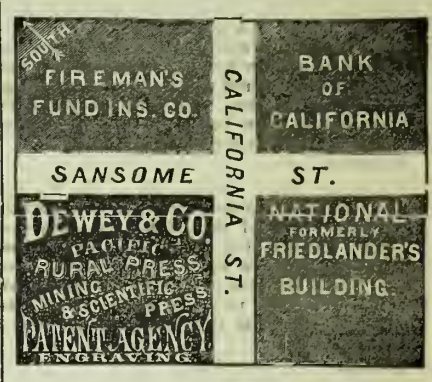
An advertisement in an honest and handsome sheet is favorable to the reputation of the advertiser. The readers of the Press are a superior and industrious class, who are able to purchase and who seek to patronize the best and fairest dealing tradesmen.

Advertising in cheap priced mediums (of limited circulation) is like buying goods at retail when you could as well take them at wholesale.

Information imparted to a list of superior and intelligent and active and industrious readers (naturally looked up to by others for information), is seed sown in good soil for the advertiser.

Fame and fortune are gained, nine times in ten, by liberal and judicious advertising.

Location of Dewey & Co.'s New Offices since July, 1874.



FROM AN INVENTOR.

Placerville, Octoher 3d, 1874.

Messrs. Dewey & Co.—*Gentlemen:* Yesterday I received from you my Letters Patent for my Hydraulic Mining Lamp, and I herewith tender you my grateful acknowledgements for the energy and promptness which you have displayed in working said invention through the Patent Office for me; and shall in the future, as well as the past, recommend all parties having new inventions, to go direct to the office of Dewey & Co., and ask for Mr. Boone, in the Patent Department, and if he cannot procure a patent for them they will find it useless to try further. Yours Respectfully, C. B. Brown.

FARMERS' LINE.

THE SPLENDID IRON SHIP,



CITY OF YORK,
1255 Tons. A 1.
AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,
1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co. RODGERS, MEYER & CO.,
aug15-tf 212 Battery street.

Hooper's South End Grain Warehouse

Japan and Townsend Streets.

San Francisco, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo. F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rates. Storage taken at lowest current rates. 4v8-tf

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER,
22v6-1y President Board of Directors.

YOSEMITE HOUSE,

STOCKTON, CAL.

JAMES COLE, Proprietor.

This House contains all modern improvements; Saloons, Bath Rooms and Telegraph.

The only first-class Hotel in Stockton.

A. W. THOMPSON,

Attorney at Law,

No. 6 Leidesdorff street, - - San Francisco

sep12-tf

Farmers write for your paper.

Agricultural Notes.

California.

AMADOR.

A Fact Worth Noting.—Amador *Dispatch*, Nov. 14: We have known several vineyards this year which have not paid for the labor bestowed upon them. The last case of this kind is a gentleman living near Brighton, Mr. F. B. Fitch, who determined last year to give his small vineyard one more trial, and if that failed, to dig up the vines. This year, however, he had so much other work to do that he neglected his vineyard, and allowed the weeds to almost cover the vineyard, and very late in the spring ran a cultivator through them. To his surprise they brought an average good crop. He attributes the former failure to the fact that he plowed too deep and too close to the vines, cutting and breaking many of the roots, and thus injuring the vines to a great extent. He now believes that before a vineyard is plowed deep it should be ascertained how deep the roots run, and in no case should any of them be broken.

COLUSA.

The Present Autumn.—Colusa *Sun*, Nov. 14: Never within the recollection of the oldest inhabitant has this section been blessed with such an acceptable autumn as the present. The rains have descended at proper intervals for the benefit of the soil, and the fresh grass is springing up as if by magic, and already the earth is covered with a delicate mantle of living green. Between the showers we bask in the genial sunshine, and in the evening time are fanned by mellow breezes. The finest opportunity is now offered for the plow to be brought into active exercise. All nature rejoices, and why should man be unmindful of the many blessings that are showered upon him.

HUMBOLDT.

Grass.—Yreka *Union*, Nov. 14: We learn that the young grass in the ranges has started up better this fall than it has for many years before. This is due to the rains we have had, and the warm weather accompanying them. Mr. Dorris informs us that he has hardly ever seen such grass in Butte creek valley, and about the lakes at this season of the year as there is now.

KERN.

Kern County Lands.—*Courier*, Nov. 14: Kern lake, on the north and west sides, is surrounded by an extensive body of rich tule lands, composed of a fine vegetable mould reaching down to the water level. The first to test their productive capacity was I. D. Stockton, who took up a claim there about two years ago. The crop he has since raised there, particularly sweet potatoes, have been marvelous. His field of this esculent recently underwent a careful examination by four experts in agricultural matters, Messrs. Wood, Marshall, Garlick and Ahalt who have furnished us a statement in regard to the yield which we find averages about twenty-four tons to the acre. This seems incredible, but it is true nevertheless.

MENDOCINO.

Fine Specimen.—*Independent Dispatch*, Nov. 14: O. A. Carpenter has left at our office a beet of this year's growth, weighing seventeen pounds. It is a fine specimen, and suggests the idea that this branch of farming is sadly neglected, as a greater amount of food can be raised on a given amount of land, in beets than any other article. It was raised on Mr. Carpenter's place.

MONTEREY.

Sales of Mutton Sheep.—Monterey *Democrat*, Nov. 7: We report the sale this week of two bands of wethers—the first bred by Smith P. Carter, of this valley, and the second by Mr. Godfrey, of San Luis Obispo. They had been fattened upon stubble, in this vicinity, and Carter's band is considered the best that has gone into market the present season. The two lots numbered seven thousand, and the sales were effected thorough Fred. Sherwood.

Grass.—The weather since the first rain has been very favorable to grass, which has already attained considerable length. The prospects are of a very easy winter to all kinds of loose stock. Plowing is going on steadily wherever an early beginning is desirable.

NAPA.

Plowing.—Napa *Reporter*, Nov. 14: Farmers in Napa valley are busy following their plows. More than half the ground to be sowed this year is already plowed, and the prospects for good crops in this county are flattering.

Flowers and Fruit.—The St. Helena *Star*, of Nov. 12th, alludes to blooming flowers and the green freshness and beauty of the vegetable kingdom, which everywhere greets the eye at this time in California, in contrast with the freezing, rigid weather which now prevails at the East, and the desolate, barren appearance of vegetation there, and asks—Why is it that the people will stand the horrors of a rigid winter at the East, foregoing the pleasures and comforts of life, in preference to seeking the healthier climate and richer soil of California.

NEVADA.

Red Land of the Mountains.—Mrs. Wilson, who, with her husband cultivates a hill farm a few miles from Grass Valley, recently called upon the editor of the *Foothill Tidings*, published at that place and in course of conversation said: "You cannot speak too highly of the capabilities of this soil and climate for anything one need desire to grow." "But," added she, "they who merely scratch over the top soil, consisting largely of pine leaves, more or less decomposed, will find great improvements in their crops if they will turn up the subsoil and mix it with this oily pine mould. Twelve inches deep and thoroughly mixed, is the way such land should be plowed." We believe you Madam, and hereby pass the hint around that others may be benefited.

Grass.—*Nev. Transcript* Nov. 4: We hear that the grass has started nicely in the foothills below Grass Valley, and that in a few weeks, if it is not too frosty, stock will be able to live without feeding.

PLACER.

More About the Red Lands — Monstrous Yield.—Placer *Herald*, Nov. 14: J. W. Payne has a ranch here in the foothills, a few miles from Auburn. He has raised each year a little hay, a few hogs, a few fowls, and cut a little wood, from which in the aggregate, we suppose he has scratched together a pretty fair living. A brother of his, Madison Payne, came out from Missouri about a year ago and went to live on the ranch with J. W. He read somewhere or heard somebody say that anything would grow in this locality if well cared for. Being naturally enterprising, he determined to test the matter, and planted besides many other things some corn and some hemp. The result astonishes even the oldest settlers. Through the kindness of Mr. Payne a stalk of the corn and a stalk of the hemp hangs against the wall in our office. The hemp stalk measures over five inches in circumference at the butt, and is 14 feet long, and bore, Mr. Payne tells us, three quarts of as fine seed as he ever saw. The corn stalk still has one fine large ear of corn on it, just nine feet from the roots, and was originally 15 feet long. Mr. Payne comes from a State where corn and hemp are among the principal productions, but he is free to confess that he never saw hemp 14 feet high, nor an ear on a stalk of corn nine feet from the ground until he saw these, and he thinks that these foothills properly cultivated will beat even the rich Missouri river bottoms, in the production of anything that grows. It is fair to add that this corn and hemp were raised on the common high red land.

SACRAMENTO.

Farmers Busy.—Folsom *Telegraph*, Nov. 15: —The farmers and gardeners during the past week or two in this section have been as busy as bees in a clover patch;—all plowing and seeding—wheat and barley in the fields, and radishes, beets, lettuce, onions and turnips in the gardens. The late showers have put the ground in fine condition for this sort of business, and the classes of workers above mentioned are not slow in improving the golden opportunity.

SAN JOAQUIN.

The Grape Crop.—Stockton *Independent*, Nov. 17: The grape crop has been abundant and the quality quite up to the average. In the vicinity of Stockton, the owners of vineyards have more fruit than they are able to utilize. Parties engaged in the brandy manufacturing business might make a good haul of grapes upon short notice, as we are told there would be no difficulty in readily obtaining two hundred tons, which unless made use of very soon must remain and shrivel on the vines or rot on the ground. So plentiful and cheap have grapes become that the owners of excellent vineyards propose to root out the vines altogether and devote the land to other crops. In the meantime there is a large quantity of grapes in San Joaquin county awaiting a market.

SANTA CRUZ.

Enterprise, Nov. 14: Late fruits were never more abundant than this year.

Plowing has commenced quite extensively in this vicinity.

The hills and valleys in our vicinity are looking charmingly fresh and beautiful, in the varied tints which they present when flooded by the glorious sunshine which now prevails.

The Late Rains.—*Sentinel*, Nov. 14: The late rains destroyed over one-third of the grape crop in this county. Fitch Brothers lost heavily of their Muscat, Tokay, Rose of Peru, and other fine foreign varieties of grapes. The continued wet weather moulded with damp, or bursted the berry, so as to rot and destroy over half the grapes not picked. A portion, however, will be saved and fermented for distilling.

SONOMA.

Cotton, Hemp, Etc.—Diversified Farming. Petaluma *Argus*, Nov. 13: It is the opinion of many who are competent to judge, that there are sections of this county and Mendocino which will produce cotton of good quality. It will cost but a trifle to try the experiment, and it is to be hoped that the attempt to cultivate this important fiber will be tried in various localities.

It is known that flax will grow luxuriantly in various parts of the district, but as yet its cultivation has not been carried on to any appreciable extent. This product finds a ready market at good prices, and leaves the land in excellent condition for the succeeding crop. We hope to see a dozen or more specimens of flax seed and straw at our next fair.

We are not aware that the culture of hemp has ever been attempted in the district, but there is not much doubt that there is a considerable area where it will do well.

Mendocino is one of the leading hop-growing counties in the State, and large quantities are produced in Sonoma. Many tons have been shipped through Petaluma this season, yet there was not a single exhibit of hops at our last fair.

Experiments should also be made in the cultivaton of chiccory, castor beans and numerous other products that have not yet been attempted, and for which there is reason to believe our soil and climate are well suited. At the last fair there was no exhibit of peas, beans, peanuts, honey or sweet potatoes, each of which should have been represented by numerous specimens. We trust our farmers will give heed to these suggestions, commence early in the season, resolve to make one or more exhibits of their produce, and see to it that the vast resources of our district are properly presented at the fair of 1875.

STANISLAUS.

Rapid Growth.—Modesto *News*, Nov. 13: Vegetation was never known to be so forward at this season of the year. In the foothills of both the Coast and Sierra Nevada ranges of mountains in this county, grass is already sufficiently advanced for all kinds of live stock to make a good living. In fact sheep are already improving in flesh. Both the summer-sown and volunteer grain is well advanced, causing the broad fields of our valley to wear the appearance of a green lawn. In fact so mild and pleasant has been the season thus far that even the peach, fig and cherry have not yet shed their leaves. The unusual warmth of the climate and soil, together with the early heavy rains, has pushed vegetation forward rapidly. Everything is certainly auspicious for both the farmers and the stock raisers.

Land Values.—The following sales of land, with more or less improvements, will show that land actually rates low in this county; nor were any of these mentioned considered forced sales: Wainscott, to Tynan, 320 acres, cash sale, five miles from Modesto, $14 50 per acre. Carter to Whitmore, cash sale, 320 acres, three miles from Modesto, $15 per acre. Mitchell & Cressey Brothers to Wm. H. Davis, 50 acres, two miles from Modesto, $12 per acre. All of the land was of excellent quality, level and light, but rich, sandy loam, and in good neighborhoods, and within three miles of a railroad depot, and only about 105 miles from San Francisco. We have also heard of several sales of land in the neighborhood of Oristimba at $10 per acre. The land borders on the San Joaquin, a navigable stream for eight months in the year, with prospects of an irrigation ditch soon. Likewise in a good community, and the land is of the very best quality, it being rich, black valley loam. Along the eastern portion of the county land can be purchased at from $4 to $20 per acre, owing to quality, locality and improvements. In this section the land is very rich, and has never, in twenty years experience, failed to yield heavy returns.

TULARE.

Sweet Potatoes.—Tulare *Times*, Nov. 14: A sweet potato was brought to our office that measured twenty-seven inches in circumference, and weighed eleven and one-half pounds. It was raised by Dr. Stockton, on Kern island, in Kern county. The doctor cultivated twelve acres in potatoes this year, and a sworn statement shows that land that was cultivated this year for the first time yielded 42,000 pounds per acre, and that land previously cultivated yielded 49,000 pounds per acre. This looks like a "big thing," but nevertheless it is true. The potatoes have been sold as fast as dug, at three cents per pound. This shows what our country will do when plenty of water is used. We have no doubt that there is much land in this country that would yield equally as well if properly cultivated.

An Early Season.—The plains near the foothills in this and Fresno counties are covered with green grass and wild clover. In some localities the grass is sufficiently large to make good grazing for stock.

TUOLUMNE.

The Season.—*Union Democrat*, Nov. 14: The genial weather of the past week has caused the grass to get a good start. If not nipped too soon by frost there will be a good feed for stock all winter. The hills around look fresh as they assume a green hue and spring-like appearance.

YUBA

Pasturage.—*Appeal*, Nov. 12: If the fine growing weather continues the pasturage will soon be of substance, and the price of hay will be materially affected. There are considerable quantities of baled hay being stored in this city by farmers and dealers, and they are watching the weather anxiously.

Living Death.—A paragraph in Professor Redfern's paper on biology, read before the British Association, furnishes a curious confirmation of the axiom, "we die daily." Referring to the blood, it is said that the duration of life in any of its particles is but short; they die and their places are occupied by others, and so continues a substitution which only ends with death. After every meal an amazing number of white corpuscles are added to the blood; breakfast doubles their proportion to the colored corpuscles in half an hour; supper increases their proportion three times, and dinner makes it four times as great. They come from such solid glands as the spleen. In the blood going to this organ, their proportion is one to two thousand two hundred and sixty; in that returning from the spleen, it is as one to sixty. Perhaps the most stupendous miracle of organization is the steady maintenance of but slightly variable characters in the living and moving blood, which is every moment undergoing changes of different kinds as it circulates through each tissue and organ in the body.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Nov. 17th, 1874.

For Week Ending Nov. 3d, 1874.*

Machine for Sewing Sacks and Bags.—Howard P. Garland, S. F., Cal.

Carbureter.—Louis Marks, S. F., Cal.

Cheese Vat and Steam Heater.—John S. Woolsey, Gilroy, Cal.

Stave Machine.—Lamartine R. Fulda, S. F., Cal.

Diving Apparatus.—John Peter Schmitz, S. F., Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

General News Items.

Pacific Coast Postal Changes.—The following Post Office changes on the Pacific Coast were made during the past week: Offices were established at Cross creek, Tulare county, California, and Charles H. Robinson was appointed Postmaster. At Glenville, Kern county, California, and Jos. Meyers appointed Postmaster. Offices were discontinued at Mountain House, Yamhill, Oregon; at Hampton, El Dorado county, California. Postmasters were appointed as follows: Robert F. Campbell, Cisco, Placer county, California; J. W. Roberts, at Walker, Sacramento county, California.

Carlism Crushed.—The latest dispatches from the Spanish Republican army to the Government are of the most encouraging nature. Army officers report that but few bodies of organized Carlists are now in the field, and those have been so weakened through desertions and other causes, as to be unfit for any aggressive movement. It is believed that Carlism has been effectually crushed.

Warlike Villainous Saltpeter. — Agents of a European Government have contracted with a firm in this city for the purchase of 3,500,000 pounds of saltpeter. This, probably, will be used for the manufacture of gunpowder, and its purchase has given rise to rumors of coming conflicts between European powers, possibly Russia and Germany or China and Japan. It is not known what Government is the contracting party.

Immoral Chinese Women.—Congressman Page, of this State, had an interview with the President a few days since, in relation to the coolie trade and the importation of Chinese women for alleged immoral purposes. The President was very decided in his opinion that such importation was in direct violation of the treaty with China. He will call attention to the subject in his annual message.

Become an Honest Man.—It is said that Andrew McGarvey, the New York Court House plasterer of the Tweed Ring, who was paid $400,000 for work not worth one-twentieth of the money, is now earning four dollars a day as an iron worker in a Market street shop, in this city. If he has gone to work, there is hope that he may become an honest man.

Coal Oil Lamp Explosions.—During the past week we have noticed the occurrence of two coal oil lamp explosions in this city, which fortunately did but little damage. One also occurred on Saturday last at Cheyenne, which resulted fatally. All these have occurred through sheer carelessness, or ignorance of the nature of coal oil.

Frightful Railroad Accident in Italy.—A frightful accident occurred a few days since on the railroad between Bologna and Ancona, attended by heavy loss of life. Two passenger trains collided. Both were totally wrecked. Thirty-five persons were killed and injured. The cause of the accident is not stated.

The Nevada Legislature.—As nearly as can be stated, from returns so far received, the Nevada Legislature will stand: Republicans, 47; Opposition, 28.

Mint Removal.—The office and official documents of the Superintendent of the New Mint have been removed to the new Appraiser's stores, on Washington street.

D. D's.—One hundred and thirty-six degrees of Doctor of Divinity have been conferred by colleges in the United States this year.

The Ross Boy.—The parents and friends of the little Ross boy have already expended over $100,000 in their fruitless search for him.

Bridges Washed Away.—The temporary bridges at Lisle's Bridge, American River, were washed away Saturday.

The Reason.—A Danbury little darkey refused to go to church "kase he didn't want to look there like a huckleberry in a pan of milk."

W. L. Church, formerly newspaper agent, will please address this office.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Nov. 18th, 1874.

The week's news is replete with encouragement for the farmer at home and abroad. The Liverpool market has advanced 3c since our last issue, being now quotable at $2.37@$2.43. Those who have shipped wheat under the auspices of the Patrons of Husbandry have occasion for congratulation, not so much in the amount of the income as in the indication thereby afforded of the turn of the tide. By the present time the bulk of the English harvest has been delivered, and the turn of the market has consequently come. Most of the cargoes shipped through E. E. Morgan's Sons will not arrive till toward the end of the present month, and from that till the beginning of the year; and there is a prospect of a steady advance all the time. This is what the *Mark Lane Express* of November 14th has to say about the subject: "The weather during the past week has been cold, with snow and frost, which have been injurious to pastures, but at the same time have favorably checked wheat, which was getting too luxuriant. The wheat market is improving in tone; a rise of a shilling is noted on the continent." The receipts of nearly all cereals have been very large for the week, that of wheat over 300,000 cents, while that of rye barley has equalled 59,001 centals, an unprecedented amount. Barley as well as wheat has advanced. The Eastern demand still active, and cargo is loading for Australia. A cargo of oats is also loading for the same destination.

Beans—Receipts during the week 4,219 sks. Sales of 170 sks Bayos at 2¼c. All kinds have advanced ¼c.

Barley—Receipts for the week very large, 59,001 ctsl of Bay, (including 43,632 ctls for the Northern Light,) and 16,025 sks Coast. Besides the cargo of the Northern Light, another will be dispatched to Sydney, and the market is 5c higher in Chicago. This has caused an advance of 2½c on Feed.

Beeswax—Still quotable at 25@27½c.

Broom Corn—Receipts for the week, 360 bdls. No change in the market price, which is 5@7c.

Buckwheat—Receipts for the week 141 ctls. Nominal at $3 25.

Cornmeal—Still quotable at 2½@3c for Table, and $31@$32 for Feed.

Cotton—Receipts for the week 49 bls. Sales of 8,000 lbs, at 16c.

Fruits—There is little or no change to note. The Nautilus from Tahiti brought 275,000 Oranges during the week.

Fresh Meat—No change in quotations since our last.

Flour—In good demand both locally and for shipping purposes. The receipts for the week more than double those of the previous one, amounting to 72,042 qr-sks of California and 204 bbl-sks and 2,225 qr-sks of Oregon. Exports for the week 12,796 bbls.

Feed—Is in good demand and quotations remain unchanged.

Game—The supply of Game has been generally good. Venison is scarcer.

Honey—Receipts for the week 430 cs. A carload has been shipped East. It is firm at rates last quoted in our price current. There is, however, very little movement just now.

Hay—Receipts for the week large—5,782 bls. Sales of a cargo of Medium at $14. Quotable at $12 to $17.

Hops—Receipts for the week small—only 11 bales. Market firm in consequence of the advance East in California Hops. Quotable at 30@37½c. Growers who have not yet disposed of their crop are indifferent as to selling it, anticipating a further advance and an improvement in rates here.

Hides—Receipts last week of Bay, Coast and Oregon 3,141. Market unchanged. Shipments by one firm of 800. There will be no money made on Hides for the next two months. Quotations in New York always shrink during the Winter season.

Nuts—No changes in quotations. There are a good many California Peanuts, etc., coming in, arriving by every steamer from Los Angeles. Demand fair. Chile Walnuts a drug.

Oats—Firm. A cargo is being made up for Australia. Receipts for the week 446 ctls of Bay and 20,586 sks of Coast and Oregon, the largest for some time past. Sales of 200 sks Light at $1.35; 200 do Good Feed at $1.45; 1,000 do Oregon at $1.52½; 650 do do at $1.55; 1,200 do Good at $1.40@1.45, and a small lot of Surprise at $1.70.

Onions—Receipts 2,747 sks. The price has again declined to 60@70c.

Oatmeal—No change of note in the market.

Pearl Barley—Still quotable at 6½@7½c for shipping.

Potatoes—Receipts for the week 33,641 sks—fivefold that of the previous week. Under the pressure of such large supplies the market has again declined, being quotable at $1.25@1,35, and at $1 for Sweet.

Poultry—Has been in extra good supply during the past week. Turkey was as low as 15@16c, now it is quotable at 15@17c. Hens, Roosters, etc., are somewhat cheaper.

Rye—Quotable again at $1.11½. Sales of 800 sks at this figure. Receipts of Coast, 931 sks.

Seeds—Market unchanged. There is a large quantity of Mustard Seed in the State yet, and prices will probably be low. Over 2,000 sks of last year's crop have been placed in the market this year.

Straw—None in the market. No quotations.

Tallow—Still remains at 6@7c, but it is firmer. Sales last week of two specially good lots, one of 20,000 lbs and the other of 10,000 lbs, at 7½c—½c higher than the market.

Vegetables—Diminished supply. Little change in price. String Beans and Green Peas have declined. Green Corn is 2c dearer. Carrots have declined $2 per ton, being now quotable at $8@$10.

Wool—Market flat and dull, with 25,000 lbs on hand and receipts of 2,978 bales during the week. Local factories just buying from hand to mouth, and already sufficiently well stocked. Rates quoted in our price current merely nominal. No buyers, and when there are some parcels disposed of it is at about 1c less. In the Wool business California is now feeling the effects of last year's Eastern panic. The mills are shutting down for a while or working only part time many of them, and others are talking of doing the same. There need be no movement expected in the market until there is a brighter condition of things East. Meanwhile the Wool must remain in store. Sales for the week aggregate 170,000 lbs, about two-ninths of receipts; 50,000 lbs being sold within the range of 14@20c and 50,000 lbs within the range of 15@18c. Burry lots are difficult to sell at 12@14c.

Wheat—Market better, both in Liverpool and here. The rate as telegraphed is $2.37½@2.43 for average California and $2.49@2.61 fur Club. This is an advance on average of 3c as compared with last week. The rate here is $1.55 for Shipping and $1.57½@1.60 for Milling. Freights remain dull and depressed at £2.7.6 @£2.12.6.

DOMESTIC PRODUCE.

WEDNESDAY M., Nov. 18, 1874.

BEANS.			
Beans, sm'l wh. ₱ lb	3¼@	—	
do. butter	3½@	4½	
do. bayo	2½@	—	
oo, pink	2½@	—	
do, pea	3½@	—	
BROOM CORN.			
Per ₱	5	@	8
COTTON.			
Cal. 1874. ₱ lb	15	@	16
DAIRY PRODUCE			
Butter, Cal. choice			
₱	45	@	52½
do, good	40	@	45
do, inferior	30	@	40
do, firkin	30	@	35
do, pickled	35	@	40
Cheese. Cal. new	12½	@	17
do. Eastern	15	@	20
EGGS.			
Eggs, Cal. fresh	60	@	—
do, Oregon	35	@	—
do, Eastern	—	@	—
do, Ducks'	40	@	45
FEED.			
Bran, per ton	—	@19	00
Middlings	—	@28	50
Hay	12	00@17	00
Straw, ₱ bale	—	@	—
Oil cake meal	—	@30	00
Corn Meal	31	00@32	00
FLOUR.			
Extra	4 75	@5	12½
Superfine	4 50	@4	75
FRESH MEAT.			
Beef, fr quality ₱ lb	7	@	8
oo, second do	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed	6½	@	6¼
do, dressed	8½	@	8¾
GRAIN, ETC.			
Wheat, coast	1 45	@1	50
do shipping		@1	55
do milling	1 51½	@1	60
Barley, coast	1 10	@1	17½
do brewing	1 35	@1	40
Oats, ch ice	1 65	@1	75
do oommon	1 45	@1	55
Corn, White	—	@1	37
do, Yellow	—	@1	37
Buckwheat	3 00	@3	25
Rye	1 15	@1	20
HOPS.			
California, 1874	30	@	35
East'rn, '73 ch'ice	—	@	—
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey in comb	18	@	22½
do Strained	5	@	10
Pulu	9	@	10½
Onions	65	@	70
NUTS—JOBBING.			
Cal. Walnuts	10½	@	12½
Peanuts per lb	7	@	9
Chile Walnuts	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds h'd shell	10	@	12½
do, soft	20	@	25
Filberts	17	@	18
Cocoanuts, 1000	—	60 00	@ —
POTATOES.			
Sweet, per cwt	—	@1	00
Cuffee Covel	25	@1	30
H. M. Bav	1 25	@1	35
Pigeon Pi	—	@1	25
Humboldt	—	@1	00
Petaluma	—	@1	25
Mission	—	@	—
Salinas	—	@	—
Bodega	1 25	@1	35
St Barbara	—	@	—
Sac. River	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per lb	15	@	17
do gobblers	15	@	17
Hens, per dz	5 50	@7	00
Roosters, young, large	5 50	@6	50
Broilers, small	2 50	@4	00
do large	3 50	@4	50
Ducks, tame, doz	5 50	@7	00
Geese, per pair	2 00	@2	50
Hare, per doz	3 00	@3	50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@1	75
Mallard Ducks	3 00	@4	50
do small	—	@2	00
Wild Geese, gray	—	@	—
do white	—	@	—
Doves, per dozen	50	@	75
Prairie Chickens	—	@	—
Grouse	—	@	—
Rabbits	1 25	@1	50
do tame	5 00	@6	00
Venison, per lb	8	@	9
PROVISIONS.			
Cal. Bacon, Light	—	@	17
do Medium	—	@	16½
do Heavy	—	@	15½
Eastern do	13½	@	16
Hams, Cal	14	@	14½
do Whittakers	—	@	17
do Duffield, ch	—	@	17
do Planklon & Arm ur	—	@	15
do Boyd's	—	@	—
do Stewart's	—	@	16
Eastern Sbould's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	14½	@	17
SEEDS.			
Alfalfa, Chili	—	@	12
do California	—	@	15
Canary	4	@	4½
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	2	@	3
do. Brown	1¾	@	2
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	—	@	11
Timothy	11	@	12
Sweet V Grass	60	@	75
Orchard do	30	@	35
Red Top do	30	@	40
Hungs'rian do	10	@	13
Lawn do	50	@	60
Mesquit do	27	@	—
Clover Red	—	@	20
do White	—	@	65
Alsike	—	@	60
WOOL, ETC.			
FALL—			
Good to choice	19	@	22
Fair grade	16	@	18
Heavy free	14	@	16
Defective	12	@	15
Hides, dry	19	@	20
do wet salted	8½	@	9
Tallow, Orude	5	@	6
do Refined	6½	@	7½

FRUITS AND VEGETABLES.

WEDNESDAY M., Nov. 18, 1874.

FRUIT MARKET.			
Tahati, Or. ₱ M	—	@40	00
Lorita, do	—	@—	—
Osl. do	—	@—	—
Limes, ₱ M	—	@20	00
Cal. Lemons, ₱ M	—	@25	00
Australian do	—	@40	00
do Sicily ₱ b'x	—	@—	—
Bananas, ₱ bnch	—	@—	—
Cocoanuts, ₱ 1000	—	@60	00
Pineapples, ₱ dz	—	@—	—
Apples, ₱ box	40	@1	25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries ₱ lb	—	@	30
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	5	@	6
Peaches, bskt	—	@	—
do, ₱ box	—	@	—
do ext Mountain, lb	—	@	—
Pears, Bart'l, bx	—	@	—
do Cooking	40	@	50
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel's ₱ 100	—	@	—
Muskm'l's ₱ 100	5 00	@10	00
Pomegran's ₱ 100	6 00	@ 7	00
Figs	—	@	—
Grapes, Black 1	00	@1	50
do Muscat	—	@1	00
do Malvo'se	—	@	—
do Sweetw'r	—	@	75
do Mission	75	@	1 00
do Rose of Peru	—	@	1 50
do Tokay	1 00	@	1 50
do Morocco	1 50	@2	00
do St. Peter	—	@	—
DRIED FRUIT.			
Apples, ₱ lb	7	@	8½
Pears, ₱ lb	10	@	11
Peaches, ₱ lb	8	@	10
Apricots, ₱ lb	10	@	12½
Plums, ₱ lb	8	@	10
Pitted, oo ₱ lb	—	@	—
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	5½	@	12½
Black Figs, ₱ lb	5	@	—
White, do	10	@	15
Prunes	6	@	8
do German	14	@	—
Citron	@27½		32½
Zante Currants	8	@	—
Dates	12½	@	—
VEGETABLES.			
Asparagus	—	@	—
Beets	—	@	1
Cabbage, ₱ 100 lbs	50	@	75
Carrots, ₱ 100 lbs	60	@$7½	
Cauliflower, doz	—	@	—
Celery, doz	—	@	—
Garlic, ₱ lb	10	@	12½
Green Peas	2½	@	3
Green Corn ₱ doz	20	@	22
Sum'rSquash, box	—	@1	25
Marro'lat Sq'sh, tn	8 00	@10	00
Artichokes, ₱ doz	40	@	75
String Beans, ₱ lb	1½	@	3
Lima Beans	5	@	—
Parsnips	12½	@	15
Shell Beans	7	@	10
Peppers, green ₱ lb	6	@	7
Okra ₱ lb	12½	@	15
Okra, Green	7	@	8
Cucumbers, box	50	@	—
Tomatoes, box	62½	@1	00
Egg Plant, box	1 25	@	—
Rhubarb	8	@	10
Lettuce	10	@	—

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ₱ lb	35		
do unpared, ₱ lb	32		
Peaches, do, ₱ lb	16		
do pared, ₱ lb	33½		
do do ₱ lb	30		
Bartlett Pears, pared, lb	45		
Pears, pared (sliced) lb	30		
Pears, 10-lb boxes, family use, extra	35		
Currants, stemmed, lb	30		
Royal Ann Cherries, pitted, ₱ lb	25		
Kentish Cherries, pitted, ₱ lb	55		
Apples, pared (ring) lb	12½		
do do (whole), ₱ lb	12½		
Apples, 10-lb boxes family use, extra	18		
Plums, pitted, ₱ lb	25		
do do ₱ lb	40		
Rhubarb, ₱ lb	35		
Corn, ₱ lb	32½		
Beans, ₱ lb	60		
Potatoes, ₱ lb	14		
Sweet Potatoes, ₱ lb	15		
Onions, ₱ lb	40		
Beet, ₱ lb	40		
Tomatoes, ₱ lb	75		
Squash, ₱ lb	20		

*In caddies. †In hulk.

LEATHER.

WEDNESDAY M., Nov. 18, 1874.

City Tanned Leather, ₱ lb	26@29
Santa Ornz Leather, ₱ lb	26@29
Country Leather, ₱ lb	24@28
Stockton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@ 72 00
Cornellian, 12 to 18 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	63 00@ 67 00
Cornellian Females, 14 to 16 Kil	71 00@ 76 50
Simon Ulmo Females, 12 to 13, Kil	80 00@ 63 00
Simon Ulmo Females, 14 to 15, Kil	70 00@ 72 00
Simon Ulmo Females, 16 to 17, Kil	73 00@ 75 00
Simon, 18 Kil., ₱ doz	61 00@ 63 00
Simon, 20 Kil. ₱ doz	65 00@ 67 00
Simon, 24 Kil. ₱ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kips, ₱ lb	1 00@ 1 15
California Kip, ₱ doz	40 00@ 60 00
French Sheep, all colors, ₱ doz	8 00@ 15 00
Eastern Calf for Backs, ₱ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ₱ doz	9 00@ 13 00
Sheep Roans for Linings, ₱ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ₱ pair	5 00@ 5 25
Good French Calf Boot Legs, ₱ pair	4 00@ 4 75
French Calf Boot Legs, ₱ pair	4 00@ —
Harness Leather, ₱ lb	30@ 37½
Fair Bridle Leather, ₱ doz	48 00@ 72 00
Skirting Leather, ₱ lb	33@ 37½
Welt Leather, ₱ doz	20 00@ 50 00
Buff Leather, ₱ foot	17@ 23
Wax Side Leather, ₱ foot	17@ 3
Eastern Wax Leather	—@— —

GENERAL MERCHANDISE.

WEDNESDAY M., Nov. 18, 1874.

BAGS.			
Eng. Stand Wht	—	@12	
Detrick's Machine Sewed, 22x36 E	12	—@12½	
do 22x36, do E W	—	@13½	
do 20x40, do A	—	@13½	
Flour Sacks ½s	9½	—@11½	
" " ¼s	6	—@ 7	
Stand. Gunnies, double seam	15	@15½	
single seam	13¾	@14	
" Wool Sacks	60	@67½	
Barley Bags 24x36	—	@14	
do 23x40	—	@14½	
do 24x40	—	@15	
do 28x36	—	@16	
Oat Bags, 24x40	16	@16½	
do 28x36	—	@17	
Hessian 40-in. gds	9½	@ 9¾	
do 45	10½	@11	
do 60	—	@15	
CANNED GOODS.			
Asst'd Pie Fruits in 2½ ₱ cans	2 50	@ 2 75	
do Table do	3 50	@ 4 00	
Jams & Jellies	3 75	@ 4 00	
Pickles ½ gl	—	@ 3 50	
Sardines, qr box	1 80	@—	—
do hf boxes	3 20	@—	—
COAL—Jobbing.			
Australian, ₱ ton	10 50	@12	50
Coos Bay	—	@10	00
Bellingham Bay	—	@ 8	50
Seattle	—	@11	—
Cumberl'd, cks	—	@18	00
do bulk	16 00	@17	50
Mt. Diablo	6 25	@8	50
Lehigh	—	@17	00
Liverpool	10 50	@11	50
West Hartley	—	@14	00
Scotch	1	@11	00
Scranton	—	@13	50
Vancouver's Isl	11 00	@11	50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Americ'n	20	@	21
Costa Rica per ₱	23	@	23½
Guatemala	21	@	22
Java	—	@	27
Manilla	19	@	20
Ground in os	—	@	27
Chicory	9	@	10
FISH.			
Pac. Dry Cod, new	5	@	—
cases	—	@	—
do boneless	11	@	12
Eastern Cod	—	@	—
Salmon in bbls	9 00	@9	25
do ½ bbls	4 50	@4	75
do 2½ ₱ cans	—	@3	00
do 2 ₱ cans	2 65	@2	75
do 1 ₱ cans	1 75	@	—
Do Col. R. ½ ₱	—	@	—
Pick. Cod, bbls.	22 00	@	—
do ½ bbls	12 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bbls	8 00	@8	50
" Extra	—	@9	00
" in kits	2 00	@2	50
" Ex mess.	3 00	@3	50
" Ex mess. ½ bbs	—	@12	00
Sm'k Herr'g, hx	50	@	60
NAILS.			
Assorted size, lb	5 37½	@7	50
OILS.			
Pacific Gine Co. Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No. 1	—	@1	75
do do No. 2	—	@1	60
Cocoanut	60	@	65
Olive Plagniol	5 00	@	—
do Possei	4 75	@	—
Palm ₱	9	@	—
Linseed, raw	—	@1	05
do boiled	—	@1	10
China nut in cs	77½	@	80
Sperm, crude	—	@1	90
do bleached	—	@2	25
Coast Whales	60	@	—
Polar, refined	50	@	55
Lard	1 15	@1	30
Coal, refined Pet	37½	@	—
Oleophine	21	@	24
Devoe's Brii't	25	@	28
Long Island	21	@	24
Eureka	—	@	—
Devoe's Petro'm	21	@	24
Barrel kcrosene	21	@	24
Olive	4 20	@9	25
Downer Kerose'e	—	@	37
Gas Light Oil	—	@	26
PAINTS.			
Atlan. W. Lead.	6	@	10
Whiting	—	@	2
Putty	4	@	5¾
Chalk	—	@	2½
Paris White	2¾	@	—
Oobre	2	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@2	10
RICE.			
China No. 1, ₱ lb	6½	@	6¾
do 2, do	5¾	@	6
Japan	—	@	7
Siam Cleaned	7	@	—
Patna	8	@	6½
Hawaiian	7¼	@	8
Carolina	10	@	10½
SALT.			
Cal. Bay, per ton	10 00	@14	00
do Common	5 00	@ 7	00
Carmen Island	11 00	@13	00
Liverpool fine	—	@22	00
do coarse	16 00	@—	—
SOAP.			
Oastile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Cloves	45	@	50
Cassia	26	@	27
Citron	—	@	30
Nutmeg	1 20	@1	25
Whole Pepper	18	@	19
Pimento	—	@	15½
Gr'nd Allsp'rdz	—	@1	12½
do Cassia do	—	@1	50
do Cloves do	—	@1	50
do Mustard do	—	@1	20
do Ginger do	—	@1	00
do Pepper do	—	@1	00
do Mace do	—	@2	00
SUGAR, ETC.			
Cal. Cube per lb	11	@	—
Partz' Pro. Cube bbl or 100 lb bxs	—	@	11¼
do in 50 lb bxs	—	@	11½
do in 25 lb bxs	—	@	11¾
Circle A crushed	—	@	10½
Powdered	—	@	11¾
Granulated	—	@	11
Dry granulated	—	@	11
Hawaiian	8	@	10½
California Beet	10¾	@	11
Golden C	—	@	—
do Key'g grade	—	@	60½
Cal. Syrup in bls	—	@	67½
do in ½ bls	—	@	70½
do in kegs	—	@	75
Hawaiian Molasses	25	@	30
TEA.			
Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@1	00
Gunpo'der, Cant.	30	@	42½
do Pingsuey	50	@	90
do Moynne	65	@1	25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, lacquered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½ & 1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	60
Dark do	50	@	55
Dwa f Twist	70	@	72½
12 inch do	60	@	70
Light Pressed	70	@	80
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Ohio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine cut chewing, buc'ts	75	@	90
Banner fine cut	9 00	@9	25
Eureka Cala	—	@9	00
TURPENTINE.			
Eastern	55	@	70

METALS.

WEDNESDAY M., Nov. 18, 1874.

American Pig Iron, ₱ ton	—	@	46 00
Scotch Pig Iron, ₱ ton	42 00	@	46 00
White Pig, ₱ ton	—	@	46 00
Oregon Pig, ₱ ton	—	@	46 00
Refined Bar, bad assortment, ₱ lb	—	@	3¾
Refined Bar, good assortment, ₱ lb	—	@	4
Boiler, No. 1 to 4	—	@	5¼
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5¾
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	— 08	@	— 09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	— 9½	@	—
Norway Iron	— 8	@	—
Rolled Iron	— 6	@	—
Other irons for Blacksmiths, Miners, etc.	—	@	— 4½
COPPER.—			
Brazier's	— 31	@	— 32
Copper Tin'd	— 45	@	—
O. Nail's Pat	— 50	@	—
Sheathing, ₱ lb	—	@	— 24
Sheathing, Yellow	—	@	— 25
Sheathing, Old Yellow	—	@	— 12½
Composition Nails	— 24	@	—
Composition Bolts	— 24	@	—
TIN PLATES.—			
Plates, Charcoal, 1X ₱ box	13 00	@	15 00
Plates, 1 C Charcoal	13 00	@	14 50
Roofing Plates	12 50	@	15 00
Banca Tin, Slabs, ₱ lb	— 32½	@	— 33
STEEL.—English Cast, ₱ lb	— 20	@	— 25
Anderson & Woods' American Cast	— 16	@	— 17
Drill	— 18	@	— 22
Flat Bar	— 18	@	— 22
Plough Points	— 16	@	— 17
ZINC—	—	@	— 11
Zinc, Sheet	—	@	— 11½
NAILS—Assorted sizes	5 25	@	8 00
QUICKSILVER, per lb	—	@	1 55
LEAD.—			
Pig, ₱ lb	— 5¾	@	— 6
Bar	— 6½	@	— 7
Sheet	—	@	— 9
Pipe	—	@	— 8½

LUMBER.

WEDNESDAY M., Nov. 18, 1874.

CARGO PRICES OF PUGET SOUND PINE REDWOOD.

Rough, ₱ M	$16 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustio, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref. M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

Retail Price.

Rough, ₱ M	20 00
Fencing and Stepping, M	37 50
Fencing, 2d quality, ₱ M	30 00
Fencing, ₱ lineal foot	1o
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	25 00
Latbs, ₱ M	3 25
Furring, ₱ lineal ft	¾

REDWOOD—Retail.

Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	25 00
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustio, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 75

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Nov. 18, 1874.

POULTRY, GAME.			
Spring Chickens	50	@	75
Hens	75	@1	00
Eggs	45	@	50
do Ducks'	45	@	50
do Farallones	30	@	35
Turkeys, ₱ lb	—	@	25
Ducks, large, pr	75	@1	00
do small, pr	37½	@	50
Tame, do	1 50	@2	00
Teal, ea	25	@	—
Geese, wild, pair	75	@1	00
Tame, ₱ pair	3 00	@4	00
Snipe, ₱ doz	1 00	@1	25
do English	—	@3	00
Quail, per dozen	2 00	@2	—
Prairie Ch'k's, ea	—	@	—
Pigeons, per pr	50	@	75
Wild, doz	—	@2	00
Squabs, doz	—	@3	50
Hares, each	37½	@	50
Rabbits, tame, ea	50	@	75
Wild, do, ₱ dz	2 00	@	—
Squirrels ea	15	@	20

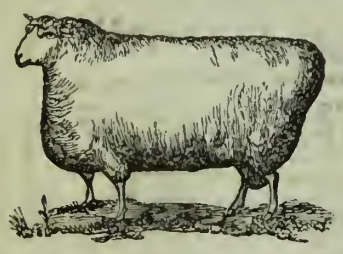
Live Stock Notices.



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,
13v7-eow-tf Watsonville, Cal.

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



OWENS & MOORE,
COMMISSION MERCHANTS,
DEALERS IN
WOOL, HIDES, PELTS AND GRAIN.
Office—405 Front street, S. F. 14v7-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,


S. E. Cor. 5th & Bryant Sts.,
SAN FRANCISCO.


Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.
P. S.—*Special rates to members of the Grange.*

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,
San Rafael, Marin Co., Cal.,
Breeder of Jerseys and Alderneys. 7v8-3m

POISON! POISON!
WAKELEE'S PATENTED
Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is SURE DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz:

SANTA CLARA, April 20th, 1874.
H. P. WAKELEE, ESQ :—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.
J. R. AROUELLO.

SAN LEANDRO, Cal., April 3d, 1874.
H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,
J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.
MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,
Cor. Montgomery and Bush streets, S. F.

ALFRED S. MOORE. W. L. THWING

ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.
7v8-3m

Nurseries and Seedsmen.

1874. GUIDE AND CATALOGUE 1875 FREE.

To persons contemplating purchasing I will send my ILLUSTRATED, DESCRIPTIVE CATALOGUE and GUIDE to the VEGETABLE and FLOWER GARDEN WITHOUT CHARGE. It contains the most extensive and valuable list of



Flowering Bulbs, Roots and Plants, Semi-Tropical Trees, Ornamental Shrubs, Fruit and Shade Trees, etc., ever offered in this market. It tells how to successfully grow the Australian Blue Gum, the Monterey Cypress, Pine, etc., and the proper method of Cultivating Tobacco on this Coast.

☞ My stock of Seeds is in part my own raising and in part direct importations from the best European and Eastern growers, and is unsurpassed in all respects by that offered by any other establishment.

100,000 Australian Blue Gums and Monterey Cypress in boxes at from $30 to $50 per 1,000, raised at my own Nursery at San Rafael.

R. J. TRUMBULL,
Grower, Importer, Wholesale and Retail Dealer in Shrubs, Trees, etc.
20v8-6m 427 Sansome street, S. F.

SHINN'S NURSERIES,

NILES' JUNCTION,

Alameda County, - - California.

The attention of persons intending to set out Trees is requested to the well grown and large variety offered for sale by the undersigned at the above Nurseries. An examination of our stock will satisfy any one of the quality, being all that can be asked, and when the low prices we have fixed are taken into consideration, we believe we are offering the very best inducements for buyers to deal with us. For full particulars we refer to our circular for the approaching season, which will be sent, as requested, on application to either of the undersigned.

SHINN & CO.,
Proprietors.

Address James Shinn, Niles, Alameda County, Cal., or, Dr. J. W. Clark, 418 California street. San Francisco, Cal. 8v17-4mo.



Published Quarterly.—JANUARY NUMBER just issued, and contains over 100 PAGES, 500 ENGRAVINGS, descriptions of more than 500 of our best Flowers and Vegetables, with Directions for Culture, COLORED PLATE, etc.—The most useful and elegant work of the kind in the world.—Only 25 cents for the year. Published in English and German.
Address, JAMES VICK, Rochester, N. Y.
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SUPERIOR FRUIT TREES
TRUE TO NAME.

A fine collection of Evergreen and Deciduous Trees. Australian Gum Trees in variety, by the hundred or thousand. Monterey Cypress in quantities and sizes to suit all. Orange and Lemon Trees at reduced prices. A general variety of Nursery stock.

Also, Rhubarb and Asparagus roots.

T. CORLEY,
18v29-tf 315 Washington Street, S. F.

PEPPER'S NURSERIES.
(Established in 1858.) PETALUMA, CAL.

Green Houses and Tree Depot corner Washington and Liberty streets.

4 Green Houses. 3,000 feet of Glass. Fruit Trees a Specialty.

We offer for sale at lowest market rates a general assortment of Fruit and Shade trees, small Fruits, Vines, etc. Evergreen trees and Shrubs in great variety. Green House, Conservatory and Bedding Plants, Roses, etc.

We are now ready, Nov. 1st, to fill orders for trees and plants. Catalogue and price list furnished on application.

Address, W. H. & G. B. PEPPER,
19v8-tf Petaluma, Sonoma Co., Cal.

FREE to all applicants—my Nursery and Bulb Catalogues. F. K. PHŒNIX, Bloomington, Ill.
8v17-1m

Grange Notices.

The Sewing Machine
—FOR THE—
GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

California Farmers' Mutual Fire Insurance Association.

Office, 320 California Street, - - - San Francisco.

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This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

Commission Merchants.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce
—AND—
COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,
EGGS,
POULTRY,
LARD,
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BACON,
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PELTS,
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H. K. CUMMINGS. 1858. — H. H. RALSTON, 1873.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have no interests that will conflict with those of the producer.
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Davis & Sutton, Commission Merchants,

For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; O. W. Reed, Sacramento, Cal.; A Lusk & Co., Pacific Fruit Market, San Francisco, Cal.
3v2-1y

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.
PIEROE & CO., 627 Sacramento St., bet. Montgomery and Kearny Sts., S F
4v17-3m

THE HORSE.

Care of Team Horses.

The Massachusetts Society for the Prevention of Cruelty to Animals presents the following concise rules for the care of horses which will commend themselves to every horseman:

Potatoes or carrots may be given once or twice a week to good advantage.

See that your horse is kept clean, warm and comfortable, with plenty of bedding.

A piece of rock salt should always be left in his manger.

See that the harness is kept soft and clean, particularly the inside of the collar, which ought always to be smooth, as the perspiration when dry causes irritation, and is liable to produce galls on the shoulder.

The collar should fit closely with space enough at the bottom to admit a man's hand. If too large it has the bad effect of drawing the shoulders together.

On no consideration should a team or work horse be compelled to wear a martingale, as it draws the head down and prevents the animal from getting into an easy and natural position.

The check rein may be used, but only tight enough to keep the head in a natural position, and it should never be wound around the hames.

See that the hames are buckled tight enough at the top to bring the draft iron near the center of the collar. If too low it not only interferes with the action of the shoulder, but gives the collar an uneven bearing.

Caution should be taken that the girth is not buckled too tight. Particularly on string teams, for when the traces are straightened, it has the tendency to draw the girth against the belly and distress the horse.

See that the horse is well shod, with a good stiff shoe, always calked at toe and heel on hind feet, as it is there where all the propelling power comes from when heavily loaded.

Keep the feet good and strong, by not allowing them to be cut away too much by the blacksmith.

The best of judgment should be used in loading, taking into consideration the condition of the street, and the distance to be traveled.

Never overload, for by so doing you distress, strain, and discourage your horse, and do him more injury than you can possibly gain by carrying the extra load.

When your load is hard to pull stop often and give your team a chance to breathe.

No good driver will ever resort to the cruel practice of whipping or beating his horse. A light whip may be carried, but there is seldom use for it. Much more can be accomplished by kind treatment and good judgment.

Remember the horse is a very intelligent, proud, sensitive, noble animal, the most useful known to man, and is deserving of the greatest kindness.

Founder.

The term, founder, from the foundering, stumbling gait it produces, has been applied to diseases totally opposite, as inflammation of the laminæ of the feet. It is true that a distinction was intended by the term chest founder for the one, and foot founder for the other, but the terms are often found confused one with the other. The absorbtion or diminution of the muscles of the chest, and which used to be called chest founder, is neither more nor less than diseases in the feet (the navicular, in fact) and which, existing in both fore feet, prevents the forelegs being properly exercised, and consequently, the muscles, from being partially thrown out of use, become to a certain extent absorbed.

With such authority, it must be taken for granted that no such disease as chest founder exists, and we must look to the feet for the source of trouble. Besides, by the operation of neurotomy, which means to sever the nerve, with the view of removing pain through the destruction of feeling, a horse having stood stretched out for a long time, will, after the nerve is cut, bring his legs completely and naturally under him.

Contraction, again, may be produced by long continued standing upon hard, dry, plank floors. Trush may so injure the foot as to cause contraction; too great and constant paring away the bars of the feet may destroy their resistance to the approach of the heels. So the cutting of the frog may destroy the function of that organ as an elastic spring to keep the heels open. The horse indicates the amount of pain he suffers by the short, quick step in traveling, and the gentle manner in placing his feet upon the ground. When not in motion, he rests his feet forward, and constantly changes them, and is oftener found lying down in the stable during the day than horses not affected. Contraction is quite frequently seen in more highly bred horses with a foot naturally high and narrow, but many less aristocratic have it.—*Mirror and Farmer.*

LONG VS. SHORT TAILS.—In an Irish paper was an advertisement for horses to stand at livery on the following terms: "Long-tailed horses at three shillings six pence per week; short-tailed horses at three shillings per week." On inquiry into the cause of the difference it was answered that the horses with long tails could brush the flies off their backs while eating, whereas the short-tailed horses were obliged to take their heads from the manger.

Poultry Yard.

Roup and Canker.

Under this heading we find a communication from Col. Manuel Eyre, Jr., in a recent number of the *Fanciers' Journal*, in which he gives the result of some experiments with chickens affected by these diseases. After detailing the causes which led to the illness of his fowls and sundry experiments for their relief or restoration, Col. Eyre says:

Cancer or ulceration I found was easily produced by filth. I placed cut straw in a pen, and after it had been trampled under foot for several days, and became dirty, with more or less excrement among it, I fed the fowls with soft food thrown on the straw. I soon had several cases of severe canker. All were easily cured by touching the ulcers with Labbaraque's solution. I also found alum-water very beneficial for both canker and roup, and I would now give two or three tablespoonsful every time I doctored a fowl. Dampness or drafts in the roosting-house, or the same cause which would produce cold or catarrh in any animal, should be looked for when fowls are attacked with roup. Roup is but a protracted or aggravated cold.

To ascertain whether the disease was contagious, I dropped a small portion of the mucus from a diseased fowl into the water and gave this to two healthy ones to drink. As long as I used the discharge from the nostrils of those simply affected with cold it produced no apparent effect, but a very little of the cheesy matter from the mouth of one affected with roup diseased them in a few days.

Stagnant and foul water is the worst enemy of all, and I have found it to repay me well to cover the water from the rays of the sun; and, where running water was not accessible, to provide it clean and fresh at least twice a day. —*Pigeon and Poultry Book.*

Poultry Notes.

At one of the meetings of the New York State Poultry Society, a prominent breeder gave directions for choosing breeds, from which we select in substance the following. It is proper to state, however, that in many points he differs from other leading poultry men:

As mothers the large, heavy Asiatic breeds, such as the Brahmas, Cochins, etc., are distinguished for their motherly qualities.

The Polish, the Hamburgs and the Leghorns will lay the greatest number of eggs in a year, and the Hamburgs more than either of the others, but their eggs are lighter.

The Houdans, Crevecœurs and the Spanish lay the largest eggs, perhaps—about seven to the pound.

The Crevecœurs, La Fleche, Houdans and Dorkings are regarded as among the best for the table. Much difference of opinion exists on this point, as tastes differ materially. The Dorkings have more breast meat proportionally than any other breed, and the Crevecœurs are most juicy and delicious.

For ornament the Golden Spangled Polish, the Silver Spangled Hamburgs, the Spanish and the Games will perhaps adorn your grounds better than any others.

As fighters the Games stand prominent, and the Black Breasted Red Games are about as good as any of the numerous variety.

The Brahmas are, perhaps, the hardiest breed, the Houdans and Hamburgs next. The two former are also first as domestic birds, staying contentedly in close quarters for any length of time.

The Brahmas, Cochins, Crevecœurs and Dorkings are largest, and the Bantams and Silkies smallest. For the best average combination of qualities the Brahmas and Houdans are recommended by many good judges.

How to Feed for Winter Eggs.—The editor of the Germantown *Telegraph* says that those not fully familiar with all the requirements of the hennery, should remember that if they desire a liberal crop of eggs in the winter fowls must be fed with raw meat, chopped fine, not less than twice a week. They should also have a constant supply of gravel, also old mortar, lime and ground bones. They should be kept warm, the house should have a southern exposure, if possible, with window lights to shift when necessary. No one who cares about the appearance of his lawns, or the cleanliness of his yards, doorsteps, etc., should allow his fowls to wander about. A chicken yard, as well as a chicken house, is indispensable. As a desert, a feed of crushed bones or bone dust should not be overlooked. On it mainly depends the success of the hennery in winter.

Instantaneous Extinguishment of Street Lamps.—The simultaneous lighting and extinguishment of street lamps is now effected by a very simple contrivance of some Belgian engineers. This is accomplished by affixing to the lamps an apparatus which is affected by the increased pressure of the gas at the gasometer, which is usually applied at the hour of lighting, and when in the morning the pressure is diminished at the main the gas can be either totally extinguished or let down to a mere thread. The lamp lighter of to-day may not be grateful to science for the disclosures; but it will be no less acceptable to the general public, for the effect of illuminating the streets and squares of a large city in an instant, without the apparent agency of man, would be magical indeed.

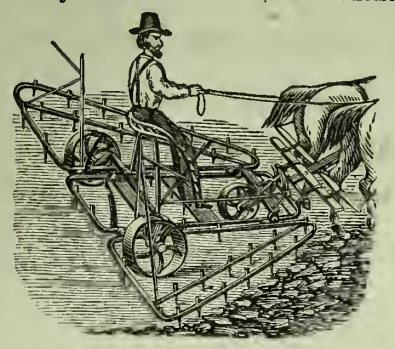
Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

First—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

Second—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

Third—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

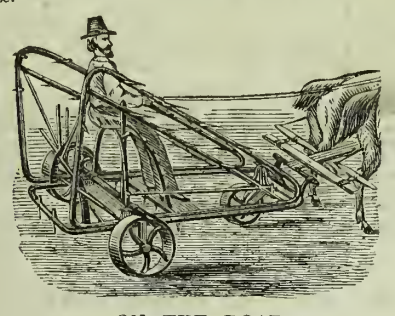
Fourth—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

Fifth—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

THE TREADWELL SULKY



GANG PLOW.

Improved for 1874, with BLACK HAWK Plow Bottoms, is the best **GANG PLOW** in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50; old style, $25. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

18v27-tf San Francisco.

THE

CELEBRATED MITCHELL WAGON



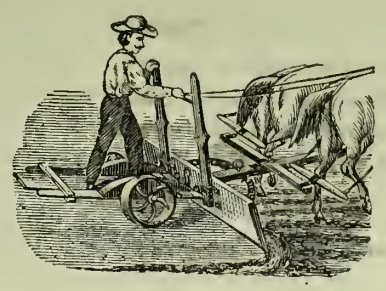
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THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

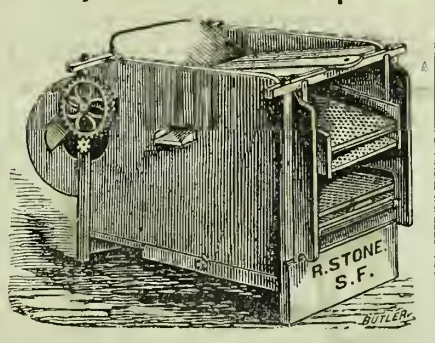
The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

THE PATENT
Novelty Mill and Grain Separator



Is one of the greatest improvements of the age for cleaning and separating grain, while it combines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

For further information, apply to

R. STONE,

10v8-eow-3m 422 Battery street, S. F.

C. OREGO. S. O. BOWLEY.

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,

No. 9 Merchants' Exchange, California street,

24v5-3m San Francisco.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

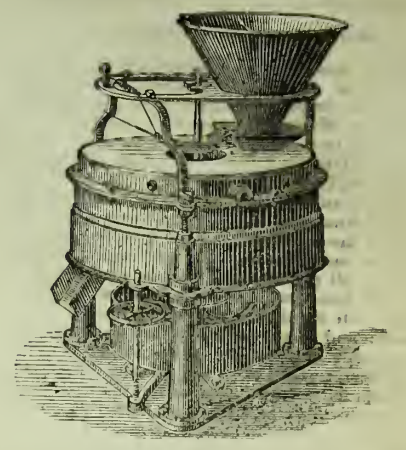
This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON, Stockton, Cal.

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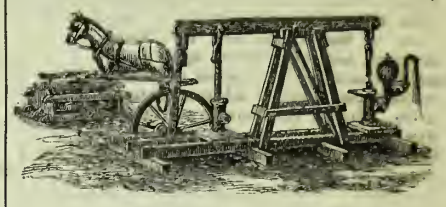
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When the invention consists of a new article of manufacture, a medicine, or a new composition, samples of the separated ingredients, sufficient to make the experiment (unless they are of a common and well-known character), and also of the manufactured article itself, must be furnished, with full description of the entire preparation.

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A note obtained by frand, or even from one intoxicated, can not he collected.
If a note he stolen it does not release the maker—he must pay it.
An indorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment.
A note hy a minor is void.
Notes bear interest only when so stated.
Principals are responsible for their agents.
Each individual in partnership is responsible for the whole amount of the debts of the firm.
Ignorance of the law excuses no one.
It is a fraud to conceal a fraud.
The law compels no one to do impossibilities.
An agreement without consideration is void.
Signatures in lead pencil are good in law.
A receipt for money is not legally conclusive.
The acts of one partner bind all the others.
Contracts made on Sunday can not be enforced.
A contract made with a minor is void

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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, NOVEMBER 28, 1874. [Number 22

Too Much Aggregating.

The phenomenon of California's wheat crop of the present year may possibly furnish employment for pencils that migbt otherwise be less harmlessly employed. Those who have produced estimates of the number of cars or ships required to transport this grain, and the length of this imaginary railroad train or grain fleet when in motion, might, it is true, have been less mischievously occupied, and it is possible that the genius of California, a creation about as imaginary as the aforesaid train and fleet, may be delighted with the spectacle; but it affords, we opine, very little satisfaction to the producers and holders of this grain. Their principal delight would probably be in having the last car or vessel disappear in the distance. The "Golden Grain" is a fine subject for school compositions; but when it does not represent a compensating amuont of real gold, it arouses a very limited amount of enthusiasm in the producer.

The same mistake of aggregating too much and individualizing too little, is committed iu estimating the mineral, mechanical or commercial wealth of our country; but the character of our paper does not warrant us in going outside the agricultural world in treating of the matter. There is sufficient here to occupy our attention.

We are confident that every experienced practical farmer will indorse our position when we declare that there is no legitimate department of trade or industry that presents a more superficial, or even artificial view to the world at large than American agriculture, from the oldest farming districts of the East to the newest portions of the Western country. The well paid and easy-going officials in the departments at Washington send forth their expensive monthly, quarterly, or annual reports, displaying to a gaping world the aggregated agricultural wealth of the different states; while the individual farmer, whose product form the basis of the tables of computed wealth, finds it extremely difficult to scrape together an amount of cash sufficient to pay the taxes that are expended in getting up these reports, and in other ways proving to the world that we are a prosperous and happy people.

The press generally is as blind a guide in this matter as the Government itself. If newspapers could put money in the purse of the farmer by means of their aggregating tables, they would undoubtedly do so; but, unfortunately, this is one thing that "the lever of the world" can not do. The press is ever ready to "write things up," but somehow those very things will still continue in the mire. It is extravagantly liberal with its ciphers, manifesting a perfect willingness to call its millions instead of thousands; but ciphers will not pay the farmer's taxes or get his horses shod. These efforts may inspire general confidence, and they may induce emigration; but we have our suspicions that the people understand the press better than the press understands the people. If it is a blind guide it has not blind followers.

As a nation, we have not yet ascertained our true position, or what is required of us. It will not do for us to devote all our energies, for ages and ages, to building pyramids or temples, as laudmarks for the student of coming times; let us, instead, levee our tule lands, and erect innumerable cottages for our unhistorical, every-day people to occupy. We can not afford to devote much time to anything that will merely make work for future historians. Let us "right about face" and go for individual prosperity and happiness. Not, however, according to the crude notion expressed in the old saying, "every man for himself and the Chinaman take the hindmost." We believe that the American people are in a condition to embark in such individual purposes as will result in general good; and that it would be the grand turning point in the social world if each individual member thereof could be induced to accept his full share of its responsibilities, instead of thrusting them upon religious, educational, political, and social organizations and orders.

If we can achieve individual prosperity, then public prosperity is secured; and each family, in working out its own enduring social salvation, will do far more in saving the community at large than by embarking in any organized reformation. Let us, as far as possible, escape individual woe, and the public want will require no looking after. It may be charged against this system that it is founded on selfishness, and the charge is freely admitted; but it is a conscientious, considerate selfishness, which knows that permanent prosperity and happiness is not to be obtained at the sacrifice of the prosperity and happiness of others.

If we would cease to bother our heads about the "wealth of nations," and the Smiths, Jones and Browns who constitute these nations would employ their philosophical resources in ascertaining their own financial condition and business relations, it would improve their own bank accounts, and thereby add to the real "wealth of the nation." It is the simplest thing imaginable. We have only to apply the old maxim, "take care of the pence and the pounds will take care of themselves." It is not the duty of the farmer to grow anything for the good of the country, for the glory of California, or to show outsiders what we can do; the simple question—will it pay? judiciously and conscienciously considered, is as lofty a view of the matter as patriotism or philanthrophy demand.

Tourists and casual visitors know nothing in reality of the social condition of a community; and political economists generally ride through the country on political hobbies. What do they know about mortgages and store bills? There is an old story of a trader who assured a customer that he was really losing money on the goods he was selling; when the purchaser wonderingly enquired how on earth the merchant could live by such a trade? "Oh!" replied he, "it is by selling such large quantities." It is so with the farmer; only the aggregating statistician answers for the farmer, and congratulates the country on the fact, as proven in his tables, that although every bushel of California wheat costs more than we get for it, yet we produce enough to load 600 ships, of 1,000 tons burden each; and if these ships should sail in a line within sight of each other, they would extend around one-half the circumference of the globe. How grand!



A NEW SEEDLING.

Oakland Library.—This library has recently moved into new quarters, near the City Hall, Oakland. The library now contains about 4,000 volumes. On Friday night last there was a social meeting of the intelligent citizens of Oakland, on the occasion of the opening of the new quarters. The library is now in a prosperous condition.

A New Seedling.

The frontispiece of our paper to-day represents a new acquisition to the list of California fruits. The engraving was executed by our own artist, from a drawing in water colors by Miss H. Millard, of San José. The drawing is a beautifully executed work, and it is extremely gratifying to know that the artistic talent of California is entering the field, in company with science and labor, to aid in developing and making known to the world the glories of our fruit resources. Miss Millard is at present engaged in visiting different sections of the State, painting many varieties of California grown grapes, preparatory to the publication of an illustrated volume for the Wine and Brandy Growers' Association of California.

We are also indebted to Miss Millard for the following description of the peach herewith illustrated:

A new seedling has been grown in the orchard of Mr. William Cantilbu, of Pleasant valley; a peach possessing so many excellent qualities that it merits an introduction to the notice of fruit growers. The need of a white peach which will ripen about the same time as the early Crawford has long been felt. This new peach appears to possess qualities which will supply this need. Fruit almost globous a trifle longer in the direction of the seam. The largest specimens eight and one-half inches in circumference in the longest direction. Seam well marked, running half way round; color of the skin, a light golden yellow, with a cheek in which are blended roseate scarlet and purple hues. Altogether it is very beautiful in appearance, as well as delightful to the taste, for it has a delicate, fine flavor. The pit is a freestone, small for so large a peach. The flesh next to the stone is tinted with roseate rays or stripes. Except this stain, the color is nearly white. The skin cleaves but slightly to the flesh, and is easily removed without the necessity of peeling.

The leaves are lanceolate, generally smooth; occasionally one is ruffled, like other peach leaves; color, a bright golden green. The larger leaves measure six inches in length, and are an inch and three-quarters in width at the widest. Near the center of the tree, where less exposed to the sun, the leaves seem glandless, but, on the outmost twigs the leaves have glands, which seem to be orate. The young shoots are crimson red on the side exposed to the sun, yellow green on the other side. Petiole stained with crimson until it becomes the medirin of the leaf, when it is greenish white like other medirins. Altogether this is an excellent peach, worthy to be a favorite in the market, which it no doubt soon will be.

Change Your Seed.—From conversation with well informed farmers, we are satisfied that many wheat growers are "penny wise and pound foolish" for not purchasing improved seed for their ranches. Considerable pains should be taken to secure that best adapted to each locality. If you are not fully advised, buy a small quantity of various kinds this year. Experiment with them. Next year you will know something about which kind to sow most largely. But don't stop experimenting on one season. Sow the several kinds at different periods and under varying circumstances. Our word for it, you will not regret your labor. If parties having improved grain seed would advertise the same in the Rural, we believe it would benefit both advertisers and readers, besides helping support one of the best agricultural papers on the continent.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Home Hunting.

EDITORS PRESS:—With wagon canvassed over, family on board, and cow in the rear, we set out southward as in the days of '49. September 24th we crossed the straits at Benicia. Contra Costa is, in many respects rather inviting, though there are too many non-resident land owners. Among the tenants there is a rather strong feeling of migration. Bone yards of last winter's mortality among cattle are everywhere to be seen. We halted at Oakland, went over to visit the Mechanics' Institute and were doubly paid for the money invested. Then on to the city of artesian wells and gardens—San Jose. Everywhere is to be seen the mark of thrift and prosperity. New buildings in the process of construction, the streets throng with vehicles of every model, but most prominent is the farmer's wagon. All show unmistakable evidence of prosperity.

Gilroy.

Too many tenants—land owned by non-residents in the main, and times are rather tight among the tenants. The Gilroy tobacco lands show the most productive soil yet seen on the tramp. Tobacco culture seems to be an abundant success. North of east, forty miles, through Pacheco Pass, squirrels are the main product of a very productive country. Excellent grade through the pass.

Los Banos.

Good soil. Many farmers are selling out, others are abandoning their places. Here we found an old friend from Sonoma. He had better crops than many of his neighbors; his yield twenty-three sacks per acre. What the great canal will do yet remains to be seen. Your correspondent was not willing to try it. Passed ninety miles along the canal. The soil is from excellent to a barren desert.

Merced Slough.

Fair grazing near the slough, but there are miles of alkali and sand, with an alkali weed of a foul stench, and water that my mules could not drink. We saw here a large band of antelope. Kingston is settling up rapidly. There are marks of mighty overflows here. Cotton is nothing extra. Corn is extra. Spent ten days east of Tulare lake. There is some vacant railroad land here yet. Land smuggling is very prominent. Irrigation is a great success in Muscle Slough township. Visalia has beautiful land, but chills and fever prevail.

On to Bakersfield.

Much was told your correspondent of the vast region between Visalia and Bakersfild. I did not explore, but would recommend this region to those looking for sheep ranges; but take along a well borer and appurtenances to get water at a great depth. Bakersfield is all that I was hunting in the way of productiveness of soil; but I would as soon risk health in New Orleans or Galveston as on Kern Island. There, on Keru Island is the first place during my tramp that fever could be scented in the air, and especially in the steam of the water of the island when boiling. Your correspondent had too much experience in the ague regions of the Mississippi valley not to be able to remember the odor of the miasma producing fevers. Aside from the ague, Bakersfield has a fever peculiar to Kern river, in many respects similar to the Panama fever known to our pioneer emigrants.

One Hundred Miles On

Sand deserts, mountain passes, and winds from the Mojave desert that were terrible. Stage stations at every twelve or twenty miles; sheep, wherever a sheep could find anything to feed on. In fact, your correspondent often saw a large flock of sheep, when, from the appearance of the desert region it seemed strange how even a hare could find anything to subsist on. But here they were in fair condition; better really, than most flocks in the San Joaquin valley. Staging through this region, and the great number of freight teams, remind one of the good old days of '49.

Ho! this way, quicksilver hunters! Between Fort Tejon and Franciskito valley, the plain mark of a quicksiver lode crosses at the same old point of the compass, from northwest to southeast. However, as your correspondent has served his time quicksilver hunting, he is not disposed just now to try it again. But the footprints of quicksilver are there—plain.

More bye and bye, GEO. KAY MILLER.
Los Neitos, Nov. 13th, 1874.

[We wish our old, plain-spoken friend success in his homo-hunting, with permanent prosperity after he has found the desired spot. Wherever he may go, we hope he will not forget the RURAL PRESS; and we also hope that the residents of these localities of which the somewhat impatient pioneer speaks rather tartly, will make such allowances as the occasion calls for. It is characteristic of the emigrant, that while he is applying his whip to his mules, he should bestow an occasional cut on the country through which he is to pass.—EDS. PRESS.]

Letter from La Honda.

EDITORS PRESS:—As you have no regular correspondent from our part of the State, I will try to give you a few items.

The harvest has, with few exceptions, been rather below the average yield. On the coast, about Pescadero, the rust injured the late grain very much, and as the latter part of the winter was very wet, grain was put in later than usual. On the hills further back grain was better. On Woodham's ranch, the yield was very good. The land had been farmed for several years, and became foul with the small, bitter thistle, so common in some parts of California. The owner turned it into hay fields and night pasture for dairy cows for four or five years, and this year it was put to grain, and yielded an average of eighty bushels of oats to the acre, and other grain in proportion. The wheat was remarkably bright and clean, and sold for the highest market price, which is an unusual thing for coast wheat. The October rains caught a great deal of grain in the fields along the coast. It will be quite a loss to farmers, who were so unfortunate as to have grain out in the fields; but has proved a blessing to dairymen, and they will rejoice in an early and abundant pasturage, and proves the old saying true, "that it is an ill wind that blows nobody good." J. C. W.

La Honda, October 27th.

HORTICULTURE.

A Model Nursery.

EDITORS PRESS:—Aware of the growing interest manifested by the farmers of our State in the cultivation of fruits and the embelishment of their homes with beautiful flowers and shrubs. I have presumed that a few words at this time about our nurserymen; what they have, etc., would not be out of place. With the sole object of obtaining information on these particular topics for the enlightenment of the readers of the RURAL, I have taken the pains to visit and examine carefully one of our leading nurseries and shall pay the like respect to others as time and opportunities present themselves.

The nursery or nurseries of my first visit were those of Mr. John Rock, of this county, to whom the first premium was awarded by the Santa Clara Valley Agricultural Society, for the best nursery.

The soil, for the most part, is a rich, sandy loam. The water, which is supplied by five large artesian wells, is conducted to all parts of the nurseries through underground pipes, which keep it under complete control and always at command.

The different classes of trees and shrubs are systematically arranged in squares, each square containing from fifteen to twenty thousand trees, and surrounded with open roadways for the convenience of teams and wagons. The ground is nicely graded and remarkably free from weeds; complete order, without regard to expense prevailing throughout the whole.

The amount of ground devoted to the business is about fifty acres. The extraordinary growth attained by most of the trees seems almost incredible. I saw cherry trees one year old from the bud, which stood by actual measurement ten feet in hight, straight as an arrow and well proportioned. There is a square of apple trees two years old, (some twenty thousand) strong and well-branched, and neatly dressed; included in this lot are all the varieties of cultivation on this coast. Near this square bristles a twenty thousand square of one year olds, the growth of which appeared to me without parallel.

Fruit.

Pears, apples, cherries, peaches, plums, nectarines, apricots, almonds, and quinces in immense variety may be seen as one passes along

The pomegranate, English walnut and soft-leaved fig, grow side by side with the orange, lemon and lime, all arranged in straight and stately rows, vying with the vegetation of the tropics in the wonderful luxuriance of their growth.

I noticed also that Mr. Rock has made full and ample provisions to meet the demand that will arise the coming season for trees for roadside planting, among which can be seen fine specimens of ash, maple, elms, several beautiful varieties of each, among which is the sugar-maple which seems to thrive well in this climate. I saw fine trees of the beautiful golden weeping ash, also the upright golden, and other very curious varieties with richly variegated foliage. The elms are also various, including the cork bark which is, in my opinion one of the very best for the roadside, possessing a hardihood capable of enduring any amount of rough usage, forming a nice round head, stately and with deep and graceful foliage. It is destined to become a universal favorite for the purposes for which it is intended. Here you see the genuine "old tulip tree." Of locust, both yellow or black, and honey, Mr. Rock has an abundance. A very noticeable tree, lately introduced to this country, is the *Paulinia Imperialis*, a native of Japan. Its leaves are its most attractive feature, resembling those of the melon, many of them more than two feet in diameter. The tree will grow to a hight of ten feet in a single season from cuttings. The other varieties of shade trees are so numerous that any detailed description of them would occupy too much space; I shall therefore mention but a few of the most prominent.

French, American and weeping elms are very abundant here. Willows of all varieties, from the basket sort to the grand old Babylonia, or weeping willow. Among others the following are well represented: Ailanthus, beech, birch, linden; (European and American), mulberry, oak, five kinds of poplars, including the silver leaved variety. The maiden-hair tree, black California walnut and the white, pink and double red thorn. In the evergreen department, I note everything in profusion, from the pretty little dwarf box to the gigantic *sequoia gigantea*—or "big tree of Calaveras." The acacia, eucalyptus, cypress, juniper, spruce, pine, cedar, and magnolia families are also well represented.

The loquat, *merpilus japonica*, a beautiful evergreen tree, with large, attractive, glossy, green leaves, a rapid grower and perfectly hardy, is worthy of special mention.

Palms, Yuccas and Agraves.

I doubt if Mr. Rock's collection of palms can be equaled on this Coast, if on this continent. He has several thousand excellent trees in various stages of growth, from a few inches to several feet in hight, embracing twenty-five varieties, many of them very pretty, some superb. Many of these varieties are new to Californians, but seem to adapt themselves to our soil and our climate. This class of trees are becoming very popular of late, several sales having been effected in this valley recently, where the handsome price of $500 was paid for a single tree of one variety, of which I am informed the true name has not been fully determined, and several magnificent specimens may be seen growing to perfection in private gardens in this city. They are found chiefly in Mexico, where they are native.

Of yuccas, this gentleman has six varieties; a very attractive flowering plant, which should not be overlooked in making a selection. Of agaves, I noted ten varieties. The one variegated with gold and green is very pretty and showy.

The Flowering Shrubs

Of which there seems to be an almost endless variety, I shall not attempt to describe. They are among our most attractive floral production. The white and red flowering almond are delightfully beautiful in early spring. The flowering peach, and the Chinese double flowering apple should be given a place when we adorn our lands.

Olives, Oranges and Lemons.

Of this class of trees an assortment may be seen in this nursery that can scarcely be excelled. Mr. Rock has met with good success in grafting seedling orsngea with the best market varieties, and the appearance of his trees indicate an unusual thrift. Of oranges and lemons he has fifteen varieties. Anracaria—four varieties of which I saw in the green house—is a beautiful semi-tropical pine, in my opinion the very prettiest of all the pinea. Several of the varieties are very hardy.

The olive tree, of which this nursery has a fine showing, is begging to attract attention as an ornamental tree, as well as for future commercial value of its fruit The grape vine—of which Mr. Rock has all of the varieties, both foreign and American, worthy of culture on Coast—is a prominent feature of his nursery.

In the Green House

The collection of plants is fine. I note 50 varieties of ferns, the most noticeable of which are those with obony, wire-like stems, known as *adiantums*, the gold fern, birds-nest fern and tree fern. I also notice 25 varieties of palms; 25 varieties caladinums, 10 of echeveria, 12 of epiphyllum, (a species of flowering cactus), several fine varieties of camas, (a beautiful flowering plant with large glossy leaves) several beautiful varieties of orchids, and cerens in great variety. There are several fine India rubber trees, geraniums, heliotropes, carnations and fuchsias. One room is devoted to bulbs, wherein may be seen samples of hyacintha, tulips, tuberoses, crocuses, lillios, and everything else in the bulb line. The collection of dahlias here is especially fine. I have thus given a rough outline of what this one nursery contains. It may perhaps give you a better conception of its capacity when I tell you that the number of trees and plants of a marketable character in this single nursery is more than a million, and that it gives employment to from thirty to forty hands for five months in the year. A. KAMP.

San Jose, Nov. 16th, 1874.

SCREW VS. PADDLE.—During the past ten years the screw has entirely replaced the paddle in trans-Atlantic navigation, the weight of marine engines has diminished one-half, the steam pressure has quadrupled, and the consumption of coal has decreased two-thirds.

THE SWINE YARD.

The Hog Crop.

The *National Live Stock Journal* says: The Chicago *Tribune*, in discussing the probable supply of hogs for the next season, gives the following figures, based upon the assessors' returns for the States named:

	1874.	1873.
Illinois	3,469,166	3,560,083
Ohio	1,915,200	2,088,300
Iowa	1,287,414	1,460,784
Indiana	2,869,878	2,999,139
Nebraska	233,652	196,095
Total	9,766,310	10,304,401
Decrease this year over last		538,091

It has been remarked that these figures do not include animals under six months old, at the time the returns were made (last spring), many of which will be suitable for packing this winter. But while this is true, it should be remembered that neither did the returns for 1873 include pigs under six months old, and that as the number of pigs bears a certain relation to the number of adult animals (a relation not likely to vary much in a single year), there were probably more pigs under six months old in the country in the spring of 1873, than in the spring of 1874, and that if the returns included animals under six months, the deficiency would have been much greater than above shown.

The fact that the supply is not only short, *but largely short*—can not be disputed. Perhaps the strongest indication of the fact is found in the high prices which have prevailed during the past summer. Had the supply of hogs been even reasonably large, the high prices which have prevailed would have called out enough hogs to have swamped the market. But the supply of hogs being limited, of course they could not come forward. It is interesting to have one season, in which the gamblers in pork can not delude the country with their clamor about short supplies.—*Rural Home.*

Hogs and Their Diseases.

On this subject, the Nashville *Union and American* says:

There is need of a first-class treatise on hogs—diseases and treatment. This animal was domesticated in Europe in pre-historic times, and although naturally of a very hardy constitution, yet, like man, is now subject to many maladies. The measles come from a cyst worm (cysticercus cellulosa) and this from the eggs of the tape worm voided in human excrement, to which hogs find access. Trichinæ pass from porkers to a home in human flesh; tape worms go from the human system to a home in the flesh of swine.

Hog cholera and cholera in man are nearly related, but do not spring from the same organism. Both, however, we doubt not, are produced by parasites, which, to a great extent, are preventable. Salt, ashes and sulphur fed a little every week or oftener, in corn meal, to hogs is a preventive, and may remove cholera germs from the system.

High-bred swine are quite liable to lung complaints and scrofula, the seeds of which are not well understood, although hereditary in their character. As some aristocratic families of the genus homo easily run out, so all of our domesticated mammalia may, by improper keeping, exposure and defective breeding, lose their natural vigor and soundness of constitution, and die prematurely. The parasite enemies of hogs, man and cattle, are evidently on the increase.

KEEP THE HOGS OUT OF WATER.—A correspondent of the *Colonial Farmer*, whom the editor declares to be a practical breeder, writes that to handle hogs to the best advantage, a pasture is needed of green grassea—clover, blue-grass and timothy—and it is best if there is no running water or stock ponds in the lot. Hogs do better where there are no branches or stock ponds to wallow in. In place thereof, have well water pumped for them. Have troughs made, and nail strips across, eight inches apart, to keep hogs from lying down in the water, and let the troughs be placed on floors, to keep them from digging up wallowing holes. If feed be given, it should be soaked in swill barrels for twelve hours before feeding—no longer—and fed to them as drink.

FEEDING TOO MUCH CORN.—A correspondent of an Eastern paper, referring to the fact that pork is sometimes found of a yellow color, says it results from too free use of corn for food. He says that about the time hogs are finished off, farmers often make a mistake in feeding too much unmixed grain. The result is, bad digestion and yellow fat. Mixed feed should be given to the last—roots, pumpkins, apples with corn. As a rule you can get them to eat more grain and take on more flesh than by a diet of rich food only.

THE Strasburg Cathedral is no longer "the highest spire in Europe." The new church of St. Nicholas, Hamburg, has just been finished, and the great cross was placed on the summit. The total hight is 472 feet. This is called six feet higher than Strasburg.

SIMPLE SAFETY FUSE.—Soak a plaited cord in a solution of saltpeter.

Poultry Yard.

How Eggs are Hatched.

Editors Press:—In your selections under the head of "Useful Information," there appeared, November 7th, an article with the above caption replete with startling information for poultry raisers. The writer says: "People have an idea that the hen sits on the eggs for a time, and when the time comes for hatching the chicken bnrsts forth; but there never was a greater mistake. The chick, nntil liberated by outside aid, is incapable of motion," and he adds: "You might as well inclose a man in an iron boiler and tell him to get out without help, etc." His account of how the hen extracts the chick is highly artistic, and corresponds with a statement which appeared in a "New York farmers' club" report in 1870—made by an old and prominent officer of the association. As no member of the club qnestioned the correctness of his theory, I snppose none of them knew any better, and in preparing an elementary work on natural history for the use of schools, probably any one of them on the authority of their brother scientist, would have introduced Biddy "bringing forward the egg under the feathers of her crop and supporting it between the breast bone and the nest, preparatory to breaking away the shell all around the greatest diameter of the egg."

[This theory may account for the failure of the eccaleobien establishments which excited so much interest in New York some years since. Their proprietors were probably ignorant of Biddy's duties, or found breaking egg shells for chickens too expensive a process. The French being better informed, or more artistic, have made artificial hatching a success.]

Young setters, and even old ones, will sometimes pick open the shell after the chick has pnt out its bill, and eat the poor shrieking thing, or throw it from the nest. In such cases I have done as I have seen others do, covered the eggs in a box or basket, and placed them where they would keep warm, and left them to burst their own shells. A chick so weak as to require help in hatching is considered by poultry raisers, a somewhat doubtful investment of labor.

When making a new home in Kansas I had no chicken house, and provided for layers and setters a long, narrow box divided into compartments by uprights six inches higher than the sides of the box. A board wider than the box was nailed to these uprights to shelter the nests from sun and rain. Fine pine shavings, two or three inches in depth, lined the nest; and, during the summer, the box stood on a ridge of dry soil. In July a hen came off with six chicks, leaving several eggs in the nest. Nearly a week later, having sat elsewhere several nights, the hen returned to her nest, and next morning came off with several newly hatched chicks, the abandoned eggs not having been removed. Chickens were scarce in the new settlement, and in great demand among the immigrants; so, when, soon after, I found a nest of two dozen eggs, from which a hen had just come off with one chick, I put them in my nest boxes, and left them to the warm air, it being very warm night and day. When the time came for hatching, the chicks, knowing it better than I did, "hurst forth"—a fine brood, that grew up and paid well for their care. Then a neighbor gave me a setting of eggs, from which the hen had been driven within a week of hatching time, as supposed. I put the eggs into the magic nest. The time passed by, and I gave up my watch. But, going, two or three days later, to throw out the eggs and refill the nest, I found eight chicks partly hatched. A severe thunder storm the night preceding, had cooled the air and chilled them to death.

That the chick is capable of motion inside its shell, any one can ascertain by putting an egg to the ear within twelve to twenty-four hours of hatching. The bill can be heard picking away as continuously as the pick of an ambitious miner. And, soon as an opening has been made, the efforts of the chick to spread itself—which can be seen—gradually break the weakened shell "all around the greatest diamter of the egg," and it tumbles out—orphan though it be—to crow over amateur chicken raisers. Mrs. C. I. H. Nichols.

Pomo, Nov. 10, 1874.

[The party having special charge of the "Useful Information" department of our paper, declares that he was well aware of the fallacy of the argument put forth in the item referred to, and says he can hardly see how it slipped through his fingers into those of the printer, but mistakes will occur in the best regulated newspapers.—Editor Press.

Comparative Fecundity of Ducks and Hens.—Some interesting experiments have recently been made upon the comparative fecundity of ducks and hens, so as to determine from which of the two the larger nnmber of eggs can be obtained in the same time. For this purpose three hens and three ducks were selected, all hatched in February and nourished with suitable food. In the following autumn the ducks laid 225 eggs, while the hens laid none. In the next Febrnary the laying season began again with the ducks, and continued uninterruptedly nntil Augnst. They showed no inclination to set, but became very thin, although they afterward fattened np somewhat. The total number of eggs laid by the hens amounted to 257, or 86 eggs each; and 392, or 131 each, for the ducks. Although the eggs of the ducks were rather smaller than those of the hens, yet they proved to be decidedly superior in nntritive material, so that the superiority in prodnctiveness appears to be deeidedly with the ducks.—*Exchange*.

Quality of Flesh of Fowls.—The principal points by which to discern the qnality of the flesh in a fowl are the color of the feet and the kind of skin. The yellow foot generally indicates a fowl with tough flesh, heavy bones and yellow fat. It is very rare that this color does not show itself in the skin. However, it does not exclude certain qualities of the flesh in the pure descendents of the two exotic races, Cochin, China, and Brahma, Pootra. With the exception of the yellow and green, which can never be recommended, all other colors from black to white, are equally indications of excellent flesh. When the skin, and above all that of the sides and breast, is of a fine tissue, delicate and easily extended, also having a rosy-pearled color, one may be certain that the flesh is good and will fatten rapidly.

Instinct.—A correspondent of the London *Fanciers' Gazette* relates this curious instance of instinct in a hen: "A friend, to whom my brother had given some Brahma fowls, was dining with me, and told me that, one of the pullets wanting to sit, his poultry woman gave her a setting of ducks' eggs; these she positively refused to cover, or in fact have anything to do with. The woman having some of the pullet's own eggs in the honse, gave her these, making up the required number with two white eggs laid by the common barn-door fowl. These two latter the hen turned completely out of the nest, accepting, however, her own, upon which she is as present steadily sitting."

Good Health.

The American Health Association.

This association recently held its annual session in Philadelphia. The meetings were largely attended, and attracted much interest. A committee was appointed to report on persons engaged in various ways for agricultnral and other pnrposes. The next annual meeting will be held at Baltimore. A special committee was appointed to devise a project of law to meet the public want in establishing Boards of Health.

The essays were of a practical nature and contained a great number of valuable suggestions. It is a remarkable fact that in consequence of the care and attention bestowed by men of the class similar to this body upon the health of the great city of London, it has become one of the healthiest communities in the world, and its sanitary condition is very decidedly superior to that of most of the English rural districts. This fact shows that the deliberations of the Boards of Health concern rural districts quite as much as populous cities, and the latter one not necessarily unhealthy.

Drs. Sterns, of Maryland; Snow, of Rhode Island; and Curtis, of the District of Columbia, read papers on sanitary relations of pharmacy, and materia medica was read by J. M. Marsh.

Dr. Hartshorne presented resolutions favoring the establishments of large abattoirs in preference to private slaughter-houses; hut, as it is impossible to ensure against all contaminations of water and air, such establishments should be remote from the centers of population, and, if possible, on tide water.

A series of questions, accompanying the resolutions, were answered by Dr. Rauch, of Chicago, who concluded by saying, "I do not hesitate to say that abattoirs can be so conducted as not to be injurious to the public health." The resolutions were adopted.

Dr. Goodwin offered resolutions favoring the establishment of State Boards of Health. The closing address was delivered by Dr. Morgan Meyers, of New York.

To go to Sleep.—With many people who are past the meridian of life, it often becomes difficult to obtain a good night's sleep; indeed, the habit of waking at a certain hour of the night and lying awake for several hours, becomes fixed, and one which is very difficult to throw off. There may be various causes which will produce this effect, but there is one very prominent cause, and that is indigestion; and indigestion is often caused by the habit of drinking too much tea or other fluids at supper; the consequence is that steady and sonnd sleep through the night becomes impossible without the use of some means which will overcome this propensity to lay awake.

To do this and go to sleep in five minutes, is not a very difficult thing, and may he done by applying friction to all parts of the body and limbs. To accomplish it take a crash towel, and give it a lively motion in rubbing downward from the head nntil the blood will be put in lively circulation, rnbbing hardest upon the chest. If a towel is not at hand, the hand may be nsed for the pnrpose.

Effect of Hot and Cold Fluids on the Teeth.

The effect of hot and cold fluids upon the teeth has heretofore been supposed to be injurious. The dental profession have enconraged this belief, the reason for the supposed effect being, not that the extremes of heat and cold injure the vitality of the teeth, but that they crack the enamel, and then expose the dentine to external inflnence which tend to produce decay.

Dr. Robertson, of Georgetown, Mass., communicates to the October nnmber of the *Dental Cosmos* an account of experiments performed by him. which demonstrates that tho supposed injury resulting from the use of hot and cold drinks has no foundation in fact. He first proves that during the act of swallowing fluids very little contact of the snbstance with the teeth takes place. The account of his experiments to prove that the cracking of the enamel is not due to sudden changes of temperature we give in his own language: "The experiments made, and which proved that no amount of change of temperature can by any possibility be attained in the mouth, were: 1. I took a vessel filled with water, which I heated until it boiled, and which I kept boiling until I had concluded my experiments. I then took a tooth which, on examination, proved to have a perfect enamel. This tooth I held in my closed hand until it had acquired the temperature of my hand, or nearly that of the mouth. I then unclasped my hand directly over and as near as I conveniently could to the boiling water, and dropped the tooth in. I let it remain for a few minutes, and then took it out. First, I examined it with my naked eye; then through a double-lensed magnifying glass of about one and a half inch focus. There were no cracks visible in the enamel. Next, after bringing it to about blood-heat, I threw it into iced water. No cracks. Then I returned it to the boiling water, and from thence immediately into water of the temperature of ordinary well-water; that is to say, of abont 60 degrees or 65 degrees. Still no cracks. Finally, I returned the tooth to the boiling water, and from that plunged it into iced water. This cracked it badly. Thus I proved that it requires a sudden change of temperature of about 160 degrees to crack the enamel of a tooth which had been extracted and was deprived of all its vitality and other sustaining supports and adjuncts."

Dust as a Cause of Catarrh.

Dust as a cause of catarrhal affection is beginning to be recognized by the members of the medical facnlty. Some years ago the present editor of the *Artisan* contributed to some journal, the name of which he cannot now recall, the result of his experience with acute attacks of the naso-pharyngeal membrane, affirming his opinion that city dust has caused this inflammation in many instances. His attention was attracted to this subject from the great relief he experienced through short voyages at sea, and the recurrence of the attacks upon his retnrn to the city at a time when the streets were exceptionally dusty. Dr. W. H. Bennett, of New York, has contributed to the September number of the *Medical Record* a very able essay upon abnormal conditions of the superior air passages and some of the causes of chronic inflammation of these parts, in which he ranks dust as one of the most efficient causes. He thinks that ho has proved satisfactorily that chronic catarrh may be produced by the action of dust, through experiments upon animals forced to breathe air which contained no more dust than is frequently seen in air in certain parts of the business portion of New York. Dust issuing from the registers of houses heated by hot-air furnaces, and dust of streets—which is a combination of nearly all substances, filthy and otherwise, known to mankind—he regards as more effective in producing these complaints than clean earth-dust and dust occurring in various manufactories. It seems certain that chronic catarrh is more prevalent in cities than in country districts. Dr. Bennett estimates that at least four or five out of every twelve in the city of New York, irrespective of their calling or profession, suffer from chronic inflammation of some part of the respiratory membrane situated above the trachea. Nasopharyngeal catarrh, he states, is extremely provalent among the conductors of city horse-cars, and this disease is always aggravated when the streets are dry and the consequent amount of dust draggod after the cars is excessive.

Influence of Magnets on the Human Constitution.—A physician in France recently announcing the most decided and astonishing results by submitting nervous patients to the action of a magnet, the subject has been thoroughly tested by M. Volpuelli, who, after the most scrutinous search and patient observation, has come to the decidod conclusion that neither natural nor steel magnets, nor electro-magnets, have the least influence on the nervous system; that the effects supposed to be produced by the magnet are solely due to the imagination of the patient when he knows that the magnet is there. He found that whatever kind of patients they may be—nervous persons, clairvoyants, mediums, etc., they could be approached with any number of powerful magnets without any effect whatever being produced, provided they did not see or suspect the presence of the magnets.

Useful Information.

Fire-proof Starch.

In order to make ladies' apparel fire-proof, a starch is used to which sulphate, phosphate, or borate of ammonia, or what is better, tnngstate of soda is added. It appears, however, according to Prof. Gintl, (a competent authority in such matters,) in his report on practical chemical preparations at the Vionna exhibition, that manufacturers who apply them do not always act with the correct understanding, and do not consider that the compound used must be perfectly neutral and not impure; that it is not sufficient to use the ordinary commercial article, for instance tungstate of soda, which often contains considerable quantities of carbonate of soda, or ordinary sulphate of ammonia, and this is especially very impure, so much so that the impurities cannot stand the application of the hot iron during the process of ironing without ruining the color as well as the texture of the material.

The result of such mistakes is that the fire-proof starch has not become of universal application, and as long as the makers of this preparation do not use the most scrupulous care in its manufacture, its nniversal introduction is ont of the qnestion.

Prof. Gintl also calls attention to the fact that, according to his experiments, ammonia alum (sulphate of alumina and ammonia) and hyposulphate of soda are also additions to starch, which makes it very effectively fire-proof. This is important, as both are cheap substances, easy to obtain, and without any action on most colors. The latter substance prevents, if not so perfectly as some other compounds, a full inflammation, which it is a fact worthy of remark that the quality of the starch which causes it to give stiffness and gloss to the material to which it is applied, is not in the least affected. —*Manufacturer and Builder*.

Dead Surface Varnish.—Varnishes that leave a dead surface on drying, capable of snbstitution for ground glass, as for glass stereographs, and of use in retouching negatives, may be made by mixing solntions of resins with liquids in which they are insoluble. A solution of sandarach resin in ether, when mixed with one-fourth as much benzole, affords an excellent imitation of ground glass; one of dammar resin in benzole, when mixed with ether, also gives a good dead surface; water instead of ether, rendors it at the same time, semi-opaque. A mixture of benzole with common negative varnish frequently, bnt not always, gives a beautiful dead snrface. In all cases a great deal depends on the purity of the ingredients. It is recommended to dissolve from three to five parts of sandarach in 48 parts of ether, and to add 24 parts of benzole; or as much as may be necessary to produce the desired result. The following, by Hughes, is said to give a perfectly colorless varnish of this kind: Ether, 560 grains; honzole, 240; sandarach, 40; Canada balsam, 10; the resins are first to be dissolved in the ether, and the benzole added to the solution.—*Boston Journal of Chemistry*.

The use of the Tongue.—To taste aud talk, of course. It does neither. An ulcerated tongue was lately cut entirely out at the Royal Free Hospital in London. Withiu a week the man was heard distinctly to say, "I would like to have some beef tea." Blindfold a man, and tell him to open his mouth wide and keep it open; put salt on his tougue, or a drop of wormwood oil—he cannot tell the differenoo. Take half a teacup full of ice water, pour it into the center of a dose of castor oil; open the mouth, put the rim of the cup far back on the tongue, toss up the cup, down goos the oil without a taste of it as loug as you keep the mouth open, or do not allow the oil to touch the lips. Is taste, then, in the lips? To produce the sensation of taste, the tongue, the lips and the substance must all como in contact at the same time, as in the process of smacking the lips.

A Strong White Paste.—Dissolvo 2¼ oz. of gum arabic in 2 quarts of water, and stir it into 1 pound of wheat flour nntil the whole becomes of a pasty consistency. It is then to ho hoated, and 1⅛ oz. each of sugar of lead and alum dissolved in a little water, added thoroto, and the composition woll stirred until it shows signs of boiling, when it must ho removed from the fire. Add while hot six drops of carbolic acid. This is a very tonacious and durable paste, and may be used on almost any substanco.

To Dye Leather Blue-Black.—Take of beoswax 3 ozs., black resin 2 ozs. Mix togethor, and then add: Prussian blne 1 oz, lamphlack ⅛ oz. While the mixture is cooling, add turpentine till a suitablo consistoncy is obtained. It should he applied with a soft rag, and the leathor afterwards polished with a brush.

New Lubricant—An English patent describes a process in which resin oil is placed in a steaming apparatus and is then mixed with limo wator. Tho semi-saponified oil which results if allowed to settle until the water rises to the top and the water is then removed and the oil distilled.

Roof Drainage.—In providing for the removal of rainwater from roofs, it is nsual to oonsider the depth over the whole area of the roof at half an inch per hour.

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms; Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, 415 California street, S. F.

Grange Clubs for the Rural.

The Secretary (or some other Patron) is invited to act as club agent for the Pacific Rural Press in every Grange. Circular and sample copies sent free. Five or more names will constitute a club, at the rate of $3 a year. No new subscriptions will be taken without payment in advance. We will pay the postage after Jan. 1st, 1875. All club subscriptions in Granges should end on the last day of June or December. Old subscribers may join the club by paying the Secretary up to club dates. Every Patron farmer should read a reliable agricultural paper. We need the support of all on this coast. Help the Secretary (or club agent) to make up a large list in your neighborhood. Don't delay.

NOTICE.

From and after this date, all moneys due to the State Grange by Subordinate Granges should be forwarded to the Grangers' Bank of California, No. 415 California street, San Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. CARRINGTON,
Treasurer State Grange.

November 4th, 1874. 19-v8-tf

Extra Copies of the Pacific Rural Press

Containing Grange addresses, resolutions, obituaries, etc., will be furnished post-paid at ten cents per copy. Grangers wishing numerous copies should send the order for them with the MS.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

Material Work of the Granges.

For a mutual industrial movement the Grange challenges universal wonder and admiration. It is the most perfect system of co-operation ever devised—organized for the purpose of protection and advancement of the social and material interests of agricultural producers, the Grange has long since assumed proportions that compel the respect of every other combination in the land. If it continues to follow the path which has been marked out, and which a wise sagacity and the best common-sense endorses, it cannot go amiss in anything that may be honorably proposed. The Order and the movement spring from the very foundation of the social fabric and has a basis as broad as society itself. The multiplication of Granges in the different states is something really marvelous. The spirit of the Organization is even more marvelous. As an elevating agent in society it is unmistakeable. As a purifying agent in public affairs, nothing could possibly be conceived more fitting or effectual. Though absolutely devoid of political character or organization, it has, in the recent elections, sent consternation and dismay into the ranks of unprincipled politicians in every State in the Union.

As a body they are bent on ignoring parties and party dictation. They will vote for none but honest men, no matter how they may be nominated. They go in for the purification of politics, not by party nominations, but by direct, conscientious, individual voting at the polls. They go in for putting down the influence of corrupt men, everywhere. They are opposed to corrupt rings, whether in politics or business, and favor a wholesome restraint upon grasping and overreaching monopolies. This determination means that every legitimate business and enterprise in the country shall be open and free to every citizen who desires to engage in them, and that all, both individuals and corporations, shall be alike regulated and restrained by law, when they attempt to obstruct the ordinary channels of business, or, by combination, seek to unduly oppress their weaker neighbors. It means that competition shall be encouraged and protected, or at least permitted to have its full influence on productions, trade and transportation.

Look out for Them.—There are individuals and journals that profess great friendship for the Farmers' Movement; but when anything goes apparently awry with the Order, they are quick to give it place in their talk and columns. A firm or store—perhaps a "Grange Store"—with which the members may be more or less connected in the way of business, fails, and they immediately cry out "I told you so," although the Granges may be in no way responsible for any supposed mismanagement or any suspension, and even though the trouble may be brought about by the direct contriving of our enemies, it is all the same. These people seem to take an especial pleasure in hunting up and spreading abroad any unfavorable report or wicked and malicious slander which our enemies have set on foot. All such persons and such papers should be watched and avoided. It would be well to watch all persons, whether in or out of the Order, who, while professing excessive friendship for the cause, exaggerate supposed weak features, and unfriendly, mischievious, or false reports.

The Political Situation.

The political reaction which commenced as a gentle breeze, early in the year, at the State elections, culminated in a perfect tempest in November. Before it the great Republican party has been broken in pieces. Nothing like it has ever before been witnessed in the history of American parties. The public wrath has been visited upon evil doers with a sweeping vengeance. Corruption, such as was revealed in the Credit Mobilier, and "salary grab," and numerous other jobs, great and small, which have so disgusted the public of late, added to the countenance and sympathy which has been unmistakably extended to corporate and other extortions, has finally forced the people to rise, as a body, and put an end to all such doings. That the work has been thorough no one will deny. How effective it will be remains to be seen. It is true that the new men may not all all be an improvement on the old; but it is quite certain that any change must be for the better.

The politicians, on all sides, are at their wits' ends to know from whence the blow has come. Some affected, at first, to believe it to have been the voice of the Almighty; others, again, attribute it to a spiritual agency not Divine, but now the Grange element is beginning to be credited, in various quarters, with a large share of responsibility in the matter. The wonder is that the average politician was not sooner in arriving at such a conclusion. Considering his usual shrewdness, he should have scented the breeze long before the Ides of November. A few did so, and by a careful trimming of sails, have managed to turn what has been disastrous to others, into a prosperous gale to themselves, and have thereby reached a haven which but a short time since seemed far away in the misty distance of a storm tossed sea.

The Republicans have failed because of their lack of faith in the reality of the Grange movement, and their overweening confidence in their own power and prestige. They have staked and lost.

Let the Democrats beware how they lay the flattering unction to their souls that "we Democrats" have done all this. It would be a grievous mistake to call the result which we contemplate a Democratic victory. To use the words of an Eastern journal: "The Democrats had no policy to submit; no record on which they could ask the people to trust them; no coherent measures for the future, better than the Republican measures. They succeeded merely because the *people* desired a change. The people took the *change*, but not the *Democrats*. Whether they will take the Democrats, hereafter, remains an open question."

The people—the great army of producers—are searhing for reforms, and they care little under what banner they march. The Grange sentiment forms the chief embodiment of the people's will, and it is to that, chiefly, that they owe the success thus far secured. True, the license question in Massachusetts, and that and other local issues in New York and Pennsylvania, have been thrown into the sweeping tide and largely added to its intensity in those states; but we very much doubt whether a single "custom house ring" would have been broken up in any one of the great Western and Southern states, without the aid or impetus given by the Grange movement. The battles which are to test the loyalty to principle and the general effectiveness of the Democratic party are yet to be fought on the floor of Congress and in various State Legislatures.

There has never been a political campaign in which the amenities were more generally observed, both before and after election, than in the one just closed. Personalities, as a rule have been avoided, and the contest has hinged upon the public record of candidates, and their supposed fitness or unfitness for the offices to which they aspired. The back pay steal has blighted the prospects of many a congressman. The people have persistently refused to receive any explanation, whatever. Even the pitiful dodge of trying to rectify their blunder by paying back their ill-gotten gain has been of no effect. The Chicago *Tribune* has made careful inquiry and finds that out of sixty-three members who drew their back back-pay, only *one* has been returned to the 44th Congress.

Could there be a more cheering sign that the work of purification has been fairly inaugurated, and that it will be continued to the end? Reformation as to the character and style of our public men is the greatest need of the day, and the people are beginning to realize it. The recent elections have taught politicians the important lesson that it won't pay, any longer, to pack caucasses and conventions, and put in nomination mere partisans. The American voter is on the war path, and he means business, this time, sure.

The Patrons of Husbandry have long been telling the politicians that *they* have decided to throw party away, as the filthy weed of autumn, and that they will hereafter support no man for office unless he is faithful, honest and capable. Partisan politicians, and unfaithful public officers will doubtless take warning in the future.

The Granges have exhibited in the recent elections a power at the polls most unexpected even to themselves. In doing so they have by no means given the lie to their professions of not being a political party. The wonderful result which we have witnessed has not been brought about by partizan discussion or action either within or without the Grange. This victory of right over wrong is the direct result of that higher understanding which is taught in the Grange, and which places politics at the root of every matter which concerns the common interest and common welfare of the people as effected by their government. The Patron adopts and endeavors to carry out the idea so well expressed by a contemporary, that "from the cradle to the grave, almost every act of male or female is affected and more or less modified by considerations which belong strictly to the domain of politics. The girl cannot buy herself a new ribbon without paying more for it in consequence of a certain law for the raising of revenue. The man cannot buy a pound of beef at the butcher's without being affected by a law regulating the currency. Courtship and marriage, and all the sweet intercourse of private life are affected to a degree which few realize by laws concerning the tenure of property, the relation of the sexes, the punishment of crime, the testimony in courts, the right of suffrage, local and national taxation, and the education of the young. In short, all those questions which affect the foundations and framework of society, and the relations of people with each other, are, in the true sense political, and the discussion of these can never cease, nor should it. He who tries to 'drop politics' (in this sense of the term) may as well stop thinking, speaking, writing or living. For our very wastefulness or economy, our choice of occupation and our industry, have a political effect, and may be influenced by political causes."

The mere partizan politician can never rise to a just comprehension of the political teaching of the Grange. To him politics is simply the manipulation of caucuses and conventions, and he who can most skillfully do this is given preference over better men, who are above soiling their hands in such dirty work. Whenever our Order becomes a political machine of such a character its days of real usefulness will be numbered indeed. But wise counsels and deliberate individual political action will make the Grangers a power for good in the purification of politics, and in the putting down of corruption and corrupt rings, and in the judicious and healthy restraint of over avaricious monopoly.

The Grange as an Educator.

The Grange is an educator in many senses; its members are not only constantly acquiring new ideas about farming and farm management, but they are also learning how to do business—a matter in regard to which farmers here have heretofore been sadly deficient. They are also becoming more or less versed in parliamentary matters, as is necessary in the management of the Grange. Its members are familiarizing themselves with public speaking—a matter of great importance to every American citizen. We venture to say that through the Grange, the farmers will be able in less than ten years to turn out more good speakers and debaters than any other non-professional calling in the country.

To further this important object, we notice that some of the Granges in the Mississippi States are organizing debating lyceums for the interest and improvement of members, particularly the younger portion. The idea is a good one and some are getting quite enthusiastic over it. The ladies, even, are not unfrequently taking an active part in the debates, reading essays, etc. We have heard of one Grange in this State that has taken steps in this direction—the Santa Clara Grange. Perhaps there are others; we wish there were many such. The object is to furnish entertainment and facilities for mental and social culture. This is a step in the right direction. The Grange should furnish for its younger members something more entertaining than the dry business routine of the ritual, and something more substantial than is found in ordinary places of resort for young people. The Grange might well be made a means for disseminating useful facts and information of a general nature among its members. Let every true Patron—every one who loves the Order—pray the Great Master above to clothe the Grange with success in this and all other good undertakings in which it may engage.

Petaluma Grange held its regular meeting meeting on Saturday last, but the attendance was not as large as usual, owing to the fact that many farmers were busy, taking advantage of the fine weather. There were enough present however, for a pleasant and interesting meeting, at which the subject of "School Text Books" was considered, in connection with a report of a special committee on that subject. A class was also initiated in the first degree.

Labor and Capital.—There is no more real antagonism between labor and capital than there is between food and the stomach. Where they disagree with each other it shows that the food is bad or the digestion is out of order. The quarrels between laborers and capitalists are short-sighted, costly, and injurious to both parties.

The Lukewarm and the Quarrelsome.

A member of the Order, writing to the *Farmer's Friend* on the subject—"Why some Granges are practically Dead"—expresses some sentiments which, if properly considered, will not only do much toward infusing new life into Granges that are "practically dead," but, if taken in time will effectually ward off the approach of death. We extract the following from the article alluded to:

"The success of a Grange depends altogether upon the devotion of its members to the purposes and principles of the Grange. Without the generation of steam an engine, though a sightly piece of mechanism, is powerless. Without a detailed and energetic development of the uses of the Grange, it is no agent or power, however high its aims and admirable its lessons.

The Grange has, sad to say, among others, two inherent elements that are not only a hindrance to its growth, but tend to destroy the very hopes out of which it was born. One is an idle, the other a quarrelsome membership.

Idleness is a cipher; if there is anything in it, it is but sin and discontent. An effort is made and a Grange is organized, the sky is immediately expected to come down and every new member expects to catch his larks at once and on the spot. There exists a mysterious idea that a man in Iowa, another at Douglasville, and three men at Washington have only to pull a throttle lever and the newly initiated will roll fleetingly and luxuriantly in silver palace coaches to some celestial city, and thus hands are folded, disappointment ensues, money goes out and none returns; these men who persist in not "letting on steam" are put down as failures, and the Grange, from month to month, can scarcely raise its quorum. The trite maxim, 'he that by the plough would thrive' can be as readily applied to the Grange, the increase coming only as we sow and water. A farmer will toil from dawn till darkness, and earn his dollar or two, but the Grange steps in and says: If you will trust me, give me a little time, attention and effort, I will not only enlarge your profits, but in so far as you will use me wisely and heartily, to that measure will I lighten your toil. Just as your faith and support increase from Maine to California, so will my power, which is your inheritance, increase. The Grange is a vineyard with culture and but a wilderness without it."

W. Lecturer's Official Visits.

Editors Press:—Please insert the following appointments succeeding the meeting with San San Jocinto Grange, San Diego Co., which closed the list you last published:

San Diego County.

To organize new Granges:

San Luis Rey	Nov. 23rd, 7 P. M.
National City	Nov. 24th, 7 P. M.
Poway	Nov. 25th, 7 P. M.
Cajon Valley	Nov. 26th, 1 P. M.
Ballena	Nov. 27th, 1 P. M.
Julian City	Nov. 27th, 7 P. M.
Bear Valley	Nov. 28th, 7 P. M.
San Bernardino	Nov. 30th, 1 P. M.

J. W. A. Wright.

[The communication accompanying the above appointments was received too late for publication in our present issue. It will appear in our next.—Editors Press.]

Never Ready.—We heard a Granger, well up in the Order, remark the other day that he was never ready for the rain. This remark struck us as strange at first, and the more we thought of it the more strange it seemed. Never ready for the rain! Why not, pray? Is it not a certain thing that the rain will come every fall—that it will begin in October or November or December? Then why not prepare for it? Why not be ready? The remark led us to wonder how much that individual Granger had lost during the last twenty years, simply by not being ready for the rain. By not having his wheat stored and the surplus freighted to market, by not having his hay and straw secured, his corn gathered; by not having his grapes picked and his wine made—in short, by not being ready for the rain. Then, again, we thought if this good and exemplary Granger is never ready for the rain; how many others are? If this Granger loses annually hundreds of dollars by not being ready for the rain, how much does every hundred ordinary grangers lose in one year—how much in twenty, and how much does a thousand such lose? In short, how much is lost to the farming interest of California each year by being behind hand and not ready for the rain?

Don't Go to Law.—It is one of the cardinal principles of the Grange to avoid law suits. The farmer, and, in fact, any other person, can as well afford to cut wheat with a razor, as a business, as to retain, on every petty occasion, and pay an attorney, and a host of court officers and witnesses, in order to bring about a settlement with his neighbor, in a matter which a few moments plain, common sense talk would enable him to settle much more satisfactorily. Arbitration is the true way to settle disputes, whether between individuals or nations.

Election of Officers.

INDEPENDENCE GRANGE.—J. W. Symmes, M.; J. W. Martin, O.; H. C. Wright, L.; D. D. Gunnison, S.; S. A. Densmore, A. S.; A Wayland, C.; J. Vagt, T.; D. B. Curtis, Sec'y.; F. Schabbel, G. K.; Mrs. H. Vagt, Ceres; Mrs. —— Densmore, Pomona; Mrs. —— Graves, Flora; Mrs. S. E. Martin, L. A. S.

SONOMA GRANGE, No. 55.—Wm. McPherson Hill, M.; Leonard Goss, O.; Michael Hogan, L.; Thomas S. Cooper, S.; A. S. Edwards, A. S.; Obed Chart, C.; David Burris, T.; J. A. Poppe, S.; George E. Wattriss G. K.; Miss Emma Wattriss, Ceres; Mrs. Mary A. Johnson, Pomona; Miss Emma Cooper, Flora; Mrs. Mollie Akers, L. A. S.

UKIAH GRANGE, No. 114.—Thomas R. Lucas, M.; D. Cowsert, O.; W. H. Young, L.; W. F. Holliday, S.; R. Clark, A. S.; E. Weller, C.; Samuel Orr, T.; A. O. Carpenter, Sec'y.; N. Bartlett, G. K.; Mrs. M. E. P. McCowen, Ceres; Mrs. Mary Morris, Pomona; Mrs. Lavina White, Flora; Miss Elizabeth Bartlett, L. A. S.

CAMPTON GRANGE, No 32.—J. J. Morton, M.; C. W. Caltrin, O.; J. E. McOrnis, L.; A. A. Proctor, S.; A. Eddy, A. S.; A. Bousall, C.; W. H. Morton, T.; T. Kimble, Sec'y; H. Rodgers, G. K.; Mrs. A. Eddy, Ceres; Mrs. F. Kimble, Pomona; Mrs. W. H. Morton, Flora; Mrs. Emma Hazen, L. A. S.

AZUSA GRANGE, No. 94.—W. W. Maxcy, M.; J. C. Barnes, O.; J. S. Thompson, L.; C. Thronson, S.; W. J. Dougherty, A. S.; J. L. Davis, C.; F. M. Barliny, T.; J. C. Preston, Sec'y; E. P. Justice, G. K.; Mrs. M. J. Casey. Ceres; Mrs. M. O. Dougherty, Pomona; Miss J. Justice, Flora; Miss Ann Smith, L. A. S.

RISING STAR GRANGE, FRESNO COUNTY.—W. W. Hager, M.; J. N. Canfield, O.; J. W. Crayeroft, L.; Wm. Thornburg, S.; Fayette Bennett, A. S.; Henry Shaw, C.; Wm. Poage, Sec'y; E. S. Keith, G. K.; Mrs. Thornburg, Ceres; Mrs. Mary A. Crayeroft, Pomona; Mrs. Lizzie Shaw, Flora; Mrs. Fanny Smith, L. A. S.

LONE PINE GRANGE, INYO COUNTY.—J. J. McCall, M.; J. A. Rittgers, O.; Julius Roeper, L.; I. P. Rittgers, S.; G. W. Betts, A. S.; R. A. Loomis, C.; John Lubken, T.; A. H. Johnson, Sec'y; C. W. Johnson, G. K.; Mrs. M. McCall, Ceres; Mrs. A. B. Rittgers, Pomona; Mrs. M. Dodge, Flora; Miss Augusta Roeper, L. A. S.

CENTERVILLE GRANGE, No. 120.—Jas. Shinn, M.; L. E. Osgood, O.; Mrs. J. T. Walker, L.; C. Healey, S.; N. L. Babb, A. S.; Mrs. J. Shinn, C.; H. Overacker. T.; M. B Spurgis, Sec'y; J, A. Trefry, G. K.; Miss. M. S. Babb, Ceres; Mrs. J. Tyson, Pomona; Miss M. Cameron, Flora; Mrs. L. E. Osgood, L. A. S.; M. J. Overacker, Trustee.

PESCADERO GRANGE.—B. V. Weeks, M.; J. H. Osgood, O.; S. J. Finney, L.; N. Corey, C.; H. B. Sprague, Sec'y; I. C. Steel, T.; A. Moore, S.; A. Honsinger, A. S.; J. Ramey, G. K.; Mrs. Anna Weeks, Ceres; Mrs. A. W. Goulson, Flora; Mrs. N. Corey, Pomona; Mrs. M. J. Leighton, L. A. S.

A Live Grange.

A brother writes, "Our Grange is a *live* one." Only six little words, but how significant. They set us to thinking. There are too many dead granges—too many that have just enough vitality to keep them alive, and none to spare. These hang like an incubus upon the body of the great reform, dragging it downward and impeding its progress. There are rash Granges, impetuous Granges, indiscreet Granges, but the worst of all is the dead Grange, for it sends forth from its carcass the foul odors of decomposition, and fills the moral air around it with its festering breath, and men avoid it as they would contagion itself. Reader, is your Grange a live one? If not, what killed it? Is there vitality enough in it yet to restore it, to preserve its life? How many "live" members have you? Go to work with renewed zeal. Fan the little flame, if there is one. Infuse new life into dead members, and the next time you write to us, say "Our Grange is a live one." There may be live Granges with dead members in them, but there can be no dead Granges with live members in them. A half dozen live, vigorous, energetic, persevering Grangers, will keep any Grange in the countay in an energetic condition, and are worth a whole regiment of cold, lukewarm, half and half members. — *Ohio Farmer.*

THERE is lady member of Farm and Home Grange, Falls county, Texas, who is seventy-five years old. She is still vigorous and a regular attendant at Grange meetings. She has both children and grand-children members of the same Grange. Three generations represented in one Grange does pretty well for a new institution. Long life to the brave old matron.

A GRANGE WAGON ROAD.—It is reported that the Rogue River Patrons of Husbaudry propose the construction of the proposed wagon road from the head of Illinois valley to Chetco harbor, on the coast, and that the surveyors are now marking out the line of the road.

Dry Creek Grange.

EDITORS PRESS:—Thinking it might interest some of your many readers to hear from this far off land of ours—Fresno—in refereuce to Grange matters, I will endeavor to give you a short sketch of the second harvest feast of Adams Grange, No. 143, P. of H.:

On Saturday last we conferred the fourth degree on a class of two, after which the newly elected candidates and the brethren of the Order were invited to partake of the harvest feast, spread for the occasion by the Sisters of the Order. It was a feast indeed; the tables were loaded to their uttermost capacity, with the choicest viands, which would have tickled the palate of the most fastiduous epicure. The ladies appeared to vie with each other in sociability and made the affair the most pleasant one I ever attended. I should have said our feast was public, as there were a great many of our neighbors present who were not Grangers, but friendly to the cause. We were furnished some excellent music by the Misses Freeman, who performed upon the organ with vocal accompaniment. They sang that good old piece "Home, Sweet Home," which I think can never be worn out. We were also furnished some music on the piano dulcimer by Miss Mary Cranmer, who performed excellently and aided greatly in the entertainment. Bro. L. F. Potter was then introduced, who delivered a very interesting lecture on Grange matters. The day's entertainment did not satisfy the young folks, so they adjourned to the residence of Bro. Heiskell, and indulged in a social party till the hour of 12, when the old clock warned them that they were trespassing on the confines of the Sabbath, when they all returned to their homes, highly pleased with the day's entertainment.

We have had some fine showers of rain; mother earth has already put on her mantle of green and vegetation is high enough for stock to graze.

Our Grange has a membership of 41, with a good prospect for a large increase this winter.

THOS. H. WYATT, SEC'Y.

Dry Creek, Fresno Co., Nov. 4.

From Compton Grange.

EDITORS PRESS:—Not seeing any correspondence from Compton Grange, No. 37, P. of H., I thought I might take the liberty of addressing a few lines to you, that you and the readers of the RURAL PRESS may know that there still exists the thriving town of Compton. Everything is moving off lovely here in this beautiful valley of Los Angeles. Farmers are now busy gathering their corn, which yields fine this season—75 to 125 bushels per acre—the ears are well filled, and not worm eaten. We have not had frost here yet enough to hurt the tenderest plant. Tomatoes are in bloom and doing finely. We had a District Council here on the 10th of November. composed of Los Angeles and San Bernardino counties. State Lecturor, J. W. A. Wright. was here, and gave us a little talk, which was thankfully received by the many Patrons in attendance. Also, Prof. E. S. Carr, late of the State University, who gave us a rousing locture; and we all felt that we had not been severe enough on the Board of Regents. The valley is fast filling up with actual settlers, and all seem well pleased with the country. There are plenty of chances for more. The Grangers are now having a little something to say who shall rule over Los Angeles county, and many faces look brighter to think that the money we pay for taxes is now doing a little good toward improvements.

JOHN E. KAKE.

Compton, Nov. 16th, 1874.

MIDDLEMEN.—Which is the most sensible man, the storekeeper who goes whining around that the Grangers are ruining him, who curses the farmers' papers and stops his advertisements (thus taking of his own accord the direct road to bankruptcy), or he who has sense enough to recognize that the farmers have found out the advantage of buying for cash, and sets himself to meet their demands and makes money out of it? The farmers are sensible that there must be middlemen, either as a body or as individuals. What they are hostile to is paying more for their goods in one place than they can buy them for in another. They have found out that under a cash system goods may be bought from ten to seventy-five per cent. cheaper than they have been getting them. They have also found out that storekeepers who sell on credit in the old way cannot or will not give a proper reductiou to cash customers. Usually they cannot buy any cheaper at such stores for cash than on time. Consequently, they have to find other places to trade. Briefly, the Grangers do not pretend ruin to middlemen, but, on the contrary, great success to the middlemen who are smart enough to see what is wanting and supply the want.—*Vermont Farmer.*

A Baptist Church in Gallatin, Tennessee, has decided that a Granger cannot remain a member of that church while he is a member of the Order of Patrons of Husbandry. The ground assumed by the church is that the Patrons of Husbandry is a secret order.

Grangers' Bank in Europe.

In our last issue we spoke of a Grangers' mortgage bank, about being established in the United States; we may add now, that we learn from the foreign papers that Mr. Nieuwland, the founder of this enterprise, is also active in Europe with the establishment in England, Germany, France, Belginm and Holland, of banks of this kind, which are there called emission banks. They will work with a capital of about $500,000, and act as a medium to place domestic and foreign loans on commission. Provincial private capitalists, cashiers and bankers are rapidly subscribing for stock, which investment will combine security with profit.

The object of these banks is, further, to take charge of the payment of interests, dividends, premium, and redemptions. It is their aim to introduce American agricultural, industrial, city state, and it may be government loans in the money market and to aid small investors. In regard to expenses Mr. Nieuwland believes to be able to relieve both borrower and lender. For years we have had to deplore the financial suicidal policy adopted by a number of bankers who rob debtor and creditor by taking not less than 10, 20, 30 and 45 per cent. commissions for the placing of loans of railroads whose directors promise an enormously high interest and great profits with a short redemption, but fail in the fulfillment of both. Such a commission, accompanied with a despotic management, was bound to ruin American industry, and was one of the causes of the panic, disastrous to all honest parties. We should not pay more than 2½, 3, 4, or 5 per cent. commission for the placing of long running agricultural and industrial loans. Based on the well known zeal and energy of the originator of these banks, as shown by a business life of a quarter of a century as agent of a line of steamers, and stock broker, merchant and journalist; based on his sound and clear ideas for reform in financial matters, and his extensive connections in two hemispheres, we hope and trust that the Grangers' mortgage bank will prove a success.—*Manufacturer and Builder, November*, 1874.

What They Say of the Granges.

"They will soon go down."

Not without having their influence for good.

"That they are political."

Not if the parties will heed the signs of the times. We ask only for such legislation as will foster the agricultural interest of the country.

"That Granges are a monopoly."

Not at all, we are not combined against other trades or against capital. We wish, through our organizatiou, to learn the probable supply and demand, and the value of what we buy or sell, together with the cost of production.

This farmers' movement comes from the people, not politicians, and is but the outgrowth of necessity. To hear some men talk, one would suppose that it was sheer impertinence for a tiller of the soil to assert his right to think or take part in shaping the course of events.—*Western Agriculturist.*

LOOKING AFTER THE BUSINESS INTERESTS. — The business agent of the Kansas State Grange has been ordered by the Executive Committee to meet the Granges of the different counties of the State, to talk up the business interests of the Order, and to aid in their co-operative efforts. He accordingly publishes a list of places where he will be, reaching to October 31st. We regard this as a desirable course to pursue. It should be followed in all the States, either by the regular business agent where such an appointment exists, or by some special appointee, who is capable of talking up not only the business feature of the organization in all its bearings, both of purchasing and selling, but the social, educational and moral aspects and aims. Such a traveling man, all through the winter, from Grange to Grange, would, if of the right stamp, create an interest and enthusiasm much needed, as the novelty of initiations and the routine work dies out. —*Prairie Farmer.*

FARMERS FOR OFFICE.—Farmers are not addicted to office hunting, and if a portion of them yield to the popular demand for a speedy and effectual cure for the evils and abuses which have so abounded of late, and are elevated to offices heretofore held by professional office-seekers, all classes will have occasion to be glad and rejoice abundantly. We have not much to fear that the better class of farmers—those who succeed with their own local affairs, men who read, and who have no price—would fail to perceive the wants of the country, especially since these are becoming apparent to all classes, and since the popular press has become the champion of the masses as against the common enemies of the business of the country—*Iowa Homestead.*

GRANGERS in Wisconsin have on hand $250,000 toward a State Agricultural Implement Society. They have already established 41 co-operative associations for selling goods and manufacturing, and 29 insurance companies, all flourishing, and representing capital to the amount of $4,000,000.

RECENT RULING.—Worthy Master Hamilton has ruled that a subordinate Grange is not compelled to send a delegate to the State Grange. Also, that none but Deputies (in their respective districts) can instal officers.

Bring Your Wife Along.

The following appeal to farmers to bring their wives into the Grange is from one of our Eastern exchanges. No friend to the Order will fail to endorse it, or fail to assist in carrying out its requirements. It might, in strict propriety, have been made still more emphatic; and where it says that "it is *possible* that the ready wit and practical intelligence of woman *may* aid, etc.," it would have been perfectly safe to substitute a certainty for a possibility:

Every farmer should, by all means, bring his wife into the Grange. Don't commit the folly of leaving her at home on the erroneous supposition that she has no interest in the great question of raising farm products and selling them. Attend the Grange with your wife. If the children are too small to be left alone, leave them in charge of your neighbor, who is too conscientious to join a secret society, or, if you can't do better, change works—you staying with the children one week, and she the next. An evening at the Grange will give your wife needed rest and social enjoyment; besides she will learn much that she needs to learn of the practical work that supports the family. It is possible, too, that the ready wit and practical intelligence of woman may aid greatly in the accomplishment of the ends sought after by our organization.—*N. J. Grange.*

A Good Patron.

Attends all meetings of his Grange.
Is always on hand when the meeting opens.
If an officer, his chair is never vacant.
If a married man, his wife is a Matron.
He thinks she has as good a right to enjoy the benefits and pleasures of the Grange as he.
He don't blow the secrets of the Order on the public streets, or whisper them around the corner.
He don't think he is the only interesting talker in the Order; but he sometimes listens with his ears as well as talks with his mouth.
He defends the honor as well as the interests of the brothers and sisters. If poor, he feeds them; if sick, he sits up with them; if in trouble, he comforts them.
A good Patron is a good man everywhere. —*Ex.*

THE Grangers are doing more to project and establish substantial enterprise in connection with their organizatiou than has been done by legislation and capital heretofore. At Red Oak, Iowa, they propose the organizatiou of a stock company for establishing a linseed oil mill, to consume the large amount of flax seed raised in that vicinity. We hear many instances of this kind every day, and hope that the good work may go on with redoubled energy.—*Omaha Union.*

ONE of the advantages which the members of the Order are gaining for themselves, by no means inconsiderable, is the knowledge of parliamentary law which they acquire. They will use it by and by in broader fields.—*Ex.*

BRAIN VS. MUSCLE.—A farmer can do more work with a good thinking apparatus than with the best span of horses ever hitched to a wagon.

AN exchange gives the following good and appropriate advice: "Let the Patron guard well the outer gate of his lips and the inner gate of his heart."

MATTERS have been arranged for fraternal relations between the National Grange and the Dominion Grange of Canada.

PATENTS & INVENTIONS.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[FROM OFFICIAL REPORTS FOR THE MINING AND SCIENTIFIC PRESS, DEWEY & CO., PUBLISHERS AND U. S. AND FOREIGN PATENT AGENTS.]

By Special Dispatch, Dated Washington, D. C., Nov. 24th, 1874.

FOR WEEK ENDING NOV. 10TH, 1874.*

CLOD BREAKER.—Addo Borchers, Albany, Oregon.

PORTABLE CUTTING TABLE.—Benjamin Strawbridge, Stockton, Cal.

COAL-OIL STOVE.—Benjamin R. Sweetland, Sacramento, Cal.

HORSE DETACHER.—Anatole Ehret, Telegraph City, Cal.

SASH FASTENER.—Bartlott Doe, S. F., Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

MAMMOTH BEEF.—A Short-horn steer was butchered last week in Detroit that weighed 4,110 pounds alive; weight of dressed beef, 3,000 pounds; hide, 130 pounds, and rough tallow, 300 pounds. This is supposed to be the largest animal ever slaughtered for beef on this continent.



Some One's Servant Girl.

She stood there leaning wearily
  Against the window frame,
Her face was patient, sad and sweet,
  Her garments coarse and plain;
"Who is she, pray?" I asked a friend;
  The red lips gave a curl—
"Really, I don't know her name;
  She's some one's servant girl."

Again I saw her on the street,
  With burden trudged along,
Her face was sweet and patient still,
  Amid the jostling throng.
Slowly but cheerfully she moved,
  Guarding with watchful care,
A market basket much too large
  For her slight hand to bear.

A man, I'd thought a gentleman,
  Went pushing rudely by,
Sweeping the basket from her hands,
  But turning not his eye;
For there was no necessity,
  Amid that busy whirl,
For him to be a gentleman
  To some one's servant girl.

Ah! well it is that God above
  Looks in upon the heart,
And never judges any one
  By just the outer part.
For, if the soul be pure and good,
  He will not mind the rest,
Nor question what the garments were
  In which the form was dressed.

And many a man, and woman fair,
  By fortune reared and fed,
Who will not mingle here below
  With those who earn their bread,
When they have passed away from life,
  Beyond the gates of pearl,
Will meet before their Father's throne
  With many a servant girl.

Biggs' Picnic.

[Written for the PRESS.]

"Post Mortem."

"Hurrah, wife, we'll have a picnic," roared Mr. Biggs, as he dashed into the kitchen, where his wife was engaged in the delightful occupation of kneading bread. John Biggs did not stop here; he grabbed his wife around the waist, and, in spite of her struggles and remonstrances, commenced dancing up and down the culinary sanctuary. Round and round he went. Over went the table with the flour and dough. Down went the dish-pan, and crash went the kettle off the stove. "Hurrah, wife, we'll have a picnic," roared Mr. B., heedless of the destruction he had caused. His wife's remonstrances grew louder and louder, as he continued dancing, much against her will. At last, she freed herself by force. "Now, Mr. John Biggs, do you behold the ruption and scatterfusion you have been the cause of.". Mrs. Biggs was extremely fond of using big words, she did not, however, always use them correctly. "Aren't you ashamed on yourself?" she continued, "have you been and gone crazy? Have you no more respect and *admulsion* for your affected spouse, than for to come and go and do it, as you have come and did it?" "O, never mind Sal; don't scold; I've arranged it all. Jones and I. The whole family of Joneses, and the whole family of Biggses are to unite in felicitous union and to have a picnic. Hurrah, wife, we'll have a picnic! Hurrah, wife——" And John Biggs was about to commence his dancing again; but his wife contemptously threw the dish-rag at him. This act so astonished that worthy, that he forgot his intention, and stared in blank surprise at his contemptous spouse. "Wot!" he exclaimed, "don't you want to go on a picnic? Don't you want to—to——" "No I don't. Aren't you aware that Anne Jane does not possess a dress fit for a picnic? Don't you know that William John and Samuel James have not received a novel pair of boots for quite a period of existence? No, of course not. You don't perceive your affected spouse going about the house in a mornin' wrapper, while Mrs. Bontain promulates the streets in a silk dress. Then you come to thy domestic hearth and proposate goin' to a picnic. No, Mr. Biggs, esquire." She always called him Mr. B., esquire. "No picnic for the Biggses. No picnic for us." "Why, my dear, what do you mean? it was only last June that I purchased a dress for you, and one for Anne Jane; besides Sam James and Will John's boots are plenty good enough for a picnic." So saying, Mr. B. turned on his heel, and left the kitchen to his triumphant wife who firmly believed she had gained a decisive victory. In spite of this opinion, two days after she was busily engaged in preparing the eatables for the purposed picnic. The Joneses were to call for the Biggses at 6 A. M. on Thursday. Monday, Tuesday and Wednesday went slowly by. Wednesday night, Mrs. Biggs staid awake. She was sure they would all be late. She knew it, she felt it. At midnight she succeeded in rousing Mr. B., who was snoring vigorously, and informed him that it was six o'clock. "No, my dear; really now, it can't be six; why, I've only got to sleep." "Mr. Biggs, esquire, if there is one predicament I am noted for more than another, it is the faculty of correctly designating the proper time. I know it is six, Mr. Biggs, esquire, and you must get up immediately." Biggs reluctantly scrambled out of bed, rubbing his eyes, and proceeded to don his clothes. He had nearly finished, when he bethought himself of glancing at his watch. He was justly indignant, when he discovered the hands to point at five minutes after twelve. Hastily disrobing himself he again ensconced himself beneath the bed-clothes, muttering something about some people always knowing everything. Whereupon Mrs. B. took the opportunity to lecture him for half an hour on the "irreverent embodiment of the sterner sex." An hour passed slowly away; again Mrs. B. was sure it was six o'clock, again Mr. B. was certain it wasn't, again Mr. B. had to crawl reluctantly out, again Mr. B. looked at the watch, and again he triumphantly declared Mrs. B. to be mistaken. So it went on from hour to hour, till the fated five o'clock arrived. Then there was bustle in the house of the Biggses. Mrs. B. was sure they had forgotten something. Mr. B. busied himself in doing everything. Will John had his hand in every basket. Anne Jane occupied herself in taking his fingers out again. Sam James followed his mother, plying her with question after question. A quarter before six saw the large hamper and the two smaller baskets on the sidewalk, backed by the whole Biggs family. "My, what detained the Joneses so long with the vehicle. They must have broke down. I know something has happened," asserted Mrs. B., when ten minutes had passed. The other five dragged slowly away, then, with a terrible rattle, and cracking of whips, and barking of dogs, and shouts of children, and cries of neighbors, and hurrahs of Mr. Biggs, the wagon turned the corner and Mr. Jones red face shouted out, "hall haboard for the picnic."

"Hurrah," replied Mr. Biggs. Mr. B. always said "hurrah" on all occasions. "How is the equilibrium of your constitution?" inquired Mrs. B. Soon the hamper was aboard. Mr. and Mrs. Jones and Mrs. Biggs filled one seat. Biggs, Anne Jane and the two Miss Jones held another, Leander Jones, Will John and Sam James occupied a third. "Hall ready?" cried Mr. J. "Hurrah," replied Mr. B., touching up the horses and away they went. "Hurrah," again shouted Biggs. "Mr. Biggs, esquire, stop thot hilarous manuer of gesticulation," entreated Mrs. Biggs. "O let him be," remonstrated Mrs. Jones. At this moment Mr. J. dived suddenly underneath the seat, and brought out a large, black bottle. "Here Biggs," he cried, raising the bottle, "here's something to cheer us up. Take a whiffle." Mr. B. applied the mouth to his lips and took quite a respectable whiffle. Jones followed suit; but the ladies declined.

On they went leaving the city slowly behind. Now they were out in the open fields. As yet they had seen no place suitable for their picnic grounds. "There's ha place," triumphantly shouted Mrs. Jones, as she caught sight of two little scrub-trees in the distance. The rest of the party objected, however, they wanted, as Mrs. Biggs aptly said, "something a little more umbrageous." Along the road the wagon went, around corners, on farther and farther. The sun was up pretty high now. Everybody was hungry. In the excitement, the Joneses and the Biggses had neglected to partake of the necessary meal of breakfast. At this moment, Mrs. Biggs caught sight of Will John and Sam James as they were in the act of repeating a depredation on the large hamper of eatables. What was everybody's horror to learn that the best pie, the pie which Mrs. Biggs had spent the most time on, the pie, in the making of which she had most exerted herself, was all gone. The young villains had consumed it every bit. Mrs. Biggs boxed their ears, and they set up quite a respectable boohoo. Just then a cry from the two Miss Jones attracted everybody's attention. The wagon had just turned a corner, and here was a fit spot. "What a lovely spot," said the Joneses in chorus. "How romantic! How poetic! How secluded! How *awfully* good!"

A small stream ran between two large oak trees, that threw a delightful shade around. The grass looked fresh and green. The shade appeared inviting. The water was clear and limpid. The vote of the party being taken, it was decided to stop here. Accordingly, out jumped everybody. Out came the hampers. Out came the baskets. Mr. B. and Mr. J. selected a spot. Soon the cloth was laid. Soon everything was on it. Soon they clustered around it. Mrs. Biggs and Mrs. Jones held he principal place among the eatables, but heir husbands occupied the position of priority midst the bottles. The two Miss Jones and Anne Jane sat carefully down on one side, while the noisy young Bigges and Leander Jones were arranged on the other. "Hurrah," shouted John Biggs Sr., "pass the pickles." "Here's your health mam," he roared as he took a bite of pickle and quaffed a large glass of XX Stout. Each one was to give a toast. Mr. Jones followed next.

"Here's looking' hat ye Mrs. hand Miss Biggs, hand young Biggses."

"Vel Mr. B. hi 'opes has ve vill 'ave menny 'appy hoccasions like tho present hun," toasted Mrs. Jones.

Mrs. B. could not resist the temptation to fire off her big words, and to close with a scrap of original poetry. She commenced as follows:

"This glorious and enervating predicament is astronomistioated by me with exceeding circumlocution. I sincerely and devoutedly desire that when the novel year shall have cast its beaming beams——" "Pass the san'wiges," roared Sam James. "Hush," excitedly whispered everyone present. "Well, I wants the san'wiges," remonstrated Sam James. They were passed. Mrs. B. proceeded, "As I was remarkin' when it shall have perforated its beaming beams in juxtaposition to this felicitous event. I hope—I hope—I sincerely desire to—to be present.

Throng the perfumed atmospheric air,
Through the enlightened waters there.
Through these grandiloquent oaks majestic,
We are delighted with our picnic."

"Hurrah roared Mr. Biggs. "How nice; How extremely beautiful!" murmured the two Miss Jones. What ha sweet sentimen'" exclaimed Mrs. Jones. "Pass the cheese," shouted Mr. J.

The eldest Miss Jones had just come from boarding-school, and toasted as follows. "It is with much palpitation that I ascend to address myself to this assemblage present; but, as the poet has ably expressed it, 'needs must when somebody drives.' I hope the revolving planets will be able *in compor mentis* to gaze composedly on us at this same time next year."

"Very good. Hurrah!" exclaimed Mr. Biggs. But Mrs. B. was a little bit jealous, as she imagined the last toaster was "forcibly engulating her peculiar proposement." The remainder of the party asked to be excused from their part. Mr. Jones struggled to his feet, to deliver a second toast. "Ladies hand geman, ladies and geman, young ladies hand geman on this hoccasion—hon this hoc—hon han hoccasion like this—'Ere's your very good ealth."

"Pass the cake," roared the whole boys' side, in one breath. "Pickles, pickles, pickles," shouted Mr. Biggs. "Please to be so kind, condesceading and obliging to expediate the movements of the saudwichbs in this direction," simpered the eldest Miss Jones.

"Oh! Mr. Riggs, esquire," screamed Mrs. B., as that gentleman sat down in a custard pie. "I really beg your pardon my dear madam," he exclaimed as he jumped up, putting his foot in a second pie. "There! there you go again. Goodness me all my pies are going. I shall faint, I know I shall. Biggs, esquire, you're a a brute—a good-for-nothing brute." Mr. Jones caught the pie-smasher by the coat-tails and attempted to make him sit down. Biggs' foot slipped, and crash he went at full length over the eatables. Squash sounded sausages, pickles, cheese, cakes, custard pies, cups, XX Stout, and a bottle of claret. Mrs. B. screamed and fainted. Tho two miss Jones were knocked speechless. Mrs. J. didn't know what to do. Will John roared. Sam James cried. Leander Jones attempted to drag Mr. Biggs off the table. At last, Jones the elder, caught him by the feet, and with one pull jerked him away back. What a sight. Everything was ruined. Nothing was left in the basket. No more eating. Everybody was hungry. They hadn't half enough. What should they do. The pepper had collided with the jelly. The mustard had scattered over the custard. The salt had seasoned the large pie. The porter had soaked all over the cake. The claret had stained the table-cloth. The pickles had, with great presence of mind, jumped into a bowl of milk. The pies had perished nobly. Everything was as flat as a pan-cake. All was spoilt. Naught was saved. What should they do? By this time Mrs. Biggs came suddenly to her senses. A bright thought struck her. "Mr. B., esquire," she said, "you unmanly brute, take that basket, and go over to that house, away down there, and purchase enough condiments for the assemblage." With a humble air Mr. B. scrambled to his feet, took the basket, and started slowly off. Mr. Jones wished to accompany him; but Mrs. Biggs forbade.

The house was about two miles off on the other side of a large orchard. Scrambling over the fence, Biggs walked pensively on. The sun was near the zenith. It sent down its beams with fearful heat. The portly Bigga waddled on leaving a pool of perspiration at every step. Soon he reached the house. In answer to his call a fat, buxom, country-wife appeared, and in answer to his inquiry for "vittles," said, "she had eggs and bacon', and milk and bread, and apples." "O anything will do us, no matter what it is. Anything to fill up on." The basket was soon filled to overflowing. He paid her the necessary amount, and started for camp. "Look out for the bull near the bottom of the orchard," she shouted after him. "All right," he answered back. What did he care for bulls. He was a new man now. He had a basket full of provisions. (Raw bacon, raw eggs and stale bread.) He was equal in fair fight to a dozen bulls. with that basket near him. How he would lighten the picnicers' hearts, when he got to camp. He, Mr. John Biggs, of the city, what did he care for any bovine animal. As he was walking on, musing thus, he showed himself to possess a particular regard for that horned beast, for the next moment he heard a loud bellowing and a terrible thundering. "Great heavens! what's that?" he exclaimed giving an involuntary jump, knocking the basket against a tree, which had the effect of breaking every egg. How they streamed out of the basket. "Holy Jerusalem!" he yelled giving a second jump. He looked behind. He glanced back. He saw a cloud of dust making with all speed straight for him. He determined to fly, and go he did. Away with all his might he flew. On the bull came thundering. Biggs still clutched the basket. How he made his heels fly. But in vain, the enraged animal was gaining on him every bound. What should he do? "Oh! poor Mrs. Biggs," he yelled, "and all the little Biggses; what will become of them. I'm a gone man. Hang old Jones and his picnic! I've been deluded and wheedled in this. Poor Biggs you——Oh! Oh! Lord Oh!" he cried as the bull nearly caught him with his horns. Bang, crash went the basket, scattering apples, bread, bacon and broken egg shells around everywhere. The bull stopped an instant. Now was Biggs only chance. Up a tree he must go, and up a tree he went, with all the haste possible. The tree was a small one; Biggs weighed two hundred. How that tree bent and nodded. He was sure it would break. Swing, swing, up and down went Biggs. He was nearly frightened to death. Down, down, withiu an inch or two of those hated horns, then up with a swing and down again. My; how hot the sun was. Oh! what misery he was in. Heaven help him, he was to be the prey of an enraged bull at last. Then his bruised, mangled an torn body would be brought home to his bereaved and sorrowing family. He saw how they all would look—every one. For two mortal century hours that bull staid there; then left as suddenly as had come. But Biggs was afrsid to come down. It might be a ruse on the part of the despicable animal. He sat swinging on that tree for another half an hour. In the meantime the owner of the field had caught sight of Biggs in his fruit tree, and had concluded that Biggs was robbing his orchard. Seizing a gun loaded with salt and pepper, he crept slowly and cautiously loward the unconscious Biggs. The farmer got very near. B. was about to descend, when the owner catching a good sight of that worthy's rear, banged away. "Jerusalem! My God!" roared Biggs, slap head-over-heels he went out of the tree. Chuck! he came on the ground. He roared, he shouted, he kicked, he swore; he swore over again; in fact, he did everything he could do. "Ahah!" exclaimed the old farmer, "you skunk, you, I've cotched you stealin' of my apples ch?" "Oh! no, good Mr. farmer," remonstrated Biggs. holding on to his seat, and speaking with difficulty, "I assure you sir I hadn't the smallest design against your fruit." "You lie!" roared the Granger. "You're a brute. You're no gentleman," retorted the irascate Biggs. There is no telling what this would have come to, the farmer was about to salt and pepper Biggs once, when up came all the Joneses and all the Biggses. Mutual explanations followed. All was explained. As they stood there in a crowd, talking together, suddenly the farmer roared, here comes the bull. Git." Everybody got for all they knew how. How they ran. The Biggses and the Jones ruuning for dear life. How they screamed and screeched. It was well the fence was so near, or the few hindmost among whom was Biggs, might have suffered. Such a scrambling over the fence; and such congratulations after each one was over; and such a scolding as Mr. B. underwent.

That night the Biggses and Jones reached home tired, worn-out, hungry and disgusted. They all entered into a solemn vow never to go on another, or even encourage a picnic. Picnics were, as Mrs. Biggs ably expressed it, "an ingenious predicament of concentrated and sequestered embodiment of indignation and necessitous cousternation." So ended the Biggs' picnic.

A Woman of the Old School.

B. T. Taylor gives the following pen and ink sketch in a late camp meetings letters:—"And there is a mother in Israel cushioned as to her chin, and a face as pleasant and hospitable as an open fire on Thanksgiving day. At $100 a pound—and nothing could be cheaper—she would be worth $20,000, for she weighs 200. Her hat is a "bunnet." It shoots out a little in front, like a young scoop shovel. It curls up a little behind like a young wren. She wears about as many hoops as a stone jar. But she indulges in a petticoat or two "gathered" as she will tell you, and puckered with the pull of a string as they used to wind a clock. A cape with fringo or adornment has fallen upon her like the mantle of the prophet, and envelops her shoulders and her arms even to the elbows. If it were a little peaked and scalloped, it would be a vandyke, but it is as unmistakably a cape as the Cape of Good Hope. Her hands are in mitts, a flimsy suggestion of gloves without any fingers. She would as soon die herself.

That face of hers beams with goodness and good will. You want her to be your aunt as as she cannot be your mother. You would be glad to set by her kitchen fire and hear her talk, and she would be precisely as glad to have you. Her easy cushiony way of walking suggests a gentle old chaise with the top up. She is enjoying every minute of the time. She is a Methodist of the old school, and needs no assurance from you that she will go "Heaven. She has it from better authority."

AMONG the ancient Germans it was death for any woman to marry before she was twenty years old. By the laws of Lycurgus, special attention was paid to the physical education, and no delicate or sick women were allowed to marry.

MANY fashionable young ladies in New York are said to be suffering with abscesses on their feet caused by the high French boot-heels now in vogue.

Management of Infants.

Let all who have the care of infantile humanity understand the business of infants is to grow. To grow normally they must be kept in a healthy condition. They must breath at all times, sleep all they are inclined to, and eat regularly They mnst have proper clothing and due exercise, but this is generally self-regulating. Never mistake infants for toys or playthings. Never employ them to amuse yourself or entertain company. Never exhibit them for the purpose of reflecting the inherited charms and qualities of which the parents are proud—perhaps justly. In their own good time and manner, if they are well nourished and well rested, they will msnifest all the virtues they possess without prompting.

Recollect that character, as well as flesh, may be made or nnmade in fancy. The seeds of virtue or of vice may be sown by a word, a look, a smile, or a blow. Infants are as impressible as the plastic clay, and may be essily molded into vessels of honor or dishonor. If born with a sonnd organization, and normally trained and educated, they will never show any vicious disposition, except when abused, and then the "ugliness" will be merely the manifestation of the first law of all vital organism—self-preservation.

Everytbing that lives must defeud itself or die. This is true not only of every living organism as a whole but of each individual, organ, structure, and tissue. It is true of the brain, the muscle, the nerve, the bones, and even of the white corpuscles of the blood. And it is a very importsnt truth—a truth whioh, when fully realized, must greatly modify, if not revolutionize, the manner in which civilized nations train and educate their children.

This law of self-preservation is manifested when the gorged infant vomits the food it can not digest, when it sneezes because of dust or air, when it purges because of irritating mstter or cathartic medicine in its bowels, and when it collapses into stupor from an over-dose of "soothing syrnp." The ssme law is manifested when the infant is attacked by mental impressions, angry words or deeds, harsh handling, or harsher looks, and what is called "punishment," whether it be shaking, spanking, cuffing, or whipping, or any other mode of inflioting pain, necessarily put the infant on its defense. And if it grows up in this warfare sgainst adverse influences, the ill-temper and vengeful pssions, thus developed and cultivated will "grow with its growth, and strengthen with its strength." They will become its "second nature."

And now the great lesson deducible from these considerations is, never punish nor correct a child in anger. If you can not keep your own temper you are not fit to govern a child. Never punish a child at all; but correct, instruct, advise, always. Civilizatiou ougbt to learn a lesson from ssvage life on this subject. When the Indian child does a naughty thing, parents, instead of whipping it, take it into the woods by itself and give it a good talking to.

Children should never be scolded at all, nor reprimanded in company. If necessary to admonish or correct before folks do it in mild language, and with gentle manner, rather suggesting the right than condemning the wrong. Nothing tends more to sour the desposition, alienate the affections, and harden the heart, than wounding the sensibilities of young children by reproaches or criminations in presence of company. Many parents lose all governmental influence, all control of their children in this manner—the more they scold, fret, pound, or whip, the more undutiful the child becomes.

An Unclean Fashion.—The style of wearing the hair tied in a knot or lump low down on the neck, which a few would-be fashionable ladies have late adapted, may nltimately become popular with a portion of the fair sex (that portion, we may add in parenthesis, that always stands ready to give np a neat and appropriate mode for anything that is new and outre, no matter how unclean and unbecoming it may be.) But it will never find much favor with men. For, oddly as it may sound, men nowadays have a keener sense of fitness of things in the matter of dress, snd more exacting rules touching neatness and cleanliness of person and attire, than most women. Fancy a fashionable gentleman for instance, with a mass of greasy, filthy false hair hanging ouer and soiling beyond the limit of decency the collar and shoulders of a two hundred dollar coat—snpposing, for the sake of illustration, that it would be possible for him to find one costing so much money. Or with his trowsers legs trailing in the dust and mud making his hosiery and underwear so abominably wet and dirty as to be at once uncomfortable, unhealthy and indecent. No man in his senses would do or think of doing either of these things; yet leaders of fashion among women and their blind followers do more! And, what is more, they actually seem to enjoy it.

Good Hints.—Remember, boys, before you are twenty you must establish a character that will serve yon all your life. As habits grow stronger every year, any turning into a new path is difficult; therefore it is often harder to unlearn than to learn; and on this account a famous flute-player used to charge double price to those pupils who had been tanght by a poor master. Try and reform a lazy, unthrifty, or drnnken person, and in most cases you fail; for the bad habit, whatever it is, has so wound itself into the life that it cannot be uprooted. The best habit of all is the habit of care in the formation of good habits.

Young Folks' Column.

Boys Wanted.

Boys of spirit, boys of will.
Boys of muscle, brain, and power,
Fit to cope with anything—
These are wanted every hour.

Not the weak and whining drones,
That all trouble magnify—
Not the watchword of "I can't,"
But the nobler one, "I'll try."

Do what'er you have to do
With a true and earnest zeal;
Bend your sinews to the task—
Put your shoulders to the wheel.

Though your duty may be hard,
Look not on it as an ill;
If it bo an honest task,
Do it with an honest will.

At the anvil or the farm,
Wheresoever you may be—
From your future efforts, boys,
Comes a nation's destiny.

The Tree That Never Dies.

"Mary," said George, "next summer I will not have a garden. Our pretty tree is dying, and I won't love another tree as long as I live; I will have a bird next summer, and thst will stay all winter."

"George don't you remember my beautiful canary? It died in the middle of summer, and we planted bright flowers in the ground where we buried it. My bird did not live as long as the tree."

"Well, I don't see as we can love anything. Dear little brother died before the bird, and I loved him better than any bird or tree, or flower."

They paused. During the school hour George and Mary had almost forgotten that their tree was dying, but at eveniug, as they drew their chairs to the table where their mother was sitting snd began to arrange the seeds they had been gathering, tho remembrance of the tree came up beforc them.

"Mother," said Mary, "you may give these seeds to cousin John; I never want another garden."

"Yes," added George, pushing the papers in which he had carefully folded them towards his mother, "you may give them. If I could find some seeds of a tree that would never die, I should like then to hsve a garden."

"Yes, George, I have read of a garden where the trees never die."

"A real garden, mother!"

"Yes, my son. In the middle of the garden, I havo been told, there runs a pure river of water, clear as crystals, and on each side of the river is the tree of life—a tree that never fades. That is the Gsrden of Heaven. There will be no death—no fading there. Let your treasure be in the tree of life, and you will hsve something to which your hearts can cling without fear and without disappointment. Love the Savior and he will prepare you to dwell in those pastures and beside those still waters."

The Kiss That Made a Painter.—A little reader of the *Children's Hour*, who found in the first number this sentence: "The great artist, Benjamin West, said, 'A kiss from my mother made me a painter,'" wsnts to know what it means. So we will give the anecdote referred to: "A little boy named Benjamiu West, living in Pennsylvania, was set to watch a baby asleep in a cradle. He looked at it kindly, and was pleased to see it smile in its sleep. He wished he could draw a picture of the baby; and, seeing a piece of paper on the table, with pen and ink, he tried what he could do. When his mother came in, he begged her not to be angry with him for touching the pen, ink aud paper; and then he showed her the picture he had made. His mother saw the baby's likeness, and was so much pleased that she kissed her little boy. Then he said, if she liked it, he would make a picture of some flowers she held in her hand; and so he went on from that time, trying to do better and better, until he became one of the best painters in the world."

Honesty Rewarded.—A little boy in St. Louis fouud a large pocket-book in the street. It contained $1,200 in bank notes and valuable papers. He restored the whole to the owner, who was so touched with the display of honesty that he took him to a clothing storo and dressed him out from top to toe in a bran new suit. Then proceediug to a jewelry store, he purchased a good silver watch, upon which he directed to be engraved these words: "Robt. Thomas to Little Johnny Moore, St. Louis, September 3d, 1859. Honesty is the best policy." Not even content with this, he placed in a neat bead purse, five twenty dollar gold pieces, which he directed the lad to give his mother.

Evil Company.—"Dear father," said the gentle Eulalie to him one day, when he forbade her, in company with her brother to visit the volatile Lucinda, "you must think us very childish, if you imagine that we should be exposed to danger by it." The father took a dead coal from the fire, and reached it to her, saying: "It will not burn you, my child; take it." Eulalie did so, and beheld her delicate white hand was soiled and blackened, and, as it chanced, her white dress also. "We cannot be too careful in handling coals," said Eulalie, in vexation. "Yes truly," said her father, "you see my child, that coals, even if they do not burn, blacken. So it is with the company of the vicious."

Natural Curiosities in the Sierra.

Several natural phenomena have lately been discovered in the Sierra Nevada mountains, which will add to the attractions slready existing. Prominent among them is the recent volcano discovered by Dr. Harkness in Plumas county, a description of which is given in another column. This is particularly interesting as the only one discovered here bearing authentic marks of having been in eruption within the last 20 or 30 years. "Recent volcanoes" are plenty enough, for there are hundreds of places to be fonnd where the craters can be seen and the lava looks fresh, and recent. Still the presenoe of large trees grassy slopes, etc., show that many yesrs have passed since volcanic activity prevailed. In the instance mentioned Dr. Harkness details minutely the evidences which he found, to prove thst the volcano was very recently active. The boiling lake he refers to is also an object of interest; but we are sfraid that if there was much of a population in the vicinity, some enterprising Chinamen would tske possession and start their wash-honses on its borders.

Another quite remarkable phenomenon, which we do not think has been before described, is sn immense natural tunnel through the mountains in the southern part of Sierra county. During a recent trip in that vicinity Charles W. Hendel, the well known Deputy U. S. Mineral Surveyor of the county, Mr. Gibson, of Scales Diggings, and W. A. Skidmore, of this city, Deputy of the U.S. Miuing Commissioner, observed a nstural tunnel of great dimeusions through a high crest of the Sierra, appareutly near the boundary line of Sierra and Plumas county. Mr. Skidmore tells us thst his point of observation was on the Forest City and Downieville trail, 1¼ miles north of Forest City, and about one mile south of the old miniug camp of Rock creek. While scanning with a field glass a high and precipitous range on the verge of the horizon, distsut 12 or 15 miles to the northeast of their position, Mr. Skidmore distinctly observed a tunnel running through the ridge. His companions readily observed it with the naked eye. By means of an aneroid barometer and leveling glass they estimated the altitude of the range to be about 6,500 feet above sea level, and the tunnel about 500 or 600 feet lower than the summit of the range.

Between them and the range lsy the great gorge of the North Yuba, 3,000 ft. in depth. North of this gorge they could distinctly trace the various tributaries of the North Yuba. The tunnel was situated near the head of the principal of these streams, (probably Rattlesnake creek), and about 12 or 15 miles east of Fir Cap mountain. The site of the tunnel was apparently inaccessible from the south side, or North Yuba slope of the range. From their point of observation, although distant only 12 or 15 miles in an sir line, it would have required a journey of two or three days to resch it. If explored it must be approached from Fir Cap mountaiu on the west or from the vicinity of Gold lake on the east, by following the trend of the range.

The range through which the tuunel passes is of volcanic origin, with precipitous sides. Near the location of the tunnel the range falls off in a sheer precipice, at least 1,000 feet in depth. From the stsndpoint of the gentlemen referred to, the tunnel, Mr. Skidmore says, seemed as large ss sn ordinsry railroad tunnel. Therefore it could not have been less, making allowance for distsnce, than 100 feet in higbt. They had no data for estimating its length. Mr. Hendel had several years previously observed the same tunnel from a high range in Plumas county, his view being the north slope of the range while this time it was observed from the south. It is hardly probable that this remarkable tunnel will remain long unexplored.

On the same trip in which Dr. Harkness found the extinct volcano above referred to he found a lake which had been previously visited only by a few hunters. It is situated in the midst of mountains of very high altitude which flank Warner's valley on the north aud Big Meadow upon the west. The lake is on a general outline of triangular shape and the Dr. estimated its two largest diameters at one mile and three quarters, the whole size being nearly that of Donner lake. The barometer registered an altitude of 7,330 feet above sea level, which makes, we believe, the most elevated of any considerable body of water in the United States. No signs of life were fouud except on the northern shore, where the doctor discovered a colony of red Cyclops. The waters in August were intensely cold and of a deep blue color. The mountains rise abruptly from the water, and are of volcanic origin; one on the sonth which the doctor ascended had three craters upon and near its summit. The surplus wator finds an outlet from the southern extremity into Warner valley over a steep declivity of over 2,000 feet. At this outlet several varieties of fresh water algæ were found. As this lake was comparatively unknown Dr. Harknessnamed it "Lake Livingstone," but the California Academy of Sciences, to which the doctor communicated these facts, have taken tho liberty of calling it "Lake Harkness."

Some of our interior counties have never been thoroughly exp'ored, and it is to be hoped that discoveries of the nature spoken of above will encourage others to make explorations near homo, before they attempt to hunt up wonders in other countries.

Domestic Economy.

How to Cook a Beefsteak.—Some time since a complete encyclopædia of useful knowledge in humsn form became an inmate of the family. When this learned gnest came among them he was constituted as an oracle in many csses, and was asked one morning "Wonld he tell or show them a better way to cook the steak for breakfast?" He took the thin, long-handled frying psn from the nail, and putting it on the stove heated it quite hot. In this he put the piece of steak previously pounded, but to their surprise did not put a particle of butter in the frying-pan and did not salt his steak. He allowed the steak to merely glaze over and then turned it quickly to the other side, turning it several times in this manner until the steak wss done. Four minutes were not employed on the operation, but a juicier steak wss never eaten. It wss, when done laid on the platter, previously warmed, and wss buttered and salted and set a moment in a hot oven. Allowing the steak to heat but a moment on each side helped it to retain all its sweet juices, and putting the salt on at the last moment after it was on the platter drew out its juices.

To Make Superior Mince-Meat.—A Boston lady sends for publication in the *Germantown Teleyraph* the following receipt for msking mince-meat, which is now in season. She informs us that she has tried vsrious modes but finds the following to be the best: Take seven pounds of currants, well-picked over and cleaned; of finely-chopped beef-suet, the lean of a sirloin of beef minced raw, and finely chopped apples, (the Golden pippin or Smith's cider preferred,) each three and a-hslf pounds; citron, lemon-peel snd orange-peel cut small, each half a pound; fine moist sugar, two ponnds mixed spice, an ounce; mix well aud put in a deep pan. Mix a bottle of brandy and white wine, the juice of the lemous and oranges thst have been grated together iu a bssin; pour half over and press down tight with the hand, then sdd the other half and cover closely. This will keep a whole year or longer, and is frequently made one season to keep over for the next.

Color in the Kitchen.—Alum in Bread.—In a recent work, F. R. Eaton, condemns the "finest white bread" so much in request in modern times, ss not merely deficient in gluten and in the natural salts of wheat, but as tempting the baker to use slum. It is remarksble that not a few of the most dangerous adulterations spring from introducing the idea of color into our kitchens snd our dining rooms. Alnm, the author considers, tends especially to produce constipstion. The alum in bresd, however, is always accompanied by an excess of the phosphate of potash, present in tho wheat. Hence we may infer that double decomposition will ensue during digestion, the alumina combining with the phosphoric acid to form the insoluble phosphate of alumina. This, then, is our opinion, the great objection to the use of alumised bread, that a considerable portion of the phosphoric acid in our food is thus rendered unavailable.

A New Article of Diet.—A writer in the Philadelphia *Medical Times* states that he has, by way of experiment, eaten small quantities of the transparent jelly of the ordinary jelly-fish as raw oysters are eateu, and found it not unpalatable; aud the London *Lancet* says thst at a luncheon given by one of the directors of the Brighton Aquarium, the *piece de resistance* was boiled octopus, or "devil-fish," which was pronouuced to be very patatable, resembling boiled lobster and skate.

Should such diet become popular, its abundance on the Pacific coast would place it within reach of all. Which of our hotels or restaurants will be the first to add to their bill of fare "boiled devil-fish?"

A Nice Cream Pie.—One cup white sugar, two-thirds of a cup of cream, two eggs, two cups flour, one teaspoonful cream-of-tartar, half teaspoonful soda. This will make soven thin cakes, between which spread the cream.

For the cream, take half a pint of milk, put into a basin of hot water on the stove, beat one egg with white sugar enough to sweeten and add two tablespoonsful corn staroh; stir this into the milk when hot, snd flavor with vanilla or lemon. When cool put between the cakes.

Hop Yeast for Warm Weather.—Two quarts water, twelve potatoes, a good handful of hops; press the water from the bag of hops when the potatoes are done, and mash fine; add one teacupful of white sugar, a handful of salt, tablespoonfnl of ginger; strain through a colander and boil a few minutes; add yeast to raise whou cool; no soda is required to make this bread. This yeast will keep in hot weather until it is used.

Digestive Biscuits.—Mix the flour or wheatmeal in as small a quantity of water as will cause it, after much kneading or rolling, to adhere; then roll, cut into biscuits about half an inch thick and three inches square, and bake well in a quick oven. The unfermented bread is made in a similar way, except being formed in rolls about an inch thick, cut deeply across, and baked in a moderately hot oven.—*Vegetarian Cookery.*

Grandmother's Gingerbread.—Cup and a half of molasses, cup rich sour cream, teaspoon saleratus, tablespoonful ginger; mix a little stiff.

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SAN FRANCISCO:

Saturday, November 28, 1874.

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NO SUSPENSION.—We are happy to announco that we havo been able to fulfill our promise of last week, nsmely, to issue our paper a day in advance of the usual time; consequently, all parties connected with it were able to keep Thanksgiving day in a suitable manner. This has been done by the united efforts of all hands and brains engaged in the work. If the readers of the PRESS of Thanksgiving week discover in it any evidence of haste, they will find what we have not been able to see, for we do not feel called upon to ask for any allowances on this occasion, feeling our usual pride in the contents of our paper.

We shall pursne the same course in connection with the PRESS of Christmas and New Year's weeks. So that our subscribers shall receivo their paper, with the other good things that the winter holidays bring, and the pleasure of reading them shall not be marred by the thonght that thoso who "get it up," were deprived of their holiday in performing the task. Possessing proper facilities, with the requisite ability and willing hands, all that is needed is a little extra endeavor to accomplish the task.

What Shall We do with our Cotton?

That California, during the few seasons in which experiments in cotton-growing have been conducted here, should effectually prove that she can successfully compete with any cotton-growing country, both in the quality and cheapness of this material, is a matter which can scarcely be considered "without our special wonder." Another matter somewhat surprising, is the fact that one of the pioneer cotton growers of the State, Col. John L. Strong, who has probably contributed more than any other man to the successful production of the raw material, has now taken the front in advocating the establishing of cotton mannfactories in California, to convert the product into all the fabrics for which it is available. The San Francisco *Call*, of November 15, contains an exhaustive article on this subject, written by Col. Strong, of which wo propose to give a brief synopsis.

Elaborate and convincing statements are given, showing what cotton manufacturing has done for England and the United States. He says: "It is only 73 years since the British export trado in cotton goods was covered by the small snm of $15,000,000; and in 1871, 71 years after, the products of British looms from raw cotton, reached the almost fabulous sum of $493,476,880. In 1787, the first cotton factory was built in the United States; and in 1869, 72 years later, Hon. David A. Wells, Special Commissioner of the Revenue, reported tho value of goods produced $184,000,000.

It is stated that the cost of the raw material consumed in England during the calendar year 1871 was $197,556,120, and that tho increased value imparted by mannfacture was $265,617,790, or about 130 per cent. Mr. Wells states the value of raw material consumed by American mills in 1869 at $112,500,000, and the increased value imparted by manufacturo $71,500,000. It is proper to remark that the results of the year 1871 were predicated upon cotton at a cost of 16¼ cents to the British manufacturer, a consequence of the war between Prussia and France, while, in the case of American manufacturers in 1869, the results were predicated upon cotton at a cost of 25 cents per pound.

Similar and even greater benefits, it is claimed, may be secured to California by converting cotton into manufactured articles. After presenting some carefully prepared tables exhibiting the profits derived by Great Britain from her cotton manufactories, the writer brings the matter a little nearer home, as follows:

An equally impressive illustration of the value of manufacturing industry, as a contributor to prosperity and powers of communities, is found in the progress of cotton manufacture in the New England States. Without entering into any elaborate consideration of that progress, we may understand its results from the following table compiled from a report to the Legislature of Massachusetts upon the condition of her factory operatives.

Table showing capital, annual average dividends and market value of the stock in the principal cotton factories, from 1862 to 1869.

Name of Mills.	Average Dividends.	Capital.	Value of Stock. Mkt. val.	Par val.
Chicopee.....	26½ per cent.	$4,200,000	$ 325	$ 100
Merrimac	15⅓ " "	2,500,000	1,700	1,000
Middlesex.....	22½ " "	750,000	100	100
Naumkeag	19⅗ " "	1,500,000	167	100
Pacific.....	21¾ " "	2,500,000	2 200	1,000
Salisbury.....	22½ " "	2,000,000	360	100

Mr. Strong is not alone, by any means, in the persistent, far-seeing effort to work up this material in the places where it is grown. The true friends of the cotton growing States of the south are using their best efforts to establishing cotton factories at home. The following extract from an article written by ex-Governor Patton of Alabama, and published in *The South*, April, 1873, is used by Mr. Strong to fortify his position.

"The city of Lowell, Massachusetts, was founded in 1822. It now contains cotton mills with an aggregate capital of $13.600,000. They are operated by 13,500 employes, mostly women, girls and boys. These establishments havo 448,180 spindles, and 12,160 looms. They consume about 65,000 bales of cotton annustly. This cotton, at $80 per bale, is worth $5,200,000, and by tho labor of the 13,500 operatives its value is fully trebled; that is, when it leaves their hands it is worth at least $15,000,000. Now, let it be observed that this raw cotton, worth bnt $5,200,000, required for its production something like 22,000 laborers' strong hands. This statement will serve to show the great disparity in the value of labor employed in raising cotton and manufacturing it into yarns and cloths."

Mr. Gillman, of Texas, is also quoted, who, in the course of a long and able article urging the erection of cotton factories in that State, speaks as follows:

"There are general expenses incident to manufacturing cotton which bear much heavier upon small than upon large capital engaged in it; hence, it is more profitable to operate with from $200,000 to $1,000,000; and for the comparison to be made, I will suppose an investment of $200,000 at some point in Texas, near the railroad, and assnme that as good a mill can be put in operation for that sum, as in Lowell at the present time.

"We have in our favor a mild climate, admitting of cheaper buildings, and such abundance of territory that many land-holders will donate one thousand acres to any company that would locate on their lands, and we have against ns the freight and charges on snch machinery as would of necessity come from abroad. Mechanical and operative labor is as cheap to day in Texas as in the North, and all the building materials requisite for a cotton mill are as cheap here as there, and a large portion of the machinery can be made here, of better quality and as cheap as there; therefore, it is sate to assume that a mill of the same capacity can be put into operation for about the same cost here as there.

"A first-class, fire-proof, brick and iron building, with all the machinery, cottages for operatives, house for agent, store-house, saw and planing mill for preparing lumber, brick, etc., can be completed of the capacity for working up ten bales, or 5,000 pounds of lint cotton per day, from the seed, and working the seed into crude oil ready for market, for $200,000 currency.

"In operating such a mill with seed cotton, the labor of ginning and lapping ready for the cards would be no more than opening, beating and lapping from the bale, as now practised. Therefore, our Texas mill would gain the usual toll of one-tenth for ginning in the purchase of seed cotton.

Acknowledging that our mill, working 3,000 bales annually into cotton fabrics, makes a profit of ten per cent on the $200,000 capital, we have.....	$20,000
Ten per cent. or 300 bales, is made by ginning, which, at $50 per bale is.....	15,000
Bagging and rope, freight, insurance, commissions, press charges, loss of weight and damage, wharfage, brokerages, and weighing, as before stated, $25.50 per bale, 3,000 bales.....	76,500
Net product of oil and oil cake per bale, $32.75 on 3,000 bales.....	98,500
Net profit of Texas mill in one yesr on the investment of $200,000.....	$209,750

"The Lowell mill, of the same cost and capacity—less $100,000 for the oil machinery, and making the same profit on manufacturing the same amount of cotton into tho samo quality of fabrics and getting the same price for them—makes $20,000 only on the investment of $190,000. And why? Simply because they have to pay: First, for ginning the cotton, one-tenth, and the charges of $25.50 per bale in the advanced price of cotton; and second, they lose entirely tho profit from the oil and oil cake of $32.75 per bale.

"Mills in the South, now operating with small investments and purchasing their cotton in the bale, have but little, if any, advantage over foreign mills operating with large investments, whose reduced general expenses are about equivalent to the small portion of charges saved by the Southern mills purchasing cotton in the bale.

"It would be very gratifying to see our own people gather up this wealth in which they are literally wallowing; but, if from any cause or combination of causes, they cannot do it, foreigner's capital most certainly will, sooner or later, for the reason that the local advantages of the cotton-growing region are incapable of transmission to other points."

We will close the review of this able article with a few brief extracts, which bring the matter still nearer home to the producers, manufacturers, and capitalists of California:

"The question comes home to California, just entering upon her career as a producing state, whether, possessing all necessary material within her limits, she will not utilize it in building up that permanent prosperity which characterizes the localities we have been reviewing.

As a manufacturing state she must enter into competition with the established industries of both old England and New England, and her hopes of success must be based upon such economic production of raw material, combined with abundant motive power, and cheap food for operative labor, as will counterbalance the advantages afforded by the long experience and overwhelming capital of her competitors. That she possesses all of these advantages in limitless abundance it is our purpose to show."

"The capitalist of California is content to realize 1½ per cent per month upon his investment, and here is a promise of five. May we not appeal to these gentlemen to relieve us of this vassalage to Europe and New England, which, as producers and importers of staple crops, we must endure forever? Stop, we beseech you, this drain of our life blood away from us; which, in time, will exhaust our vitality and leave us only decay and ruin. To you, gentlemen, it offers no inviting prospect after our destruction. The conditions upon which a continuance of your harvest must rest is our prosperity, not our annihilation. Build factories for us, and let us convert our own products, that we may no longer be subject to the dual action of supply and demand for raw material and manufactured goods, and consequently to the dictatorship of a single market as to price. Free us, through this conversion of raw products, from all depressing influences exerted upon trade, except such as arise from a plethora of manufactured goods. In affording us this relief, you open to us, without restriction, the markets of the world."

THE plains of Los Angelos county are literally covered with wild geese.

"Motley's the Weare."

Whatever the power may be into whose hands the furnishing of sensational incidents for the entertainment of San Franciscans is intrusted, it is evident that the mantle has fallen upon worthy and capable shoulders. No theatrical manager could more judiciously cater to the dramatic appetite of the public. We have our "blood and thunder" tragedies of the most thrilling type; boisterous melodramas, in which no body is hurt but those who deserve to be, and stylish comedies, in which high-toned vice and folly trail their frilled skirts across the stage and increase our distrust in human nature. Still there are complaints here and there, that the programme is incomplete; that while those for whom the darker portion of the performance is provided are almost satiated with what is upon the stage, that portion of the audience who are attracted to the entertainment by wide-mouthed good humor, and simply want something to laugh at, does not get the worth of its money.

There is a conviction, now very generally prevailing that occurrences of the tragic and disgusting type alluded to above, are furnished by contract, for the daily press as sensational items. If such is the fact then the newspaper reading public have the right to demand a greater variety at this daily feast. These enterprising publishers, as contracting parties, should order of the supposed fates something of a humorous character. We do not mean that the funny man of the paper should be brought forward more conspicuously. Oh, no, no; no more of that. That is the most nightmare producing dish at the journalistic feast. What is wanted is langhable incidents, ridiculous situations, practical jokes; anything, in fact, to laugh at. Anything to vary the silent monotony of crime and offensive foolishness. The world is full of fun. Boys and girls—yes, men and women too—pick up lots of live current fun; and if the newspaper is really the mirror of the times, why is it that boistrous mirth cannot see his jolly visage reflected there.

It would be a great relief to the public during the long evenings of the coming winter, if we could have a little to laugh over in our papers; just a trifle, to dispel the gloom and disgust created by perusing the regular series of murders, rapes, swindles, etc. California is becoming prematurely gray, and its stomach refuses to perform its functions; and this, we apprehend, is attributable to the mental than to the physical diet upon which it subsists. It is evident that something must be done. Here is a chance for journalism to manifest its devotedness to the wellfare of the community. But, in its efforts to make California laugh, it should not, we repeat, depend upon the regular journalistic clown, with his orthogrsphical contortions, or anything of that kind. A few more such straws will break the patient camels back.

Nuts in the Foothills.

Among the products for growing which tho foothills of California are proving themselves peculiarly adapted are a variety of nuts. Some of the correspondents of the PRESS have manifested a good deal of interest on the subject of chestnuts in particular; and we are pleased to learn, through the Nevada *Transcript*, that a French gardener at Nevada City is now exhibiting some romarkably fine chestnuts grown on his place. The trees upon which these nuts were grown are only four years old, and were planted by Mr. Leme, the gardener referred to; ho having obtained the seed from France. They were planted in ordinary ground, and have received scarcely any attention since; but they are growing very thriftily and are now heavily loaded with fruit. The burrs contain from three to seven large-sized nuts, some of which are larger than an ordinary plum.

The *Transcript* notes two other varieties of nuts which have been proved successful in the same locality, Nevada City. In the yard of one of the citizens, N. P. Brown, is a black walnut tree about six inches in diameter, which has produced two bushels of large nuts the present year. The tree was set out as an ornamental shade tree and has received no cultivation. The almond trees in the orchard of Josiah Rogers of the same place were also heavily loaded with fruit.

We have eaten of the vegetables grown by Mr. Leme, and can certify to their excellence; we are also ready to certify that the apples of Nevada county are unsurpassed by any that reach this market; and we congratulate our former neighbors on their success in growing chestnuts, almonds and walnuts. The mineral wealth of Nevada county has, in a degree, blinded the eyes of its inhabitants in regard to its agricultural resources; but the scales are evidently being removed from their eyes; and it is safe to predict that those red foothills will furnish many good things for this market; apples, nuts and wino being among the number.

On the Wing.

Our excellent friend and esteemed contributor, W. A. Sanders, is still "here, there and everywhere," on his good mission to advance the interests of raisin culture, which, by the way, is scarcely second to any of the enterprises of the day in its importance to California; and among other favors which the RURAL PRESS has received at his hand, we give our readers to-day some notes of observation taken by our friend during a recent trip through a portion of the state:

From King's river we went through the region of country east of Tulare lake. Here is much land similar to that north of the lake, described in a former letter, but mostly without facilities for irrigation, which renders it worthless for farming purposes. Our next stopping place was

Bakersfield,

The present terminus of the railroad. The town is a mile and a half from the depot. We arrived there about midnight; there was no place to stay at the depot, and no conveyance to the town, so, with valise in hand we struck out for the hotel, cross lots, through the sage brush, followed by the half dozen passengers who had been with us on the train. We found the hotel and slept about three hours before daylight admonished us to be moving, then, mounted on a mustang horse we rode over the greater part of

Kern Island.

This is on the south side of Kern river, the south channel enclosing it being now but a dry river bed. It is a dozen miles or more in length, and is quite similar in appearance to the country adjoining on the south, and the soil is very sandy, and has an ashy, alkaline appearance that would condemn it as worthless to most persons at sight, but where this land is well irrigated immense crops of all kinds are produced.

Sand Storm.

We saw this locality under unfavorable circumstances. During the time of our stay, the wind blew a perfect hurricane. Dust and sand, and weeds and leaves filled the air, at times making it impossible to see the distance of a hundred yards. The drifted sand in many places evinced the fact that this was nothing new to the country. Here we saw the only appearance of

Fever and Ague

That we met with in our entire trip of nearly a thousand miles of travel. Though I should not call this a sickly country compared with what portions of the Misissippi valley were, in the early settlements there, yet immigrants here will doubtless have to undergo the ordeal of being acclimated, which characterizes first settlement in every locality not entirely healthy.

On The Road.

From here we went about 120 miles south by stage. The first forty miles of this distance is over land as level as the ocean, with an alkali soil and sparse vegetation of broom, sage and chimisal. The country is entirely unimproved, the land being used only for sheep pasture. To the south of this, the hills are somewhat more fertile. On many of their northern slopes there is a considerable growth of scrubby oak and black walnut timber. The light rainfall and absence of irrigating water will prevent this region from ever becoming of much agricultural importance. But it is a tolerably good grazing country, except in the dryest part of the year, or during seasons of unusual drought.

San Fernando.

Here our stage ride ended. This is the present terminus of the Los Angeles railroad. The Cero Gordo company have their depot here; they ship several hundred tons of bullion every month from this point, and here they receive the immense amount of mining machinery and merchandise which they are constantly forwarding to the mines. The terminus will remain here for some time, as a tunnel over a mile and a half in length has to be cut through the mountain where the cars leave this valley. But when the other portion of the road is built from Bakersfield to Tehachipa, and the southern road to San Bernardino, which will doubtless be within a year, those towns will take a great part of the mining trade, and when the cars shall finally run on beyond this point; it will be little more than a whistle station like many other railroad towns that have been very lively in the past.

This valley contains some very excellent land, but the amount of irrigating water is very limited, and can scarcely be bought at any price. Fruits and vegetables cannot be raised here without irrigation. Wood for fuel does not grow within six or eight miles of the town, while timber for all other purposes will have to be hauled a much greater distance. But in favor of the place I would say that the climate is of a semi-tropical temperature, and is most salubrious and delightful.

Los Angeles

Has been so often written up, and so much said about it, that we will only say of the city that it has a decided appearance of thrift and development in wealth and resources fully equal to any other in our State. We passed a pleasant day visiting the public school, whose edifice crowns one of the hills in the western part of the city. Dr. Lucky, principal of the school, with his able corps of assistants, is doing noble work there and is appreciated.

We found a number of old friends who had moved here from different parts of the State, all of whom were happy, hearty, and making money. There is another matter that I must speak of at length; without it my letter were like an astronomy with the sun left out, or a physiology with no mention of the head or brain. I refer to

Garey's Nursery

And fruit farm, which is about a half mile south of the city. He has everything of the orange family growing that is "pleasing to the sight or good for food." Pumelos from Java, with fruit big as muskmelons, citrons nearly as large, and oranges from a little walnut-sized, brown Chinese importation, up through dozens of varieties, to the largest and fairest found in the tropics; lemons in variety, and a field full of lime trees with their usually scraggy tops and clustering thorns, loaded with fruit fully equal to the best imported from Mexico.



A CHINESE MUSICIAN.

The sales of trees, nursery stock and fruits, from this place last year amounted to over forty thousand dollars, and there is no doubt but that in the future, his sales will reach a hundred thousand dollars annually. And all this has been built up by the energy and industry of one man who started in the work a half dozen years ago comparatively unknown and wholly without capital. To-day no man is better known throughout the country where fruits in his line are produced, and no better recommendation is over given to any thing, be it trees or fruit than "Garey says it is so." Reader, if you are one who could have felt the smile of God beaming up to heaven from Eden of old, and can feel something of the same smile glowing from every spot of earth kept and cared for as that garden was to have been, you ought never to lose an opportunity of seeing this place, seeing its luxuriance, its fruitfulness, its beauty. Such a home as this is my ideal—but I'll not write more. 'Tis a mistake to try to put our best thoughts into human language, and our brightest mind pictures, whether imagined to us from the beautiful of earth, or wholly created by the imagination, are apt to grow heavy and solid as stone the moment we attempt to describe them.

Cucamongo.

This celebrated wine vineyard is in San Bernardino county, about 30 miles east of Los Angeles. They were working on grapes brought in from a distance of six or eight miles, their own production having been already exhausted. Their "wine cellar" is an immense adobe house, most of it recently built. I was taking the dimensions of this building, when Mr. Mayerholz, the gentlemanly superintendent, recognized me as a reporter and invited me into his office. He gave me a detailed account of the vineyard. This I wrote down in shorthand, from which I condense the following:

The oldest part of the vineyard was set 28 years ago. Of this there are 12 acres. They have been making wine from it over 20 years. We have had an average crop this year, have made 75,000 gallons of wine; next year we expect to make 120,000 gallons. There are 160 acres of bearing vineyard, containing 141,000 vines. Forty acres were set out last year with foreign varieties of vines, all others are the common Mission grape—all are wine grapes, we raise no others. Our wine has sold heretofore at prices ranging from 40 cents to $1 per gallon. The present owners are a wealthy company, and they will doubtless so far control the market as to cause something of an advance on these prices. We employ 15 men the year round—during vintage, 40 or more. We irrigate but very little, only once or twice during the summer, except in seasons of unusual drought, or during the first year after the vines are set out. Keep the ground free from weeds, and cultivate about the vines and it removes much of the necessity for irrigation."

There are 16 large walnut trees. These have borne such immense crops and have proved so profitable that the company have set out 2,800 more of them. They have also set out a like number of orange, lemon and lime trees, all of which they expect will begin to bear in four years.

Three years ago the grasshoppers devoured everything here. The idea is prevalent that they come once in seven years.

The land of this vineyard is a poor, gravelly looking loam. A friend from Illinois, who was with me, remarked, "If this vineyard were not growing here, we people from the Mississippi valley would be willing to swear that this land wouldn't produce white beans, or anything else."

San Bernardino

Lies 18 miles east of this place, across a level, truly sage brush plain, most of the distance without water, and very properly called the desert. We rode over this with Mr. Waterman from Redwood City. He had one of those patent adjustable umbrellas attached to his carriage seat, which, while affording ample shade, allowed a free circulation of air and a perfect view of the surrounding country.

It has been eleven years since I was in San Bernardino. During that time great changes have taken place. Board houses and adobes have given place to fine brick blocks, that impart to the city an air of permanence and wealth, not usually seen so far out on the borders of civilization. But there is much to build up a city at this point, a climate that makes it the great sanitarium of our coast for all lung diseases, a hundred thousand acres of land in the valley with its surrounding tributaries, that will produce anything that can be grown out of the earth anywhere in the most favored regions of soil and climate; a large body of excellent timber within an easy day's drive of the city, and all this at a point from which diverge roads leading to the rich mines in the desert country to the eastward. The railroad from Los Angeles will reach this point within the coming year, and then it will acquire a great deal of additional mining trade that now passes to Bakersfield, San Fernando, or the Colorado river.

Hot Springs.

Six miles north from the city about a half mile up a cañon from the foot of the mountains are a couple of groups of these geysers. At one of them, owned by Mr. Waterman, we passed a very pleasant day. From this point the valley, with its towns of new and old San Barnardino, and beyond them Riverside Colony, with intervening and surrounding patches of chimesal land lay before us like a map, set in its ground work of surrounding hills, while above us, ragged and bare, shadowed the mountain peaks with cañons studded with clustering pines that evince the wealth of forests beyond. We enjoyed the scenery, bathed in the hot, seething water of the springs where it has been conveyed into a house for the purpose, and examined the luxuriant growth of the young plantation of orange, lemon and lime trees, till, with intense regret, we saw the sun sink behind the western mountains, which admonished us to say good bye to our host and his pleasant family, that we might be ready to travel again on the morrow. The next morning J. H. Stewart, Esq., provided us with a conveyance.

Riverside Colony.

Here, through the courtesy of Judge North, President of the company who founded this colony, we were shown what this country can be made to produce under favorable conditions of irrigation and culture. Orange and lemon trees, ten or fifteen feet high, with an equal spread of top, and many of them loaded with fruit, only three years of age; a feather-leaved acacia 32 inches in circumference of trunk, 22 feet high, and 20 feet spread of top, three years old from the seed; bananas that have fruited the first year as within the tropics, and grape vines three years from the cutting that have yielded 40 lbs. of grapes per vine. These facts, and many others of like character, so aroused our enthusiasm on the rich and varied fertility of our State, that we do not dare to write our impressions, so we only give the simple facts to the reader.

W. A. SANDERS.

San Bernardino, November 3, 1874.

A Chinese Musician.

Our illustration represents a Chinese female playing upon an instrument resembling a guitar. The Chinese instruments do not, as a a general thing, afford very choice music, and their vocal music is most execrable. It is difficult to see how the young lady "touching the light guitar" can accomplish much with such finger nails as she displays, but this is probably a matter of practice. Her costume, though strange in our eyes, seems a much more sensible one than the stylo worn by most Europeans. It is perfectly modest, comfortable and easy. Her limbs are free to move as nature intended they should, and her motions are unrestrained. She has no long, flowing skirts to drag in the mud or impede her footsteps, and appears much more comfortable than a fashionably dressed American female.

PRODUCTIVE GRASS.—Mr. A. L. Bancroft, of this city, sends to the office of the RURAL PRESS a sample of grass grown by Mr. F. Truett of Cloverdale. The sample is not in a condition to judge properly of the class to which it belongs, but its present condition is more indicative of clover than of grass; looking more like a trailing vine than an upright stalk. It is divided by joints about an inch apart. Each of these joints, we are told, sends forth roots when in contact with the earth, and these cuttings were planted by the gentlemen referred to, being set in rows a few feet apart. They were planted in June last, their growth proving enormous during the summer. It would have been more satisfactory to have interviewed the party who produced it, so that we could have learned more about its habits and whether it is relished by cattle. We hope our Cloverdale friend has not "caught a Tartar," but we confess that to us it is somewhat suggestive of quack grass in appearance. We are informed that he intends to cut up the stalks of this grass or clover, by passing them through a hay or corn-stalk cutter, and sow it in this condition; and, judging from the appearance of the stalk or vine, we have no doubt such planting will be sufficient to secure a prolific reproduction.

CORRECTION.—In the article describing the fruit-drying establishment at San Lorenzo, the capacity of each Alden evaporator was incorrectly given at 300 pounds per 24 hours. It should have been 3,000 pounds. The name of the superintendent was published as Geo. W. Martin; it should be Geo. W. Marlin.

The Vineyard.

The Juice of California Grape as Adapted to Wine Making.

[A paper read before the CaltfornteAcademy of Sciences by James Blake, M. D.]

Having, whilst in El Dorado county, tasted some wine which was evidently superior to anything I had before tasted, as the production of our State, I inquired of the maker the variety of grape from which it was made, and found that it had been made principally from a grape known in this country as the Zinfindel. Since my return, I have made an analysis of the juice of this grape, and also of some others which are now being propagated for making wine. The grapes were grown at the vineyard of the Vinieultnral Society at Sonoma, and were apparently perfectly ripe. The varieties analized, beside the Zinfindel, were the Reimer, a large white grape; the Riessling, also a white grape, and the California Mission grape. The method of analysis was to take the sp. gr. of the juice—heat it to coagulate the albuminous matters, filter through a Bunsen filter, and after bringing up the juice to the original quantity, to neutralize with a standard solution of potash or ammonia, so as to ascertain the total amount of free acid. Another portion of the juice was evaporated to about one-third, mixed with alcohol and ether to precipitate the tartrates; The ether and alcohol distilled off from the filtered juice, which was then neutralized to ascertain the amount of malic acid. The amount of sugar, as indicated by the sp. gr., was controlled by direct analysis of a portion of the juice cleared by acetate of lead by means of Fehling's copper test; and the result thus obtained is that recorded:

	Sp. gr.	Sugar.	Free acid.	Malic acid.
Zinfindel	1072	16.6	1.73	0.60
Riessling	1083	18.7	1.10	0.57
Reimer	1057	14.0	1.30	0.80
Mission Grape	1088	21.5	0.60	0.11

As there can be but little doubt that the development of the ethereal substance on which the aroma of wine depends is owing to the presence of free malic acid, and more particularly, I believe, of malic acid, the above figures explain the cause of the absence of aroma from the wine made from the juice of the Mission grape; for whilst the three varieties of foreign grapes analyzed contain respectively 60.57 and 80 parts of malic acid to 10,000 parts of juice, the Mission grape contains but 11 parts. The presence of this comparatively large portion of malic acid in grape juice is a fact which has not I think received the attention it deserves. I believe the acid itself splits up into an ether and an alcohol; and this independently of its action on the alcohol already found in the wine. Wislicenus has shown that lactic acid forms an ether even when being dried at ordinary temperatures over sulphuric acid, and alcohol is one of the products of the fermentation of malic acid. There would seem to be enough potash in the grape juice to form with the tartaric acid the slightly soluble bitartrate of potash, as after this has been precipitated by alcohol and ether, and the juice then nearly neutralized with potash, no more bitartrate is thrown down by again mixing the juice with alcohol and ether, but malate of potash separates as a thick cyrnpy deposit.

These figures as far as they go, give, I think, a satisfactory explanation of the superiority of the Zinfindel as a wine-producing grape, and fully bear out the conclusions I expressed some 14 years ago, in a report I drew up as one of a committee for examining the wines at the Agricultural State Fair at Sacramento, in 1860. As these remarks contain suggestions which I think will be useful to our wine-growers, I shall offer no apology for quoting them. After pointing out the great advantages as regards climate and soil found in our State for cultivating the grape, and which I believe ensure its being the finest wine-producing country in the world. I remarked on the imperfect manner in which these advantages had been utilized by our wine-growers, as indicated by the quality of the wines exhibited, and pointed out what I then considered to be the cause of our want of success; observing "in view of these facts your committee believe that they are authorized to call the serious attention of our wine-growers to the necessity of an early introduction into this country of varieties of foreign grapes which appear to possess those qualities which are wanting in our own, or in other words which contain less sugar and more free acid." After mentioning some of the varieties of European wine grapes which possessed these qualities, I remarked "it is highly probable that the grape now cultivated in this State is about the worst that would be selected for making a first-class wine." The truth of this remark is now being realized by our wine-growers, who are replacing as fast as possible the Mission grape by foreign varieties, for it is found that even where a portion of these foreign grapes are used in the manufacturing of the wine, it commands a much higher price than that made with the Mission grape. I believe that either of the varieties, the analysis of which I have made, is capable of making a good wine when the soil and climate to which it is most suited is properly selected, of the necessity of paying some attention to the selection of the variety best suited to the very marked varieties of our soil and climate. I quoted the following remarks of Mr. Bender, Inspector-General of Agriculture, in France, and author of a work on the vineyards of that country. After describing 144 varieties of grapes that are grown for making wine, he says: "Almost every variety of soil is found in our more celebrated vineyards, and appears able to furnish a superior wine when the variety of grape cultivated has been well selected, that is, when it is perfectly appropriate to the soil and climate. The choice of the proper variety of grape that will suit the soil and climate is after all the great secret for obtaining superior wines in a climate where the grape flourishes." That so little success has up to the present time attended the efforts of our wine growers to produce a first-class wine is not surprising when we consider that not only have they been working with probably the worst grape for the production of such a wine, but have been endeavoring to make the same grape produce good wine in the moist alluvial soil of Los Angeles, and in the heated volcanic hills of the Sierras. [I would observe that the Zinfindel from which the wine I tasted was made, was grown near Coloma, and I believe on a soil of decomposed granite.] A long experience, however, will be required to discover the most appropriate variety of grape suited to our varied conditions of soil and climate. As showing the influence of soil and climate on the qualities of the grape, it is interesting to compare the analysis of the same variety of grape when grown in Germany with those grown here. In Watts' Chemical Dictionary I find an analysis of the juice of the Riessling made in Germany by Fresenius. The quantity of sugar is there given as 15 per cent., and of free acid as 53 per cent., whilst here the juice contains 18 per cent. of sugar and 1.10 of free acid or three per cent. more sugar and twice as much free acid. Should the presence of the free acid influence the quality of the wine in the manner I have pointed out, it is evident that the Riessling may make a superior wine here to that made from it in Germany; that is, when grown in the localities which suit it.

A Recent Volcano in Plumas County.

At the meeting before last of the Academy of Sciences, Dr. H. W. Harkness made some remarks of a recent volcano in Plumas county, which he was requested to write out in full. Dr. Harkness has written the following account of his visit to this volcano, which he has allowed us to publish. What are called "recent volcanoes" are plenty enough in this State, but this is the only instance we remember where the surronndings and circumstances are such as to *prove* that the volcano was in active operation within twenty-five years.

From time to time during the period between the years 1850 and 1854, vague rumors had been circulated that evidence of active volcanic action existed in the northern portion of Plumas county, and that strange lights had been seen apparently by different observers, which were referred to by them as the result of an eruption then in progress somewhere to the eastward or Lassen's Butte. As the Indians in the immediate vicinity were exceedingly hostile no effort appears to have been made to verify the correctness of these reports, and the subject seems to have dropped from the minds of men.

While traveling in Plumas county during the past summer, I heard reports of the existence of a lava bed in the vicinity of Lassen, which bore traces of a recent upheaval. The central point of this disturbance being commonly referred to as the Cinder Cone. While camping in the neighborhood, I had ample opportunity to make a pretty thorough examination of the locality.

This cone is marked upon the map as being within the limits of Lassen county. This, however, is a mistake, its true location being at a point which would place the whole, or at least the larger portion of the cone, with its outlying lava bed within the limits of Plumas.

Two lakes are laid down upon the State Geological map as lakes Anna and Louisa; these lakes lie to the eastward and about twelve miles distant from Lassen's Butte, and are known to the residents in that portion of the State as Snag lake (Anna) and Juniper lake, (Louisa). The Cinder Cone and lava bed which I refer to, lying directly across the northern end of Snag lake.

When viewed from the upper end of the lake—1½ miles distant—the lava bank rises directly from the water to the height of 80 or 90 feet, and extends across the whole breadth for a mile or more, with as regular a gradient and as sharp a definition as a railway em bankment.

The surface beyond being studded with a few abrupt elevations of 20 or 30 feet high, while to the left rises a huge cone with a crater at its summit. On the eastern end this lava embankment turns abruptly to the north as it strikes the lake shore, and from this point the line extends in a northerly direction for a distance of one and a half miles, or more, when it strikes another lake, or as is most likely, what was once the lower end of Snag lake. At this point the line turns sharply to the west, the lava dyke crossing the lake to its western shore, when it again deviates to the southwest, until it strikes the lake line previously described. Nearly midway, on the western side the Cinder cone arises abruptly from the border of the lava bed, one side of it resting upon the plain. It will be seen that should my estimate prove to be correct, the entire circumference of the lava bed is between four and five miles for the entire distance, except at the cone, the embankment rises from the plain or water 80 or 90 feet, at a sharp angle of about 60 degrees, and in no instance is there in this border the slightest trace of a lava flow to indicate that it was in a molten state when thrown out.

The surface of the blocks show a bright metallic luster, the colors varying in different parts of the field from black to a reddish brown. On climbing to the surface of the lava it is found to be very irregular, with ridges and depressions alternately, forming a surface so uneven as to make it very fatiguing to walk for any distance upon it. Near the center of the field, I observed a mass of lava which showed signs of having been in a molten state when thrown upon the surface; this was a somewhat narrow strip, a hundred feet or so in length, lying in a horizontal position, but slightly broken, and its rough, uneven, corrugated surface, clearly indicating that it had been cooled by contact with the atmosphere. A few sickly looking pine trees—a dozen or two at the most, were struggling for existence, wherever a little collection of burnt earth rendered such an existence possible. These trees were quite small, being only two or three inches in diameter.

As I before stated the cone rises from the western side of the field. In making the ascent I selected a point to the southeast of the cone, as the side there rests against the lava and its level of a hundred feet can be reached without much effort. From this point, however, owing to the loose and sliding material, the ascent proved a very severe task, far exceeding anything I had previously undertaken.

Barometrical measurement showed the summit of the cone to be six hundred feet above the plane at its base—the exact hight, I believe, of that of Vesuvius—it possesses a well defined outer rim of some six hundred feet in diameter. Within the rim, after a descent of about sixty feet, a level bench is reached, on which one may walk entirely around the inner crater, which is funnel-shaped, and about 90 or 100 feet in depth.

The crater exhibits no signs of having contained water. A few small willow twigs are to be seen growing within the outer rim. Judging from the appearance of the lava bed, as viewed from the summit, and the present condition of the material, it would seem that the present cone has thrown out but a small portion, if any, of the lava in view, but rather that it has been elevated by forces acting directly beneath the site it now occupies. The amount of ashes and pumice which have evidently been discharged from this cone is, however, amazing.

In the immediate neighborhood of the cone the deposit is from 12 to 20 inches in thickness, and two miles away it is five or six. I traced this deposit for four or five miles to the southwest, and Obed Field, one of my guides, informed me that to the northwest it extends fully ten miles. To the eastward the deposit is not so extensive. Yet it is safe to state that a breadth of 80 or 100 square miles has been covered by the ashes from this volcano. Small bits of pumice of the size of a bean are plentifully mixed with the deposit.

The ashes are of a dull, gray color, differing in this respect from any other I had previously observed in the State, and as they offer but little resistance to the wind, no signs of drifting are apparent, and they rest evenly upon the surface as they fall. My reasons for believing this volcano to have been of recent origin may be briefly stated. In Snag lake, across which the dike of lava extends, there are several dead trees still standing, while on the lake shore are many trees and stumps battered and torn by ice, which have been driven upon the beach by the wind. This is notably the case upon the eastern border of the lake, where they may be counted by the hundred.

These facts clearly indicate that a large portion at least if what is now the bed of the lake has but recently been a forest, and that the presence of the lava has been the cause of the change in the level of the water. Again, along the borders of the lava bed there are a number of trees still standing with lava nearly or quite encircling them, their dead and blackened trunks furnishing incontestible evidence that the eruption occurred while they occupied their present positions.

To the west and northwest of the cone an open space exists of a hundred acres or more in extent—bounded on the west by forests—the trees upon which have nearly all disappeared. There exists to my mind the clearest evidence that the vegetation upon this tract was destroyed by the shower of hot ashes. The trees still standing are burned upon all sides precisely as a green tree burns, a thin stratum of charcoal, still adhering to the surface of the remaining wood. A few trunks have fallen and they rest on the surface of the heavy ash not partially buried in it. No traces are perceptible of fallen timber lying beneath the ash, as that would naturally have been entirely burned away.

I observed many concave depressions dotting this field of ashes. These depressions were from six to ten inches in depth and from one to four feet in diameter with sides sloping toward the center. Where one of these occurred, on digging through the ashes I invariably found traces of a charred or decaying tree stump. In the forest beyond the trees were invariably surrounded by a zone of ashes. Further evidence of this recent shower may without doubt be obtained by a thorough examination of the living trees in the vicinity. Many small cavities at the point where the branches are thrown off will yet disclose a store of ashes to reward the search.

A large number of trees still living in the adjoining forest show scars, and the new wood formed by the reparative process, is apparently of but a few years' growth, although, as I had no axe I was unable to verify this statement by count of the annular rings in the new wood. I had forgotten to state that there was one living tree in the field of ashes, but it has lost its top and its scarred trunk indicates a desperate struggle for life.

I have endeavored to place before you this evening all, as I believe, of the more important facts upon which I base the supposition that this volcano has been in active operation within 25 years. Much of this evidence will soon disappear. The ice in another winter, perhaps, will have lifted the last tree from its place in the bed of the lake, the concave depressions in the ashes will gradually become less distinct, and the trees encircled in the stony embrace of the lava will soon decay, yet the characteristics of the volcano itself are so marked that it will, for a century to come, be recognized as of recent origin. I had traveled for weeks over a country every inch of which exhibited traces of volcanic action. Yet there always existed something to show that nature was endeavoring to repair the mischief which had been wrought. By disintegration the unsightly lava blocks were being converted into soil on which vegetation was luxuriating, and where animal life can find subsistence. I had climbed very many well wooded volcanic peaks to find that within the very craters large trees were growing and the sides converted into grassy slopes. Here, however, the lava bed was as sharply defined as though it was a fortress in an open plain, and although surrounded on all sides by volcanic ruins it appeared as fresh and new as though the creation of but a day.

Since my oral report to this society four different gentlemen have furnished me with reports which, in my estimation, must be considered as corroborative proof of the existence of an active volcano about the period named. Dr. Wozencraft informs me that during the winter of 1850–51 he was residing at a point some distance above Red Bluffs, when he observed a great fire to the eastward of Lassen, which continued for many nights without change of position. The Doctor states that some of the observers expressed the belief on the first night of its appearance that it was the light from a large Indian camp fire. The reappearance of the great body of flame for so many nights in succession, however, seemed to shake their faith in the camp-fire theory. The Doctor at the time and since, has earnestly advocated the theory that the phenomenon was the result of a volcanc in active operation.

Dr. J. B. Trask also states that at about the same period he was near Rich Bar on the north fork of the American river. He, too, distinctly remembers the display for many nights in succession. From his point of observation the distance cannot be more than forty miles to the cone.

Mr. Charles Gibbes stated that he and a party of miners witnessed the same spectacle while at Angel's camp and referred it to an eruption of a volcano. Himself and comrades, in their estimate of the distance to the supposed volcano, placed it at 150 miles; in point of fact it is about 160.

Mr. Henry Chapman, a member of the Academy, writes that during the summer of 1851, he resided for a short period at a wayside hotel near Georgetown, El Dorado Co. One evening, two prospectors arrived at the hotel who stated that they had been since early spring in search of the mythical gold lake. They informed the company that they had traveled toward the north for a distance of more than 200 miles without discovering gold. They stated that they had however discovered a boiling lake and a volcanic mountain, which "threw up fire to a terrible hight," and a large breadth of country still on fire, as the result of an eruption. They stated further that at one point they traveled for a distance of ten miles across a strip of country where the rocks were still so hot as to entirely destroy their boots, they losing a horse and one mule during the transit. They placed the location of the mountain at an estimated distance of 100 to 125 miles, in a northerly direction from Georgetown. By referring to the new geological map of the State, it will be seen that the distance from Georgetown to the Cinder cone I refer to, is about 115 miles. If this statement can be relied upon, the burning country they mention must have been the belt of hot ashes which I have described.

The boiling lake referred to is doubtless one which is still in existence it being located about eight miles to the south of the Cinder cone.

It is oval in shape and contains an area of a little more than four acres, with an elevation of 5,976 feet, and is surrounded by hills of 100 feet in hight broken only at one point by a fissure which admits the escape of surplus water. Around the borders of this lake I found a large number of mud cones from one foot to four feet in hight formed of finely pulverized volcanic rock. These miniature craters were in a state of ceaseless activity ejecting mud and sulphurous vapor.

The water of the lake itself was hot, of a creamy color and the surface from time to time disturbed by the escape of gasses from the earth beneath.

My guide informed me that the lake is much more tranquil than at the period when he first beheld it 10 or 12 years since, and indeed there exists abundant evidence to prove that this district is rapidly cooling. A mile or so to the south of the lake there is a geyser ejecting boiling water to the hight of 10 feet, and Field assured me that in former times the water was elevated to a hight of 20 or 25 feet. While three or four miles to the westward there exists a huge geyser cañon with hundreds of springs still in action, yet there are many large cauldrons which have ceased action altogether.

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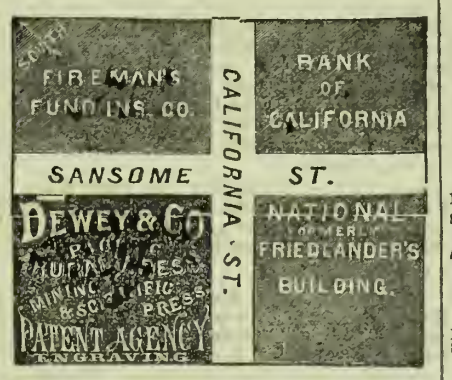
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FARMERS write for your paper.

Agricultural Notes.

California.

ALAMEDA.

Plowing, Etc.—Livermore *Enterprise*, Nov. 19: Plows and harrows are on the move in this neighborhood. Every farmer in the valley is plowing or preparing to do so. Jack Frost has been skirmishing around for several nights past. Experiments by J. F. Black and several others show that cotton can be profitably raised in this valley.

COLUSA.

Seaside.—Colusa *Sun*, Nov. 21: Messrs. D. M. Reavis, W. G. Hill, John Boggs, Phillips and Chandler, have leased 200,000 acres of land from General Beal, in Kern county, for eight years, together with the Beal ranch, and included in the lease are 35,000 sheep, wagons and horses, etc., for farming, and the finely furnished residence of General Beal, for which these gentlemen pay an annual rental of $36,000. The lessees have purchased 10,000 sheep from General Beal, in addition to those passing with the ranch, making 45,000 sheep now on the place.

CONTRA COSTA.

An Early Start.—Antioch *Ledger*, Nov. 21: There has not been so favorable a season for the farmers to sow their grain early for 15 years as the present. The early rains were sufficient to moisten the surface soil to a depth sufficient for plowing. This rare opportunity is being improved, and a large share of the grain will be sown before the heavy rains. Everywhere the work of seeding is now going on, and much of the dry-sown grain is up two and three inches high. On Sherman island, where seeding is generally done in the spring, the farmers are also busy plowing and sowing, while hundreds of acres of volunteer is up four and five inches. There has been, thus far, little or no frost.

EL DORADO.

Clover and Alfalfa.—El Dorado *Republican*, Nov. 19: With irrigation, there is but very little land in this section that is not suitable for raising clover or alfalfa—the most profitable crop, all things considered, that can be produced in the foothills—and now that we are assured a bountiful supply of water next season, many are talking of going into the business of hay raising extensively, claiming that more money can be made out of it than by using the water for mining purposes.

MARIN.

Lemons.—Marin *Journal*, Nov. 17: Did ever anything richer or prettier grow out of the ground than a thrifty lemon tree, with its yellow fruit? In Mr. Stilwell's beautiful yard are orange, lemon, fig, olive, almond, waluut and many other fruit trees. A fine lemon tree has lemons in every stage, from a rich, yellow, half-pound lemon, down through green, half-grown specimens, to the bnd, and even the blossom. The fragrance from the fruit and leaves is very fine.

MONTEREY.

Plowing.—Hollister *Enterprise*, November 21: Ranchers in every section of the valley are busy these days plowing and preparing for seeding. Already the snrface of the ground in this locality begins to assume a brown appearance. Low rates for wheat do not seem to affect the conrage of the farmers much, as nearly every available acre in the county has been engaged for purposes of cultivation, and a far larger area will be sown to grain this year than last. The last rains have placed the soil in excellent condition for working, and as early sowing is deomed on an average the surest, all who can will doubtless avail themselves of the nnusual opportnnities offered. Thus far the season has promised the most favorable of any in the agricultural history of the State, and if any reliance can be placed on snch harbingers, California next summer will reap the largest harvest yet.

Twenty thousand acres more land will be under cultivation this season than last in the Salinas valley. Ever since the recent rains farmers have been busy plowing the adobe soil, which is now in fine condition, and there is a disposition among the farmers to diversify the crops. The advance in barley will cause a greater area to be sown this year, especially will more attention be given to raising chevalier and bald barley.

NEVADA COUNTY.

Fruit.—Nevada *Transcript*, Nov. 21: No portion of the State of California produces finer apples or more bountiful harvests than Nevada. Nearly every cottage has its orchard of all kinds of fruit, apples predominating. A cursory glance at the gardens in this city and its environs, will show the ground covered with choice apples, rotting for the want of a market. Any variety of good winter apples can be had for one cent per pound by picking them, which a great many prefer doing in order to avoid having bruised apples. The abundance of fruit raised in this vicinity has convinced many that the purchase of an Alden fruit drying machine would prove a profitable investmont, and we understand arrangements are being made to form a company in this city for the purpose of going into the bnsiness next summer. We believe it will prove a renumerative bnsiness.

NAPA.

Sowing the Seed.—Napa *Register*, Nov. 21: The farmers in all directions are bnsy agitating the soil and planting seed. "Uncle" Jesse Grigsby is just in from his place in Berryessa valley, and reports great activity among the farmers. He intends putting in 600 acres of grain this season, 275 of which he will have seeded by next Monday night. He has five teams running and is losing no time this pleasant weather.

Pope Valley is in a flourishing condition; the farmers are actively engaged in putting in their crops, which are generally large this season. Work hands seem very scarce, though good wages are paid for help. There never was so heavy a fall of acorns as there is this year. They could be scooped up by tho bushel, they lay in such quantities on the ground—making a glorious field for hungry swine.

PLACER.

A Prosperous Season.—Placer *Herald*, Nov. 21: The farmers in this and adjoining counties are sanguine of a good harvest. Last year the crops in this county were poorer than ever before, and as two bad years have never yet come together, it is not reasonable to suppose they will. It is this fact, more than auy other, doubtless, that is encouraging onr farmers to unusual efforts. The farmer is a hard man to discourage, and it is well that this is so.

Around Roseville, says the *Argus*, farming operations are in a state of forwardness, and everything looks flattering. The grain sown is all up, and looks remarkably well. More small grain, especially wheat, has been sown this season than ever before.

SANTA CLARA.

The First Green Verdure.—Says the San Jose *Mercury*, growing amid the falling leaves—spring wedded to autumn—the spectacle that now greets the eye on every side. Just when winter lays his icy touch upon the earth, in other lands, here genial nature, receiving a fresh baptism of shower and zephyr, springs into new life and beauty.

SANTA CRUZ.

Rain Fall.—*Sentinel*, Nov. 21: Quite seven inches of rain have fallen to date, about all of which has been absorbed. Seven inches is sufficient to ensure passable crops.

SAN JOAQUIN.

The Season.—San Joaquin valley *Argus*, Nov. 21: There never was a time since farming commenced in this valley that people were more busily employed in plowing and seeding their lands than at the present time. Preparations for farming are being made upon a grand scale, the early rains giving some two months more time for planting than usual, and the consequence will be a largely increased acreage put in cultivation in wheat.

STANISLAUS.

West Side of the San Joaquin.—J. S. Spurgeon, of Grayson, writes as follows to the Stanislaus *News* concerning agricultural matters on the west side of the San Joaquin: "Of the farming community, the wisest and generally the most independent, are busily engaged in plowing, harrowing and sowing their land. They all say the ground is in finer condition for working than they ever saw it; and with a good deal of manual and muscular labor, they can get their wheat in good condition, and then put their faith and trust in that all wise and loving Creator, before whom all, from the youngest to the oldest, should humbly bow and offer up their devotions, asking Him to pour down His copions showers on all living things on earth, they then can rest assured of being bountifully rewarded for their services now rendered. All the volunteer that was left standing after the first rain is looking fine. R. B. Purvis, Esq., foreman of the Bostwick ranch, showed me a sample of volunteer wheat grown since the first rain, which measured 10 inches long, and he said he had a thousand acres just like it; and said if it kept on growing as it has, it will do to harvest some time in the coming February.

TULARE.

Figs.—Tulare *Times*, Nov. 21: There is no better climate for producing figs than we have in this county, especially in the foothill districts. We have seen nearly all the different kinds growing in a very vigorous state in that locality. The black, purple and white figs grow well in this immediate vicinity. All this is true, and yet there is not enough of this fruit raised for home consumption. There has been too much carelessness on the part of old settlers in reference to fruit growing. Figs can be kept in many ways; if no better is known, dry them. If they are properly taken care of, they will keep as well as apples or peaches. This is also a fruit that requires little or no care or attention so far as cultivation is concerned. Setting ont the trees and gathering the fruit includes it all.

YOLO.

Plowing.—Yolo *Democrat*, Nov. 20: Many of our farmers are preparing their grounnd for seeding. Doubtless a very large area will be put into wheat, as the ground is in good condition so much earlier than nsual. It certainly bids fair for another good crop year.

Cheap Food.—The London *Agricultural Gazette*, in an article on the English crops says that "wheat has yielded so abundantly everywhere this year that it is now one of the cheapest foods in the market, cheaper probably than oats or barley, cheaper than Indian corn or oil-cake."

Travelling Agent East.

Mr. Wm. C. Quinby will act as agent for this paper in New York and other Eastern and Western cities. Business men will find a favorable opportunity to patronize the Press whenever he calls. 1m

The Rain.

Winter has set in in earnest. The very heavy rain that began to fall on Sunday was general all over the State. Here, in San Francisco, cellars have been flooded, sewers burst, and considerable damage done. According to the report of the United States Signal Service observer, in this city, during the 24 hours preceding 8 P. M., Monday, there was a rainfall of 4.70 inches. The report of Chas. G. Ewing, of this city, makes a total for the storm of 3 30 inches, or 4 56 inches for November up to 8 P. M. on Monday. From July 1st to Nov. 1st, the fall was 2.89 inches, and according to some authority, the rainfall in this city for this year is 7.45 inches. The heaviest rain yet recorded for November in this city, was that in 1849—8.66 inches.

In the interior the rain has been general. At Yreka it has been raining and storming; at Shasta, 7.75 inches fell during the storm, making a total of 14.12 inches for the month, and 20 inches for the season. At Chico, 3 94 inches fell up to 6 P. M., on Monday. At Colfax it rained hard and also at Oroville. At Marysville, 2.07 inches fell in 24 hours. At Napa, up to 10 A. M. on Monday, 1.57 inches of rain fell. At Santa Rosa, since Saturday 2.50 inches fell. Ukiah, raining; Stockton had 1.66 inches up to 4 P. M. on Monday, making 4.17 inches for the season. At Pittsburgh Landing 1½ inches fell. At Antioch they had two inches, making a total for the season of 2.56 inches. It also rained hard at Martinez, Merced, Modesto, Lathrop, Salinas, Watsonville, and San Luis Obispo. It rained hard at Alta and all stations west of Sacramento.

We annex a table showing the monthly rainfall at Sacramento since 1849, prepared by Dr. Logan, Secretary of the State Board of Health:

RAIN TABLE FOR SACRAMENTO.—Prepared by Dr. T. M. Logan.—For the Press.

Arranged according to the seasons, showing the amount in inches of each month, during twenty-six years, and for each rainy season, to November 1st, 1874; also the quantity for every month, and the annual amount of rain.

MONTHS.	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875
September	0.250	0.000	1.000	0.093	0.000	sp'kle	sp'kle	sp'kle	0.000	sp'kle	0.025	0.083	0.000	0.000	0.003	0.004	0.080	0.000	0.006	0.000	0.000	0.000	0.001	0.002	0.000	0.050	
October	1.500	0.000	0.189	0.000	0.005	1.010	0.000	0.195	0.635	3.010	0.000	0.914	sp'kle	0.358	0.000	0.120	0.480	0 000	0.000	0.000	2.120	0.020	0.210	0.220	0.310	2.257	
November	2.250	sp'kle	2.140	6.000	1.500	0.650	0.750	0.651	2.406	0.147	6.495	0.181	2.170	0.005	1.490	6.718	0.480	2.427	2.426	3.806	0.774	0.850	0 884	1.220	1.930	0.210	.....
December	12.500	sp'kle	7.070	13.410	6.000	1.540	1.150	2.000	2.396	6.632	4.329	1.834	4.282	8.697	2.327	1.935	7.867	0.364	9.511	12.840	2.632	1.962	0 971	10.990	6.388	10.009	.....
MONTHS.	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875
January	4.500	0.650	3.000	3.250	2.670	4.919	1.375	2.444	0.964	2.310	2.666	15.036	1.733	1.077	4.776	7.699	3.440	6.036	4.790	1.371	2.075	4.040	1.220	5.200	.....		
February	0.500	0.350	2.000	8.500	3.460	0.692	4.801	2.461	3.906	0.931	4.200	2.751	0.198	0.712	2.010	7.104	3.147	3.690	3.295	1.919	4.740	4.360	1.856	.....			
March	10.000	1.880	7.000	3.250	4.200	1.402	0.675	2.878	1.214	1.837	5.110	3.320	2.800	2.360	1.303	0.481	2.018	1.010	4.316	2.942	1.642	0.690	1.936	0.551	3.050	.....	
April	4.250	1.140	0.190	3.500	1.300	4.320	2.132	sp'kle	1.214	0.985	2.874	0.475	0.821	1.693	1.960	1.370	0.476	1.806	2.306	1.240	2.120	1.494	0.610	0.512	0.890	.....	
May	0.250	0.690	0.300	1.430	0.210	1.150	1.841	sp'kle	0.203	1.037	2.491	0.590	1.808	0.355	0.742	0.490	0.262	0.003	0.270	0.648	0.270	0.786	0.289	0.000	0.370	.....	
June	0.000	0.000	0.001	0.310	0.010	1.033	0.350	0.698	0.000	0.247	0.135	0.011	0.000	0.087	0.000	0.100	0.000	sp'kle	0.008	sp'kle	0.001	0.025	0.002	0.002	.....		
July	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.543	0.000	0.000	0.000	0.000	0.004	0.018	0.000	0.000	0.000	sp'kle	0.000	0.000	0.015	0.001	.....	
August	0.000	0.000	0.000	0.001	sp'kle	0.000	sp'kle	sp'kle	sp'kle	0.000	0.000	0.000	0.006	0.000	0.085	0.000	0.000	0.000	0.000	0.000	0.001	.....	0.000	sp'kle	0.000	.....	
Total	36.000	4.710	17.980	36.365	20.065	18.620	13.770	10 443	18.991	16.041	22.626	16.548	25.549	11.579	7.868	22.612	17.924	25.305	32.769	16.644	19.672	8.470	24.052	14.208	11.369	.....	

Breeders' Directory.

Parties desiring to purchase Live-Stock will find in this Directory the Names of some of the most reliable Breeders.

Our Rates.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS. St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

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J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petaluma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

SENECA DANIELS, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

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H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., Importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS. Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro streets, Oakland, Cal. Imported Brahmas and other choice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

L. J. WATKINS. Santa Clara. Premium Fowls. White Leghorn, S. S. Hamburg, Game Bantams, and Aylesbury Ducks. Also, Eggs. 21v8.3m

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S. F. MARKET REPORT.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Nov. 25th, 1874.

The rains during the early part of the week have given the farmers hope for a good yield for the coming season. Everything, at the present writing augurs well for such a result. The produce market during the week has been unusually active, the receipts of wheat being very large. Advices from the East state that wheat has advanced slightly, but in Liverpool it remains the same as it was reported last week.

Barley—Receipts for the week, 33,082 ctls of Bay and 46,190 sks of Coast the largest yet recorded. Yet the large receipts continue to go off as as fast almost as they arrive. The Humboldt carries 17,602 centals to New York. Upwards of 2,200 tons hae recently heen sold for export at rates ranging from $1.35 to $1.42½. Rates have advanced during the week. We note an advance of from 7½ to 10c on Feed and Brewing. Sales for the week: 800 sks of Coast Feed, at $1.15; 4,100 do Bright Coast, at $1.17½; 6,800 do Bay Feed, $1.20; 400 do Coast Brewing, $1.25; 2,000 do Light California, at $1.35; 1,000 do Choice Brewing, at $1.37½@$1.40; 200 do Chevalier, at $1.70; 300 do Coast Chevalier, at $1.20@$1.30; 500 do Bay Brewing, at $1.37½@$1.40; and 1,000 do B y Brewing, at $1.37½@$1.40. A car load of California sold in St. Louis, Mo., on the 13th at $1.50.

Beans—Receipts for the week 4,326 sks. But slight chenges in quotations during the week.

Beeswax—Current rates, 25@27½c, unchanged.

Broomcorn—A good deal of that which remained ungathered up to the time of the raln during the week has heen totally destroyed, the quantlty being estimated at from 50 to 100 tons. Thls is a large prOportion of the whole crop, which is estimated at 400 tons, a reduction from the usual yield, which is between 500 and 600 tons. Quotations unchangcd.

Buckwheat—Receipte for the week 801 ctls. Nomnal at $3.25.

Corn—Firm at $1.45. Receipts of 97 ctls of Southern. We note sales of 300 sks of choice Southern Yellow at $1.45 and 600 do of good Yellow at $1 37½.

Cornmeal—No change from our last quotations.

Cotton—Recelpts for the week 30 bls. Sales of 50 hls at 15c and a small lot at 15½c.

The Antloch Ledger of the 21st has the following: "T. N. Willis, a wealthy farmer living in the suburhs of this village sends us samples of fine Cotton grown by him tho present season. Those who are judges say it is equal in growth and texture to any seen in the Southern States. On one stalk are thirty holls, all well matured and of good size. Mr. Willis has picked a number of pounds, the result of his first attempt, and will the coming season plant a larger area. Thus it is shown to a certainty tbat Cotton will grow and mature in this vicinity, and it is not improbahle that most of the land hetween Antioch and Point of Timber is hetter adapted to Cotton culture, especially as we have no means of irrigation, than for Wheat."

Feed—No change in quotations. Active demand for Bran, Mlddlings and Oil Cake Meal at $19, $28.50 and $30 respectively.

Flour—Week quiet. Sales for export few. Receipts of California 18,858 qr-sks, and of Oregon 408 half and 3,287 qr-sks. Exports, 4,047 hhls.

Fruit—Supply of all seasonable kinds large. Receipts of 2,000 bxs of Limes by the Constitution.

Fresh Meat—Fair supply. The olny change to note is the advance of ¼c on Pork, on foot—quotahle at 6¾@6½c.

Game—In demand for the holidays. Good supply on hand.

Hay—Rcceipts for the week 6,267 bls. of whlch a good deal has been damaged hy the rain. Sales of 100 tons within the range of $10@14.

Hides—Receipts for the week 3,946. Decline of ½c ℔ lb. There are hut few heing shipped at present. Some that have srrived are jobhing and in general in poor condition on account of the rain.

Honey—Quotations unchanged hut firmer. Receipts 257 cs. Shipment of a carload to Chicago on Tuesday.

Hops—Fair at an advance of 2½c on Ordinary. Quotahle at 32½@35c. No sales of any consequence during the week. Shipments East are about over. The total yield of the coast this yeer has been estimated at 16,000 bls, of whlch 12,000 hls have been shipped East. The Eastern market continues firm and exports are being still made. It is the general impression that the yield next year will be largely in advance of this.

Nuts—No changes to note since our last report.

Oats—Receipts for the week, 1,272 ctls of Bay and 8,870 sks of Coast and Oregon Fair, at last quotations. Sales of 3,550 sks of Light Feed at $1.35; 370 do do, at $1.37½; 400 do Medium, at $1.42½; 500 do Choice at $1.52½; 1,000 do Medium to Choice, at $1.45@$1.55; and 608 do Fair at $1.40@$1.50.

Oatmeal—No change in quotations since our last.

Onions—Receipts for the week 888 sks. Quotations have advanced from 5 to 10c. Sales of 100 sks of fair Yellow at 75c.

Pearl Barley—Continues in good demand at unchanged rates.

Potatoes—Rcceipts for the week, 19,251 sks large, yet not much more than half tbose of the previous week. The consequence has been an advance of about 25c all round. Sweet Pototoes are lower—$1. A very large stock, estimated at 56,000 sacks has heen accumulated. Sales for the week small. We note sales of 400 sks of Tomales, at $1.25; 1,000 do Humholdt, at $1.40@$1.50; and 500 do Choice Humboldt, at $1.50.

Poultry—Are in good demand and in moderate supply. The rain duriug the week has interfered somewhat with supplies. Prices have advanced, owing to Thanksgiving demand, Turkeys being now quotable at 17@20c as against 15@17c a week ago. Hens and Roosters have ulso advanced.

Seed—Receipts of Flaxseed for the week 342 sks; of Musturd Seed 87 sks. Quotations unchanged.

Straw—Receipts for the week 1,143 hls. Market fair for good dry Straw.

Vegetables—Market in an unsatisfactory state. Quotations not easy to give, as the rain has interfered with the supply.

Wheat—Large rcceipts—large exports—prices both here and in Liverpool at a standstill. The rates, as telegraphed yesterduy, was $2.37½@$2.43 for average California, and $2.49@$2.61 for Club. No chenge in freights since our last report. The prices of California Average in Liverpool for three years past have been as follows:

Year.	Date.	Price.
1874	Nov. 21	$2.37@$2.43
1873	Nov. 21	$3.18@$3.22
1872	Nov. 22	$3.04@$3.08

This shows a difference of 80c in favor of 1873, and one of 66c in favor of 1872. Receipts for the week: 359,502 ctls of Bey including the cargocs of several ships wholly or partially loaded at Oakland, etc., and 28,241 sacks of Coast. In all, nearly 400,000 ctls. At Napa, 62,000 sks were sold to Isaac Friedlander, terms reserved. Sales in this city for the week have been:

1,100 sks Dark Coast	$1.45
2,400 sks Good Shipping	$1.50
600 sks Choice	$1.55
2,500 sks Choice Milling	$1.55
200 sks Shipping	$1.50@$1.52½

DOMESTIC PRODUCE.

WEDNESDAY M., Nov. 25, 1874.

BEANS.			
Beans, sm'l wh. ℔	3¼@	—	
do. hntter	3¼@	4½	
do, beyo	2½@	—	
do, pink	2½@	—	
do, pea	3½@	—	
BROOM CORN.			
Per lb	5 @	8	
COTTON.			
Cal. 1874, ℔ lb	15 @	15½	
DAIRY PRODUCE			
Butter, Cal. choice			
℔	45 @	60	
do, good	40 @	45	
do, inferior	30 @	40	
do, firkin	30 @	35	
do, pickled	35 @	40	
Cheese, Cal. new	15 @	17	
do, Eastern	15 @	20	
EGGS.			
Eggs, Cal. fresh	60 @	—	
do, Oregon	35 @	—	
do, Easteru	— @	—	
do, Ducks'	40 @	45	
FEED.			
Bran, per ton	— @19	00	
Middlings	— @28	50	
Hay	12 00@17	00	
Straw, ℔ bale	— @	—	
Oil cake meal	— @30	00	
Corn Meal	31 00@32	00	
FLOUR.			
Extra	4 75 @5	12½	
Superfine	4 00 @4	75	
FRESH MEAT.			
Beef, fr quality	℔ 7 @	8	
do, second do	6 @	7	
do, third do	4½@	5	
Veal	4½@	6	
Mutton	4½@	5	
Lamb	5½@	8	
Pork, undressed	6¾@	6½	
do, dressed	8½@	8¾	
GRAIN, ETC.			
Wheat, coaet	1 45 @1	50	
do shipping	1 52½@1	55	
do milling	1 57½@1	00	
Berley, coast	1 20 @1	30	
do brewing	1 40 @1	50	
Oats, ch'ice	1 65 @1	75	
do common	1 35 @1	55	
Corn, White	— @1	45	
do, Yellow	— @1	45	
Buckwheat	3 00 @3	25	
Rye	112½@—	—	
HOPS.			
California, 1874	35 @	37½	
East'rn '73 ch'ice	— @	—	
MISCELLANEOUS.			
Beeswax, per lb	25 @	27½	
Honey in comh	18 @	22½	
do Strained	5 @	10	
Pulu	8½@9		
Onions	70 @	90	
NUTS—JOBBING.			
Cal. Walnute	10½@	12½	
Peanuts per lb	7 @	9	
Cbile Walnuts	8 @	9	
Pecan nuts	13 @	15	
Brazil do	14 @	16	
Alm'de h'rd shell	10 @	12½	
do, soft	20 @	25	
Filberts	17 @	18	
Cocoanuts, 1000	—60 00@	—	
POTATOES.			
Sweet, per cwt	— @1	00	
Cuffee Covel	—@—		
H. M. Bay	1 30 @1	50	
Pigeon Pt	1 50@1	60	
Humboldt	1 50@1	60	
Tomales	—@1	35	
Mieston	— @	—	
Salinas	— @	—	
Bodega	— @	—	
St Barhara	— @	—	
Sac. River	— @		
POULTRY & GAME.			
Live Turkeys,			
hens per lb	17 @	20	
do gobblers	15 @	17	
Hens, per dz	6 50 @7	50	
Rooetere, young,			
large	6 00 @7	00	
Broilers, small	2 50 @4	00	
do large	4 00 @4	50	
Ducks, tame, doz	5 50 @7	00	
Geese, per pair	2 00 @2	50	
Hare, per doz	3 00 @3	50	
Snipe, Eng., doz	— @	—	
Quail, per doz	1 50 @1	75	
Mallard Ducks	4 00 @4	50	
do small	1 50 @1	75	
Wild Geese, gray	— @	—	
do white	— @	—	
Doves, per dozen	50 @	75	
Prairie Chickene	— @	—	
Grouse	— @	—	
Rabbits	1 25 @1	50	
do tame	5 00 @6	00	
Venison, per lb	7 @	9	
PROVISIONS.			
Cal. Bacon, Light	— @	17	
do Medium	— @	16½	
do Heavy	— @	13½	
Eastern do	13½@	16	
Hams, Cal	14 @	14½	
do Whittakers	17½@	18½	
do Duffield, ch	— @	17	
do Plankton &			
Armour	— @	15	
do Boyd's	— @		
do Stewart's	— @	16	
Eastern Should's	9 @	10	
do new hams	— @	—	
Cal. Smoked Beef	9 @	10	
Lard	14½@	17	
SEEDS.			
Alfalfa, Chili	— @	12	
oo Californla	— @	15	
Canary	4 @	4½	
Cotton	6 @	10	
Flaxseed	3 @	4	
Hemp	— @	8	
Ky. Blue Grass	50 @	60	
do 3d quality	40 @	50	
do 3d quality	30 @	4	
Millet	12 @	15	
Mustard, white	2 @	3	
do. Brown	1¾@	2	
Italian Rye	30 @	40	
Perennial do	30 @	40	
Rape	— @	11	
Timothy	11 @	12	
Sweet V Grass	60 @	75	
Orchard do	30 @	35	
Red Top do	30 @	40	
Hungarian do	10 @	13	
Lawn do	50 @	60	
Mesquit do	27 @	—	
Clover Red	— @	20	
do White	— @	65	
Aleike	— @	60	
WOOL, ETC.			
FALL—			
Good to choice	18 @	20	
Fair grade	16 @	18	
Heavy free	14 @	16	
Defective	12 @	15	
Hlidce, dry	19 @	20	
do wet salted	8½@	9	
Tallow, Crude	5 @	6	
do Refined	6 @	7	

FRUITS AND VEGETABLES.

WEDNESDAY M., Nov. 25, 1874.

FRUIT MARKET.			
Tahati, Or. ℔ M	— @40	00	
Lorita, do	— —@—	—	
Cel. do	— —@—	—	
Limes, ℔ M	—@15	00	
Cal. Lemone, ℔ M	—@25	00	
Australian do	—@40	00	
do Sicily ℔ b'x	— —@—	—	
Bananas, ℔ bnch	4 00@ 5	00	
Cocoanute, ℔ 1000	—@60	00	
Pineapplee, ℔ dz	— @—	—	
Apples, ℔ box	50 @1	75	
Cherries	— @	—	
Blackberriee	— @	—	
do wild	— @	—	
Huckleberries	— @	—	
Strawberries ℔ lb	— @	25	
Gooseberries	— @	—	
Raspberriee	— @	—	
Currants	— @	—	
do black	— @	—	
Apricots	— @	—	
Plums	5 @	—	
Peaches, bskt	— @	—	
do, ℔ box	— @	—	
do ext Mountain, lb	— @	—	
Pears, Bart't, bx	— @	—	
do Cooking	40 @	45	
Crab Apples	— @	—	
Nectarines	— @	—	
Wat'rmel'ns ℔ 100	— @	—	
Muskin'l's ℔ 100	5 00 @10	00	
Pomegran'e ℔ 100	6 00 @ 7	00	
Figs	@	6	
Grapes, Bl'k H'g	1 00 @1	50	
do Muecat	1 50 @2	00	
do Malavo'e	— @	—	
do Sweetw'r	— @	—	
do Mission	75 @	1 00	
do Roac of Perul	00 @	1 50	
do Tokay	1 25 @	1 50	
Mission	— @	—	
Salinas	— @	—	
Bodega	— @	—	
St Barhara	— @	—	
Sac. River	— @		
do Morocco	1 50@2	00	
do St. Peter	— @	—	
DRIED FRUIT.			
Applee, ℔ lb	7 @	8½	
Peare, ℔ lb	10 @	11	
Peaches, ℔ lb	8 @	13	
Apricots, ℔ lb	10 @	12½	
Plums, ℔ lb	8 @	10	
Pitted, do ℔ lb		@15	
do Extra, ℔ lb	— @	—	
Raisins, ℔ lb	5½@	12½	
Black Figs, ℔ lb	5 @		
White, do	10 @	15	
Prunes	6 @	8	
do German	14 @	—	
Citron	@27½	32½	
Zante Currante	8 @	—	
Dates	12½@		
VEGETABLES.			
Asparagus	— @	—	
Beets	— @	1	
Cahbage, ℔ 100 lbs	.50 @	75	
Carrots, per ton	62—@	—	
Cauliflower, doz	— @	—	
Celery, doz	— @	—	
Garlic, ℔ lb	9 @	10	
Green Peae	2½@	3	
Green Corn ℔ doz	.20 @	22	
Sum'rSquash per ton	—@8	00	
Marro'fat Sq'sh, tn	8 00@	10 00	
Artichokes, ℔ doz	40 @	75	
String Beans, ℔ lb	5@—		
Lima Beans	5 @	—	
Parsnips	12½@	15	
Shell, Beans	7 @	10	
Peppere, green, box	75@	1 25	
Okra, Green	5 @	6	
Cucumbere, hox	.50 @		
Tomatoes, box	.62½@	1 00	
Egg Plani, box	1 25@—		
Rhubarb	8 @	10	
Lettuce	10 @—		
Turnips, ton	10 00 @—		

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ℔ lb*	35	do do (whole,) ℔ lb†	12½
do unpared. ℔ lb†	32	Apples, 10-lb boxes family use, extra	18
Peaches, do, ℔ lb†	16	Plume, pitted, ℔ lb†	25
do pared, ℔ lb*	33½	do do ℔ lb*	40
do do ℔ lb†	30	Rhubarb, ℔ lb†	35
Bartlett Pears, pared, lb*	45	Corn, ℔ lb†	32½
Pears, pared (sliced) lb*	30	Beane, ℔ lb†	60
Pears, 10-lb boxes, family use, extra	35	Potatoes, ℔ lb†	14
Currante, stemmed, lb*	30	Swcet Potatoes, ℔ lb†	15
Royal Ann Cherries, pitted, ℔ lb*	25	Onions, ℔ lb†	40
Kentish Cherriee, pitted, *℔ lb	55	Beef, ℔ lb†	40
Apples, pared (ring) lb†	12½	Tomatoes, ℔ lb†	75
		Squash, ℔ lb†	20

*In caddies. †In bulk.

LEATHER.

WEDNESDAY M., Nov. 25, 1874.

City Tanned Leather, ℔ lb	26@29
Santa Cruz Leather, ℔ lb	26@29
Country Leather, ℔ lb	24@28
Stockton Leather, ℔ lb	25a@28
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ℔ doz	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	63 00@ 67 00
Cornellian Females, 14 to 16 Kil	71 00@ 76 50
Simon Ullmo Females, 12 to 13, Kil	60 00@ 64 00
Simon Ullmo Females, 14 to 15, Kil	10 00@ 72 00
Simon Ullmo Females, 16 to 17, Kil	73 00@ 75 00
Simon, 18 Kil., ℔ doz	61 00@ 63 00
Simon, 20 Kil. ℔ doz	65 00@ 67 00
Simon, 24 Kil. ℔ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kipe, ℔ lb	1 00@ 1 15
California Kip, ℔ doz	40 00@ 8 00
French Sheep, all colors, ℔ doz	8 00@ 15 00
Eastern Calf for Backs, ℔ lb	1 00@ 1 25
Sheep Roane for Topping, all colors, ℔ doz	9 00@ 13 00
Sheep Roans for Linings, ℔ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ℔ pair	5 00@ 5 25
Good French Calf Boot Legs, ℔ pair	4 00@ 4 75
French Calf Boot Legs, ℔ pair	4 00@ —
Harneee Leather, ℔ lb	30@ 37½
Fair Bridle Leather, ℔ doz	48 00@ 72 00
Skirting Leather, ℔ lb	33@ 37½
Welt Leather, ℔ doz	30 00@ 50 00
Buff Leather, ℔ foot	17@ 23
Wax Side Leather, ℔ foot	17@
Eastern Wax Leather	—@—

GENERAL MERCHANDISE.

WEDNESDAY M., Nov. 25, 1874.

BAGS.			
Eng. Stand Wht	— —@12		
Detrick'e Machine			
Sewed, 22x36 E	.12 —@12½		
do 22x36, do E W	—@13½		
do 20x40, do A	—@13½		
Flour Sacks ½e	9½—@11½		
" ¼s	6 —@ 7		
Stand. Gunnies,			
double seam	15 @15½		
single seam	13¾ @14		
" Wool Sacks	60 @67½		
Barley Bags 24x36	— @14		
do 23x40	— @14½		
do 24x40	— @15		
do 28x36	— @16		
Oat Bags, 24x40	16 @16½		
do 28x36	— @17		
Hessian 40-in.gde	9½ @ 9¾		
do 45	10½ @11		
do 60	— @15		
CANNED GOODS.			
Aset'd Pie Fruits			
in 2½ lb cans	2 50 @ 2 75		
do Table do	3 50 @ 4 00		
Jame & Jellies	3 75 @ 4 00		
Pickles ½ gl	— @ 3 50		
Sardines, qr box	1 80 @—	—	
do hf boxes,	3 20 @—	—	
COAL—Jobbing.			
Auetralian, ℔ ton	10 50 @12	50	
Coos Bay	— — @10	00	
Bellingham Bay	— — @ 8	50	
Seattle	— — @11	—	
Cumberl'd, cks	— — @18	00	
do bulk	.16 00 @17	50	
Mt. Diablo	6 25 @8	50	
Lehigh	— — @17	00	
Liverpool	.10 50 @11	50	
Weet Hartley	—@14	00	
Scotch	.10 00 @11	00	
Scranton	— — @13	50	
Vancouver's Isl	.11 00 @11	50	
Charcoal, ℔ sk	75 @—		
Coke, ℔ bbl	— @	60	
COFFEE.			
Sandwich Island	— @	22	
Central America'n	20 @	22	
Costa Rica per lb	23 @	24	
Gnatemala	20 @	22	
Java	— @	26½	
Manilla	19 @	20	
Ground in cs	— @	27	
Chicory	9 @	10	
FISH.			
Pac. Dry Cod, new	5 @—	—	
caes	— @—	—	
do boneless	11 @	12	
Eastern Cod	— @—	—	
Salmon in hbls	.9 00 @9	25	
do ½ hbls	4 50 @4	75	
do 2½ ℔ cans	— @3	00	
do 2 lb cans	.2 65 @2	75	
do 1 lb cans	.1 75 @—	—	
Do Col. R. ½ lb	— @—	—	
Pick. Cod, hbls	.22 00 @—	—	
do ½ bbls	11 00 @—	—	
Bos. Sm'k'd Her'g	40 @	50	
Mack'l, No. 1, ½ hls	8 00 @8	50	
" Extra	— @9	00	
" in kits	.2 00 @2	50	
" Ex mese	.3 00 @3	50	
" Ex mess, ½ bs	—@12	00	
Sm'k Herr'g, bx	50 @	60	
NAILS.			
Assorted size, lb	5 37½@7	50	
OILS.			
Pacific Glne Co.			
Neat F't No. 1	— @	90	
Pure	— @—	—	
Castor Oil, No. 1	— @1	25	
do do No. 2	— @1	12½	
Cocoanut	.1 47½@1	50	
Olive Plagniol	— @—	—	
do Possel	— @—	—	
Palm lb	9 @—	—	
Linseed, raw	— @1	05	
do boiled	— @1	10	
China nut in ce	77½@	82½	
Sperm, crude	— @1	40	
do bleached	.1 90 @2	25	
Coast Whales	45 @	—	
Polar, refined	50 @	52½	
Lard	1 15 @1	30	
Coal, refined Pet	37½@	—	
Oleophine	21 @	24	
Devoe'e Bril't	25 @	28	
Long Island	21 @	24	
Eureka	— @	—	
Devoe'e Petro'm	21 @	24	
Barrel kerosene	21 @	24	
Olive	.4 20 @9	25	
Downer Keroee'e	— @	37	
Gas Light Oil	— @	26	
PAINTS.			
Atlan. W. Leed	8 @	10	
Whiting	— @	2	
Pntty	4 @	5½	
Chalk	— @	2½	
Parie White	2¾@	—	
Ochre	2 @	5	
Venetian Red	3½@	5	
Red Lead	7 @	11	
Litharge	10 @	11	
Eng. Vermillion	2 00@2	10	
RICE.			
China No. 1, ℔ lb	6½@	6¾	
do 2, do.	5¾@	6	
Japan	6 @	7	
Siam Cleancd	7 @	—	
Patne	6 @	6½	
Hawaiian	7¼@	8	
Carolina	10 @	10½	
SALT.			
Cal. Bay, per ton	10 00@14	00	
do Commeree	5 00@ 7	00	
Carmen Ieland	11 00@13	00	
Liverpool fine	—@24	00	
do coarse	6 00@—	—	
SOAP.			
Castile ℔ lb	10 @	11	
Local brands	5 @	8	
SPICES.			
Cloves	50 @	55	
Caeeia	26 @	27	
Citron	— @	30	
Nutmeg	1 20 @1	25	
Whole Pepper	18 @	19	
Pimento	— @	15½	
Gr'nd Allep prdz	— @1	12½	
do Caseia do	— @1	50	
do Clovee do	— @1	50	
do Mnstard do	— @1	20	
do Ginger do	— @1	00	
do Pepper do	— @1	00	
do Mace do	— @2	00	
SUGAR, ETC.			
Cal. Cube per lb	11 @	—	
Partz' Pro. Cube			
hhl or bbl 00 lb bxe	— @	11¼	
do in 50 lb bxs	— @	11½	
do in 25 lb bxs	— @	11¾	
Circle A crushed	— @	11	
Powdered	— @	11¼	
Granulated	— @	11	
Dry granulated	— @	11¼	
Golden C	— @	10½	
Hawaiian	8 @	10½	
California Beet	10¾@	11½	
Cal. Syrup in ols	— @	6	
do in ½ ble	— @	70	
do in kegs	— @	70	
Hawaiian Molasseee	25 @	30	
TEA.			
Oolong, Canton, lb	19 @	25	
do Amoy	28 @	50	
do Formoea	40 @	80	
Imperial, Canton	25 @	40	
do Pingsuey	45 @	80	
do Moyune	60 @1	00	
Gunpo'der, Cant	30 @	42½	
do Pingsuey	50 @	90	
do Moyune	65 @1	25	
Yung Hy., Canton	28 @	40	
do Pingeuey	40 @	70	
do Moyune	65 @	85	
Japan, ½ chests, bulk	30 @	75	
Japan, lacquered hxs, 4½ and 5 lbs	45 @	67	
Japan do, 3 lb bxe	45 @	90	
do pl'n hx, 4½ lb	35 @	65	
do ½ & 1 lb paper	30 @	55	
TOBACCO—Jobbing.			
Bright Navye	50 @	60	
Dark do	50 @	55	
Dwarf Twist	70 @	72½	
12 inch do	60 @	70	
Light Pressed	70 @	80	
Hard do	50 @	60	
Cavan. Wrap't	35 @	40	
Penn. Wrapper	20 @	45	
Ohio do	15 @	20	
Virgi'a Smok'g	45 @	75	
Fine ct che'g, gr	.8 50 @9	25	
Fine cnt cbewing, buc'ts	.75 @	90	
Banner fine cut	9 00@ 9	25	
Eureka Cala	—@9	00	
TURPENTINE.			
Eastern	55 @	60	

METALS.

WEDNESDAY M., Nov. 25, 1874.

American Pig Iron, ℔ ton	— —	@ 46	00
Scotch Pig Iron, ℔ ton	42 00	@ 46	00
White Pig, ℔ ton	— —	@ 46	00
Oregon Pig, ℔ ton	— —	@ 46	00
Refined Bar, bad assortment, ℔ lb	— —	@ —	3½
Refined Bar, good assortment, ℔ lb	— —	@ —	4
Boiler, No. 1 to 4	— —	@ —	5⅛
Plate, No. 5 to 9	— —	@ —	5½
Sheet, No. 10 to 13	— —	@ —	5¼
Sheet, No. 14 to 20	— —	@ —	5⅛
Sheet, No. 24 to 27	— 08	@ —	09
Horse Shoes, per keg	7 50	@ 8	00
Nail Rod	— 9½	@ —	—
Norway Iron	— 8	@ —	—
Rolled Iron	— 6	@ —	—
Other Irone for Blackemithe, Minore, etc.	— —	@ —	4½
COPPER.—			
Braziers	— 31	@ —	32
Copper Tin'd	— 45	@ —	—
O. Niel's Pat	— 50	@ —	—
Sheathing, ℔ lb	— —	@ —	24
Sheathing, Yellow	— —	@ —	25
Sheathing, Old Yellow	— —	@ —	12½
Composition Naile	— 24	@ —	—
Composition Bolte	— 24	@ —	—
TIN PLATES.—			
Platee, Charcoal, IX ℔ hox	13 00	@ 15	00
Platee, I O Charcoal	13 00	@ 14	50
Roofing Plates	12 50	@ 15	00
Banca Tin, Slabs, ℔ lb	— 32½	@ —	33
STEEL.—English Cast, ℔ lb	— 20	@ —	25
Anderson & Woods' American Cast	— 10	@ —	17
Drill	— 18	@ —	22
Flat Bar	— 18	@ —	22
Plough Points	— 16	@ —	17
ZINC	— —	@ —	11
Zinc, Sheet	— —	@ —	11½
NAILS—Assorted sizes	5 25	@ 8	00
QUICKSILVER, per lb	— —	@ 1	55

LUMBER.

WEDNESDAY M., Nov. 25, 1874.

CARGO PRICES OF REDWOOD.

Rough, ℔ M	$18 00
Rough refuse, ℔ M	12 00
Rough clear, ℔ M	32 50
Rough clear refuse, M	22 50
Rustic, ℔ M	30 00
Rustic, refuee, ℔ M	24 00
Surfaced, ℔ M	26 00
Surfaced refuae, ℔ M	18 00
Flooring, ℔ M	30 00
Flooring, refuse, ℔ M	20 00
Beaded flooring, ℔ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref. M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf. ref., M	18 00
Half-inch Battens, M	22 50
Pickets, rough, ℔ M	13 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shingles, ℔ M	2 25

CARGO PRICES OF PUGET SOUND PINE —Retail Price.

Rough, ℔ M	— —
Fencing and Stepping, M	— —
Fencing, 2d quality, ℔ M	— —
Fencing, ℔ lineal foot	1c
Flooring and Step, ℔ M	30 00
Flooring, narrow, ℔ M	32 50
Flooring, 2d quality, M	25 00
Laths, ℔ M	3 25
Furring, ℔ lineal ft	¾

REDWOOD—Retail.

Rough, ℔ M	20 00
Rough refuse, ℔ M	16 00
Rough Pickets, ℔ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ℔ M	30 00
Siding, ℔ M	25 00
Tongued and Grooved, surfaced, ℔ M	32 50
Do do refuee, ℔ M	22 50
Half-inch surfaced, M	40 00
Rustic, ℔ M	35 00
Battens, ℔ lineal foot	¾
Shingles ℔ M	2 75

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S. F. RETAIL MARKET RATES.

WEDNESDAY

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This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER,

22v6-1y President Board of Directors.



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the **Plains of Kansas, Nebraska, Missouri, Iowa and Illinois**, where no other mills have been known to stand any length of time. All we ask is a full investigation of the DEXTER.

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO.

4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.

The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept on the MERINO RANCH,



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. City Office—315 California Street, San Francisco.

SEVERANCE & PEET,

10v7-eow Importers and Breeders of Spanish Merino Sheep.

ALFRED S. MOORE. W. L. THWING

ALFRED S. MOORE & CO.,

Manufacturers and Importers of and General Dealers in

Lift Pumps, Force Pumps, Steam Pumps, Hydraulic Rams,

GARDEN ENGINES, HOSE, HOSE PIPES, COUPLINGS, ETC.,

No. 428 Sansome Street, - - - - - SAN FRANCISCO.

17v8-3m

Nurseries and Seedsmen.

1874. GUIDE AND CATALOGUE 1875. FREE.

To persons contemplating purchasing I will send my ILLUSTRATED, DESCRIPTIVE CATALOGUE and GUIDE to the VEGETABLE and FLOWER GARDEN WITHOUT CHARGE. It contains the most extensive and valuable list of



Flowering Bulbs, Roots and Plants, Semi-Tropical Trees, Ornamental Shrubs, Fruit and Shade Trees, etc., ever offered in this market. It tells how to successfully grow the **Australian Blue Gum, the Monterey Cypress, Pine**, etc., and the proper method of **Cultivating Tobacco on this Coast.**

☞My stock of seeds is in part my own raising and in part direct importations from the best European and Eastern growers, and is unsurpassed in all respects by that offered by any other establishment.

100,000 Australian Blue Gums and Monterey Cypress in boxes at from **$30** to **$50** per 1,000, raised at my own Nursery at San Rafael.

R. J. TRUMBULL,

Grower, Importer, Wholesale and Retail Dealer in Shrubs, Trees, etc.

20v8-6m 427 Sansome street, S. F.

SUPERIOR FRUIT TREES

TRUE TO NAME.

A fine collection of **Evergreen and Deciduous Trees. Australian Gum Trees** in variety, by the hundred or thousand. **Monterey Cypress** in quantities and sizes to suit all. **Orange and Lemon Trees** at reduced prices. A general variety of Nursery stock.

Also, Rhubarb and Asparagus roots.

T. CORLEY,

18v29-tf 315 Washington Street, S. F.

PEPPER'S NURSERIES.

(Established in 1858.) PETALUMA, CAL.

Green Houses and Tree Depot corner Washington and Liberty streets.

4 Green Houses. 3,000 feet of Glass. Fruit Trees a Specialty.

We offer for sale at lowest market rates a general assortment of Fruit and Shade trees, small Fruits, Vines, etc. Evergreen trees and Shrubs in great variety. Green House, Conservatory and Bedding Plants, Roses, etc.

We are now ready, Nov. 1st, to fill orders for trees and plants. Catalogue and price list furnished on application.

Address, W. H. & G. B. PEPPER,

19v8-tf Petaluma, Sonoma Co., Cal.

FREE to all applicants—my Nursery and Bulb Catalogues. F. K. PHŒNIX, Bloomington, Ill.

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SHINN'S NURSERIES,

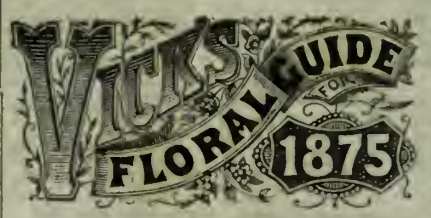
NILES' JUNCTION,

Alameda County, - - California.

The attention of persons intending to set out Trees is requested to the well grown and large variety offered for sale by the undersigned at the above Nurseries. An examination of our stock will satisfy any one of the quality, being all that can be asked, and when the low prices we have fixed are taken into consideration, we believe we are offering the very best inducements for buyers to deal with us. For full particulars we refer to our circular for the approaching season, which will be sent, as requested, on application to either of the undersigned. SHINN & CO.,

Proprietors.

Address James Shinn, Niles, Alameda County, Cal., or, Dr. J. W. Clark, 418 California street, San Francisco, Cal. 8v17-4mo.



Published Quarterly.—JANUARY NUMBER just issued, and contains over **100 PAGES, 500 ENGRAVINGS**, descriptions of more than **500** of our best **Flowers and Vegetables**, with Directions for Culture, **COLORED PLATE**, etc.—The most useful and elegant work of the kind in the world.—Only **25 cents** for the year. Published in English and German.

Address, JAMES VICK, Rochester, N. Y.

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ALMOND TREES.

35,000 Brier's Languedoc Almond Trees, one and two years old from the bud. This is the only Almond planted on a large scale, being hardy, late blooming, beautiful tree. It bears the second year from planting. The Almond is large and sweet with soft shell. Also, two year old Peach and English Walnut trees. Liberal terms to the trade and persons planting large orchards. Send orders to

W. W. BRIER,

21v8-3m Centerville, Alameda Co., Cal.

FARMERS' LINE.

THE SPLENDID IRON SHIP,



CITY OF YORK,

1255 Tons. A 1.

AULD.....Master.

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co. RODGERS, MEYER & CO.,

aug15-tf 212 Battery street.

Important Fossil Discoveries.

The discoveries of fossils in the interior of the American continent appear to be adding more largely to paleontological science than any other portion of the globe. Every expedition into the great unknown wastes on either side of the Rocky mountains adds largely to our knowledge of ancient and extinct life, and are beginning to point out the necessity for important changes in some of our conjectures with regard to the age of some of the early animals upon this continent. These discoveries are duly appreciated both at home and abroad. Last year, saye the Denver *News*, it will be remembered, that Prof. Cope set the scientific world on fire by the discovery of an "elephant's graveyard," containing the bones of mammoths, and the extinct elephantine genera, and this year again he is likely to cause a similar mundane conflagration by an even more extensive discovery of the same sort. In conjunction with his coadjutor, Dr. Yarrow, he has unearthed in the valley of the San Juan a large number of vertebrates of enormous size, some of which are entirely new to science, and those that are not, of a very rare and comparatively unknown species. Among them are several very perfect skeletons of the mastodon race, and a very large variety of mammoths cousin German to that elephant of the past. The discovery has not yet been arranged and classified, so that a complete list of the different specimens embraced in it cannot be given; but this work already is in progress; a number of the specimens having been forwarded to Washington soon after their discovery, where competent persons at once set to work upon them, and Dr. Yarrow recently left Denver for the East with a large proportion of the remainder.

Besides this very valuable variety of vertebrates, as many as a hundred additions to the known list of invertebrates have been made, while also a large number of "old friends with new faces" have been found; in other words, familiar specimens have been discovered in entirely new formations. The effect of this latter will be to revolutionize many of the conjectures of science, not only as to the age of the animals in question, but also as to that of the formations they are found in. The entire discovery, taken as a whole, Lieutenant Wheeler regards as the most valuable contribution to pale ontology made since that study became a branch of scientific research.

The natural division of the survey under Dr. Rothrock, the well known botanist, has achieved substantial success. An immense number of specimens of mammals, reptiles and fishes, and as many as 1,000 bird skins, some of them new varieties, were obtained. Of the fishes, five of the species discovered are entirely new.

TEMPERATURE OF THE SUN.—M. J. Violle described to the French Academy of Science his apparatus and methods, and concludes that the temperature of the sun at Grenoble, on June 20th, at 3:30 P. M., was 1,354 degs. Concerning the above researches of M. Violle, H. Saint-Claire Deville remarks that it is not prudent to speak of temperatures above those which have been measured, the highest of which probably has been determined by the experiments of Bunsen. In speaking of calorific phenomena produced by combination we must remember that, in given conditions of temperature and pressure, the quantities of matter which combine, and consequently the amount of heat produced, are limited by the phenomenon of constant dissociation—a limit which the speaker's experiments place very near to measurable temperatures. It is, therefore, not permissable, until the contrary has been demonstrated, to speak of those fabulous temperatures which have often been mentioned.

FIXING SLATES.—Slates, instead of being nailed to the roof, may be fastened by movable hooks about two inches long, which are soldered to conically-formed zinc plates, four to six inches long. The slates are thus kept securely between the hook and zinc plate and can be removed simply with the greatest facility, by turning the hook. Thus one or more of the plates can be taken out for repair or new ones inserted without interfering with the rest. The method is said to make a roof water-tight.—*Scientific American.*

SUCCESS OF STEAM CANAL BOATS.—The thirteen steam canal boats put into service on the New York and Erie Canal appear to be doing their work satisfactorily, one of them recently reached Buffalo from New York with a load of merchandise, in six days, seventeen hours. This is considered good time. The Baxter Company have contracted for ten more boats of the same pattern—a fact which shows that they are regarded as an improvement over the horse boats. The freight rates are very low, but notwithstanding this it is said the new boats make money.

IRON AS A WOOD PRESERVER.—According to Hubert, the best means of protecting wood which is exposed to moisture, especially railroad ties, is to drive into them long, fine iron nails, with broad and flat heads. When wood thus protected is placed in the ground the nails rust, and the rust spreads equally throughout the wood protecting it. The ties may also be wound with iron wire. Hubert states that wood treated this way has been buried in moist earth and remained sound for nearly fifteen years.

Better Tools and Implements Wanted.

Did you ever read the story of the "Wonderful one-horse shay?" Do you remember that it was made as strong in one part as another, so that no part could wear out or break *first?* And it rnn on for a whole generation and descended to children, and children's children as a family heirloom. At last, however, after having run so long without a break or flaw, it came to grief. One Sabbath while on its way to church it reeled, and creaked and fell to atoms, reduced from a wonderful one-horse shay to a pile of dust, and its glory was gone! *Worn out all over alike!*

Well, why can't we have tools and vehicles that will wear alike *all over* now? Why don't manufacturers improve and strengthen the weak points in their wares? Take spades, shovels and hoes, for instance; three-fourths of them at least fail in the shank, or where the handle joins the blade. If you want one stronger in the shank you must buy one that is heavier all over and may he no stronger in the shank than the others. This is wrong and ought to he remedied.

If we look over tools in common use we may find that most of them show a weak point or two where a majority of all breaks occur. These ought to be made stronger in new ones. Such, however, does not seem to be the fact concerning a large number of staple articles. Indeed, many things seem to show more weak points than formerly, and needlessly so too. Implement makers may plead that competition is so sharp and that certain articles are already known in market as standard, that to compete successfully an article must sell as cheaply as the standard one, and the profits are too small for improvement. This is not wholly true; inferior articles even are sold for a superior price, when neatly painted or polished and systematically advertised; and there is no rnle of business that forbids the appreciation of merit when properly advanced.

Of course the bulk of manufacturing tools is now done in factories, to the exclusion of home workmanship. Country mechanics complain that they cannot compete with factory prices, and the result is that users of tools buy of dealers who jew both the maker and pnrchaser, thus covering the weak points of his merchandise on the one hand, and preventing the more general diffusion of tool and implement making on the other.

The hent of inventive ingenuity seems to be adjustihility more than practicability; more of polish than of use. Now, we plead for the useful, and insist that we pay enough now for articles that ought to be more durahle. Give us an ounce or two more of metal in the weak points of tools, rather than gaudy paint, and we will be better satisfied. Let us insist that the weak points he strengthened in tools, implements, vehicles and machines; and above all let ns have simplicity of construction. —*Cor. Germantown Telegraph.*

The Nationality of "Old Probabilities."

Professor Abbé in a late number of the *Silliman's Journal*, gives his reesons for helieving that weather telegraphy had its origin in the United States—that "Old Probabilities" was a Yankee by birth. This article has drawn the following communication from Dr. Vanderweyde, in which he states that "Severrier in France, in 1854, called attention to the importance of systematic weather reports, and that in 1863 a system of daily probabilities was inaugurated in that country, further, that Professor Redfield wrote in 1846 to *Silliman's Journal* that gales might be predicted with the help of the telegraph, and lastly that the Weather Bureau was inaugurated in the United States in 1864. These statements are undouhtedly correct, but as the article is intended as an argument concerning the honors of priorty in this regard, it may be well to make a few statements of facts within my personal knowledge, the correctness of which I can prove by published documents.

Professor Buys Ballot, of Utrecht, Holland, after having for years made meteorological observations with a view to obtain probabili ies, estahlished simultaneous observations at fixed days and hours all over Holland and neighhoring localities, with help of voluntary correspondents of whom the subscriher was one.

Later, the system was extended, and the estahlished telegraph companies aided liherally in transmitting the weather reports, while Professor Buys Ballot nrged, during a period of 14 years, the government of Holland to puhlish them officially and to organize a weather hureau, which was finally done May 21st, 1860. England followed suit in Febrnary, 1861; France in August, 1863; and the United States intended to do so in 1865, when the destrnction of the Smithonian Institution, which was to be the head-quarters of the enterprise, caused a postponement."

If "Old Probabilities" is after all a Dutchman, neither France nor the United States should dispute his paternity. Seven cities, we are told, claimed to he the birth-place of Homer, and it is impossible to determine which of them is entitled to the honor; but in this case a careful sifting of facts and dates will of conrse settle the question.

THE Pullman Car Works, at Detroit, have recently shipped to England nine palace cars to he used on the railways there. A numher of workmen go out with them to pnt them together, as they are necessarily shipped in pieces.

Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed hy no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

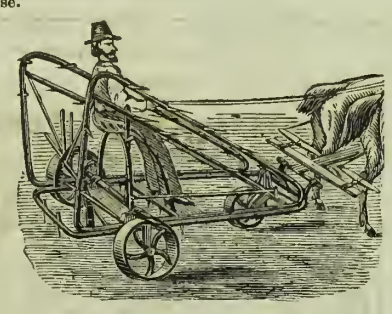
FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can he made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can he done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

THE TREADWELL SULKY



GANG PLOW.

Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50; old style, $25. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

18v27-tf San Francisco.

THE

CELEBRATED MITCHELL WAGON



15v7-3

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

C. CREGO. S. O. BOWLEY.

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Hetfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,

No. 9 Merchants' Exchange, California street,

24v5-3m San Francisco.

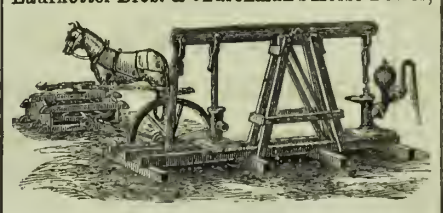
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

v7-2m-3m Cor. J and 10th Sts., Sacramento.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,

Stockton, Cal.

Miscellaneous Notices.

ARE YOU GOING

TO PAINT?

THEN USE THE BEST.

THE AVERILL CHEMICAL PAINT

WILLLAST THREE TIMES AS LONG as the best lead and oil, without CHALKING; is of any desired color. It is prepared for immediate application, requiring no Oil, Thinner or Drier, and does not spoil by standing any length of time. It is equally as good for inside as outside work; over old work as well as new; in fact, where any paint can he used the AVERILL CHEMICAL PAINT will be found superior to any other. Any one can apply it who can use a brush, which truly makes it the FARMER'S FRIEND.

IT IS JUST THE PAINT FOR THE AGE.

IT IS SOLD BY THE GALLON ONLY.

One gallon covers 20 square yards 2 coats.

For further information send for sample card and price list.

MANUFACTURED BY

The California Chemical Paint Company.

TYLER BEACH, Pres't. M. C. JEWELL, Sec'y.

Office—Corner Fourth and Townsend streets, San Francisco. 16v7-eow-hp-3m

POISON! POISON

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is SURE DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was used according to your directions, on my *Ouito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

Mr. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, O. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office, 422 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.

Works, King street, bet. Second and Third. fe15-eow



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,

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CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,

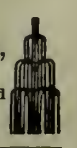
Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.

21v2-1y



Brittan, Holbrook & Co., Importers of Stoves and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento

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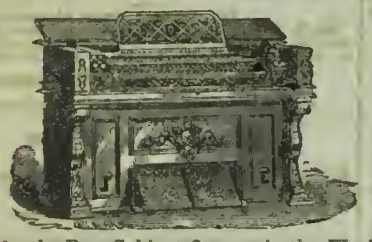
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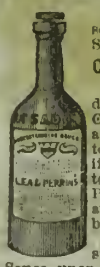
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CALIFORNIA PORTRAYED.

The columns of the PACIFIC RURAL PRESS from January 1, 1870, contain the most complete and reliable information concerning the soil, climate, products and capabilities of the different sections of California, of any publication yet made. Neither new comers or old settlers in the rural districts can well afford to do without this enterprising and leading agricultural weekly. It is a good helper at home and a welcome guest abroad.

W. L. CHURCH, formerly newspaper agent, will please address this office.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, DECEMBER 5, 1874. [Number 23.

Aquarium and Flower Stand.

The beautiful cut on this page of our paper represents a combined aquarium and flower stand; a tasteful and appropriate ornament for the parlor or window. Still, the term ornamental is hardly adequate in giving our readers an idea of its merits; for when it is properly occupied by its aquatic, amphibious and floral tenants, it furnishes a worthy subject of study for the student of natural history. Its presence would have an improving influence on the youthful members of the household, and would tend to the development of a taste for natural history. Here they could watch the growth and habits of plants, fishes and amphibious animals. The cost of the stand with globe—unoccupied—would be about $17; with the different apartments properly fiilled it would probably be from $25 to $30.

For the cut we are indebted to the *Guide to the Vegetable and Flower Garden*, recently issued by R. J. Trumbull, seedsman of this city. We have seen nothing in the catalogue line that equals this in its practical suggestions, in its adaptability to the Pacific coast, and in its general make up. We shall occasionally appropriate information from this publication for the benefit of our readers.

The following directions for filling and managing the flower stand and aquarium were written by P. R. Hoy, M. D., of Racine, Wisconsin:

How to Fill the Aquarium.

First, cover the bottom of the tank to the depth of one-half inch, with pure fine sand, on top of which put an equal quantity of fine gravel; over this gravel sprinkle small ornamental stones, shells, coral, etc. Everything put into the tank must be thoroughly washed. Next put in position an ornamental central piece of coral, stone, or anything out of which you can construct an arch through which the fish can readily swim. Now fill the tank one-third full, with pure cold water from the lake, river or well.

Plants.

The best aquatic plant for ærating the water in the aquarium, is *Anacharis Canadensis*, found growing under water on the bottom of nearly all sluggish streams and ponds. The *Valisneria Spiralis* (eel-grass) is the next best, after which comes the *Myriaphyllum Spiralis* and the *Myriaphyllum Verticellatum*. There is a species of *Conferva* found in rapid streams, attached to stones, that is an excellent ærator, valuable especially during the winter when other plants do not flourish. If you get the *Anacharis*, remove all decayed stems and leaves, wash clean, and arrange in packets of 10 to 15. Make a hole in the sand, insert the butt-end of the plants, and secure in this position by pressing small stones about them. Insert in this way about six to eight bunches, and be careful to make them secure at the bottom. Roots are not necessary, as the cuttings will soon send out fine, white rootlets. Now you are ready to fill up the tank with water to within one and a half inches of the top. Wait two or three days before introducing the fish, that the plants may have time to commence growing.

The Fish.

Almost any small species of fish may thrive in the aquarium, but we think the best for the purpose are the red-bellied minnows and sticklebacks, all found in small streams. Select small fish; from four to eight for a tank holding from eight to 12 gallons. Such a tank will support four small ones better than one larger. Introduce also 10 or 12 water snails. The *Lymnæ* are the best; yet the *Planorbis* and the *Physa* are interesting. Better, however, get a few of every kind you can find in the ponds and stagnant pools in your vicinity. They feed on the softer parts of aquatic plants, and do not exhaust the oxygen mixed with the water, for they are air-breathing, and have to come to the surface to take in a supply of air to be used while they go about cleansing the plants and the glass of the tank with their curiously constructed jaws.

Food.

The best food for the fish is angle-worms and flies in summer, and fine bits of fresh raw meat in winter. Never give the fish more than they can eat at one time, for whatever is left will injure the water.

Position.

The best place for the aquarium is where it will be exposed to the sun at least one hour each day, in order that the plants may exhale oxygen, which can only take place under the stimulus of light. Too much light, however, is to be avoided, as the fish do not thrive when exposed to the sun, and the glass will be soiled by *confervæ*, a green vegetable matter. In summer an out-door position is best, if there be sufficient shade. It is well to cover the aquarium, both for the shade and to keep the fish from leaping out of the tank.



COMBINED AQUARIUM AND FLOWER STAND.

Cleansing the Aquarium.

If well balanced with plants, fish and shells, the water will remain sweet for an indefinite time. We have an aquarium that has been in service for the last 12 years, and which does not require a change of water oftener than once or twice a year, and then only to renew the sand which becomes filled with excrementitious matter.

Benefits.

A well regulated aquarium is a beautiful ornament for the home, and one which is a perpetual source of amusement and instruction. It has the peculiar advantage of making us acquainted with forms and habits of animated existence which are commonly hid from our inspection. Thus its influence upon the family circle is wholesome and elevating, tending constantly to awaken in all the members, both young and old, an increased love for the contemplation of the wondrous skill and wisdom of the Great Creator.

Amphibious Animals.

If lizards, frogs or other amphibious animals are introduced, they should be provided with some surface above the water to climb upon. The rocks may be built above the water, or a piece of flat cork may be allowed to float upon it, when the animals will climb and produce no small amount of amusement and instruction.

Gold Fish.

Gold fish may be kept 10 or 12 years, (their average period of existence), by using the following precautions:

1st. Allow not more than one fish to two quarts of water.

2d. Use the same kind of water, whether well or river; change it every other day in summer and twice each week in winter.

3d. Keep clean sand and pebbles at the bottom, washing it occasionally or replacing with a fresh supply.

4th. Use a small net rather than the hand while changing the water.

5th. Feed with cracker, yolk of egg, lettuce or flies, one each week, except in cold weather. Feed but little at a time. Remove any crumbs that may remain on the surface after feeding.

6th. Do not feed at all from November to the end of February, and but little during the following three months.

7th. If there are growing plants in the aquarium, water need be changed but rarely.

8th. Keep from sun and in coolest part of room.

Seth Green gives the following advice concerning the care of gold fish:

Use any well, creek or river that is not impregnated with mineral. Change the water when the fish come to the top and stay there, breathing part water and part air; take out nearly all the water, leaving enough for the fish to swim in, and fill the vessel with fresh water. Never take the fish in your hand. If the aquarium needs cleaning, make a net of mosquito netting and take the fish out in it. There are many gold fish killed by handling. Keep the glass clean. Watch the fish and you will find out when they are all right. Feed them all they will eat, and anything they will eat; be very careful to take anything they do not eat out of the aquarium. If your fish die, it will generally be due to handling, starvation or bad water.

Superintendent Mullet.—Quite a sensation was created in Washington, a few days since, by the announcement that Supervising Architect, Mullett, had resigned his position, rather than surrender to Secretary Bristow the control of the contingent fund, amounting to $100,000, although the law places the fund under the control of the Secretary. It is said, however, that the real difficulty grows out of the extravagant ideas of Mr. Mullett, in regard to construction of public buildings. Secretary Bristow is opposed to expending enormous amounts of money for such purposes, when a much smaller amount will answer, and still give us substantial buildings of good architectural proportions and construction. The people will sustain the Secretary by acclamation, and the President dare not interpose, notwithstanding his great partiality for Mr. Mullett and extravagant architecture. It is said that any interference in favor of the retiring architect will be met by a prompt resignation from the spunky Secretary, who knows he is doing right in the eyes of the whole country. From our kowledge of Mr. Mullett, we think he is one of many who can be well spared to visit the shades of private life.

Birds as Weather Prophets.—At the last meeting of the California Academy of Sciences Dr. Cooper stated that the bird presented by Mr. Blunt, called "Foolish Guillemot" (*Uria tomvia*) by the whalers, was the first of the kind obtained on the California coast. It is common in the Arctic ocean and the far north Atlantic, and has doubtless been driven so far south by unusually cold weather. He also stated that Mr. Gruber has lately obtained here the first California specimen of the "Arctic Skua" (*Stercorarius parasiticus*), another evidence of severe weather approaching. The interior papers, about two months since, noticed also the uncommonly early arrival of the wild geese from the north. The unusual amount of rain already fallen is an evidence of cold weather northward, though we have not felt it here, as the under-current of cold north winds condenses the moisture brought to us by the warm south winds. These facts should be recorded, and we may find the "Foolish" Guillemot really a very weather-*wise* bird.

Improved Harrow.—Frank Donohue, of Mayfield, Cal., has recently patented an invention which relates to an improved harrow, and consists in so constructing a compound or double harrow, that the outer corners will hug the ground at all times, without using a weight or other contrivance to keep them down. Each section of the harrow he constructs in the shape of a rhomboid. The hinges which connect the sections together are placed on opposite sides of the line of draught, by a peculiar construction of the harrow, thus causing the weight of the corners or acute angles to be nearly at right angles to the breaking line or joints of the two hinges, so that their superior leverage, owing to their greater distance from the hinges, will cause them to keep closely down to the ground.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

From "Old Sonoma."

EDITORS PRESS:—Thinking a few lines from "Old Sonoma" would not be uninteresting to your many thousand readers, I concluded to write you a brief letter for publication—a thing I never attempted before—and I trust you will kindly look over its many deficiencies. Send me to the field with a span of horses and a plow, or place me on the stack with a pitchfork in my hand, and I can "hold my own wid anny man." But to assume the role of a newspaper correspondent seems rather awkward to me, and I fear my poor, little effort at writing for the papers will be the first to find its way into the waste basket.

We have dug our potatoes and gathered in our corn crops, and we have had a delightful rain are now busily engaged in getting ready to begin plowing our wheat land, which is in splendid condition for the plow. Everybody here predicts a good season and bountiful crops for the next harvest. But then, a failure in the corn or wheat crops in this part of the county, is classed among the things that are not; and when we sow the "fruitful grain" we are sure of reaping sufficient to reward us for all our labor. Russian River valley, though small, is one of the richest in soil, and one of the most delightful places in the State. All kinds of vegetables, fruit and grain, are cultivated here and thrive luxuriantly. I might write a dozen pages in its praise, but all its many attractions have already been written up by the newspaper correspondents who have visited us, and should I attempt it, I could not do it justice.

Although I am not a member, I understand that the Healdsburg Grange is in a flourishing condition—numbering about 120 members. Their newly elected master, Mr. B. B. Capelle, is a very estimable gentleman, and an old pioneer, having emigrated from Jackson county, Mo., to California, in 1852. He is still a young man, and will make an efficient officer.

EUGENE ORILLIER.

Healdsburg, Nov. 20, 1874.

[Plain, practical, candid statements like the above, need no apology on entering the sanctum of the RURAL PRESS. Our waste basket was not made for such.—EDS. PRESS.]

Planting Walnut Trees.

EDS. PRESS:—Under the caption of "Seasonable Hints," in the RURAL of November 21, I find some very valuable suggestions in regard to tree planting, which reminds me of an article of mine which appeared in the PRESS under this heading two years ago. I then advised the planting of as many trees for ornament and otherwise as they possibly could afford.

The people in Napa valley in general, and the people of St. Helena in particular, did plant largely that spring; and now what a change in the landscape in many places. Who would take ten times their cost and destroy them? As I said then, I say now, plant for ornament, for shade and for timber, according as you have land to spare. Making judicious selections, minding the suggestions of J. C. C. under the heading above mentioned, and plant mixed varieties of both deciduous and evergreen trees for ornament. Do the work properly, for whatever is worth doing at all, is worth doing well; and my word for it, in a few years' time, you would not part with them for many times their cost of labor and money. The increasing beauty of the landscape alone will more than pay you, to say nothing of the enhancing values of your property. But this is not all; the family attachments likely soon to cluster around such a home, ever growing in beauty, forming associations which grow stronger year by year, until that migratory habit—the bane of western society—is uprooted.

I will close by adding my mite in favor of our native walnut, which, I think, is too much neglected by our people both for ornament and timber. It has foliage dense and beautiful, subject to no disease and harbors no insects. It is early to put forth its foliage, and retains it till the frosts of autumn, and is withal a rapid grower, and bearing nuts at six or seven years old. The nuts should be planted where they are to remain, as they do not bear transplanting well, and much time is lost by so doing. I know of none that will give so much satisfaction for the care given as our native walnut, save the eucalyptus family. Perhaps the black walnut of the Western states (*juglans nigra*) might succeed as well. Of this, perhaps, some of your many intelligent readers might inform us.

J. M.

St Helena, Nov. 23, 1874.

Potatoes and Oranges.

EDITORS PRESS:—While the clerk of the weather is allowing rain enough to set the plow to work in the northern part of the State, we of these parts, are enjoying it dry and quiet yet. Some are plowing but it is only on irrigable lands. One third of the corn crop is out in the fields yet. Potatoes are not out of the ground on many farms. One of your subscribers in last week's RURAL, wanted to know about potatoes in Los Angeles: The whole catalogue of the potstoe family is planted here, in warm, sandy soil—the pinkeye and other early kinds are being planted now. In due time—according to locality and soil—other varieties are planted. The red Humboldt is not so much esteemed here as some other varieties, yet they are often planted and give a good yield.

Our friend who is making the query about potatoes here must be from Bodger! and has orange on the brain. I have one word of advice to those of the coast of old Sonoma. Those sunny coves about old Fort Ross—Timber Cove, Stuart's Point and dozens of other sheltered localities higher up the coast, where potatoes are thought to be the only crop, put out in those sheltered localities oranges. I can't see why Fish Rock Cove can't produce as good an orange as the coast of Los Angeles. There are no winds nor frosts to hurt, and not half as much fog as at Annaheim. And on those Sonoma mountain ranches, even about those sheltered benches where the breath of many of those springs ward off the frost, and are so propitious to the growth of the laurel or pepperwood, put out the orange. Try it on; and while you are planting the orange, try some of the other semi-tropicals; may be you will have to protect some of the others a little, but suppose a little straw arbor needs to be thrown above a dozen lime trees, what of it, you will be doubly paid by so doing. I have seen snow a foot deep, and ground frozen so hard as to resist the penetration of the plow in Solano county, and unprotected orange trees at the same locality that fruited well. Plant oranges at home, don't run off with the idea that Southern California and an orange grove is the only thing necessary to happiness and wealth.

GEORGE K. MILLER.

Los Nietos, Los Angeles Co., Nov. 16, 1874.

POULTRY YARD.

Feeding Poultry.

At one of the sessions of the Savoy, Illinois, Farmers' Club, as reported by "Rural" to the Chicago *Tribune*, we find the feeding of poultry thus discussed:

After detailing a great variety of practices in this connection, it was decided that the best plan to feed, with the view of eggs and a due regard to economy, was to give dry corn—that is, to have a supply of corn at all times within reach of the poultry. The next step is to feed meal and bran, or shorts, once or twice a day. This feed is placed in a suitable dish or trough, and then boiling water is poured on it, stirring it up at the same time, and allowing the chickens to take it warm. Sometimes it is thus fed morning and night, but more commonly once a day. During cold weather this warm feed is considered indispensable. Sometimes the meal is made into a hasty pudding and given quite warm, but even then a mixture of bran with it is considered more valuable. Old mortar or lime should be kept in the house during the winter, when the hens cannot have access to the ground. Offal and crumbs from the kitchen, hog-livers at killing time, lard scraps, and young calves that are killed for their hides—known as deacons—all of these should be fed to them freely. In the summer, corn as usual, lobbered milk—that is thick milk, and this is improved by heating, as is done in making cheese curds. Hot whey on meal, or, what is better, bran and meal mixed, is recommended for chickens and summer feed for hens.

A Lady's Suggestions.

One of our lady correspondents closes a business communication with some suggestions about fowls which we have transferred to this department. We would be pleased to lay before the readers of the PRESS the statement alluded to. She writes as follows:

"I am always glad to see a column devoted to poultry in the PRESS, for I think that as a general thing farmers pay too little attention to fowls. I have made poultry profitable, and if time permits at the end of the year, may give items of expense and profit, for the benefit of those who are in doubt. There was an item in the last PRESS, to the effect that Brahmas, Handons, and Hamburgs were the hardiest fowls. I beg to differ, I should say Brahmas, Leghorns, Games, and then perhaps, Handons and Hamburgs were the hardiest."

THERE IS A BOY I CAN TRUST.—We once visited a public school. At recess a little fellow came up and spoke to the teacher; as he turned to go down the platform the master said "That is a boy I can trust. He never failed me." We followed him with our eyes and looked at him when he took his seat after recess. He had a fine, open, manly face. We thought a good deal about the teacher's remark. What a character had that boy earned. He had already got what would be worth more to him than a fortune. It would be a passport into the best store in the city, and what is better into the confidence and respect of the whole community. We wonder if the boys are rated by other people. Every boy in the neighborhood is known, and opinions are formed of him; he has a character favorable or unfavorable. A boy of whom the master can say "I can trust him—he never failed me," will never want employment. The fidelity, promptness and industry which he shows at school are in demand everywhere and prized everywhere. As whoever faithful is in little will be faithful in much.

Fractures.

Line upon line, precept upon precept, here a little and there a little; so the knowledge accumulates until we poultry men now find that broken bones in our poultry may be as successfully attended as those in our own structure.

The most frequent occurring fracture in poultry is that of the shank or lower portion of the leg. The bone will always knit itself, but not always in the most approved manner, therefore must we splint it. If the patient is a chick of two to six months old, wrap the injured member well up in thoroughly wetted paper; put on this a coat of gum arabic, and allow it to harden, and unless unforseen matters will arise the bird will be cured in a few weeks. But if the patient is an older bird, one, say of a year or two, well developed and grown, then wrap the leg well up in pasteboard, and put on it a coat of glue. Very seldom is it necessary to have to re-dress the injured member. As soon as the paper or pasteboard dries, it being moulded when moist to the form, will continue to act as a firm binding splint, which exercises a perfectly even pressure at every point of its contact.

Thigh fractures are by far more difficult to treat. The best plan we have ever seen tried is to put the feathered sufferer in a quiet place so it will not have much inducement to move about. For splints take two small pieces of soft green wood, and shave them down; place one on the forward part of the thigh and the other opposite. Now, take strong, well-waxed thread and bind them firmly, the firmer the better, as it renders the bird indisposed to make much movement. Now, during the process of all fracture-mending be careful of the feed the patient receives—boiled meal mixed with broken bone or any of the phosphates is excellent, as it assists the mending bone.

Broken backs are difficult to set. We have never yet seen one; but if the fowl is a very valuable one the experiment might be tried, splintering tightly at the sides,

Broken toes can be very readily healed by binding on a thin chip and placing the bird in a coop, or where it cannot get on a roost.

Broken wings are easily set. The chief point in setting is to keep the fowl from moving the wing. Lewis Wright explains the treatment so thoroughly in his new work that it is useless to repeat it here.—*Cor. N. W. Poultry Journal.*

DEEP SEA SOUNDINGS.—The U. S. steamship "Narraganset" has been making an experimental cruise outside the Golden Gate, in deep sea sonndings. The sonnding apparatus is of the Thompson pattern, but of heavier metal, and the specimen cups are known as the Belknap Cylinder, the invention of Commander Belknap, of the United States Navy. The heavy shot, weighing 58 pounds, specimen cup and Cassill's thermometer, were attached to 25 fathoms of Albecore line, and lowered into the water until the strain came upon the wire, when they were let go to the bottom of the ocean, which was reached at a depth of 2,199 fathoms in 26 minutes and 41 seconds. The drum containing the wire was then connected with a large balance wheel by means of an endless band, and this great length of line was recovered in 33 minutes and 24 seconds. The temperature of the bottom, registered by the thermometer, was 34 degrees, which agrees with the results of previous experiments. A quantity of green matter was brought up, which, when put under the microscope, was found to be composed of diatornacea and their debris. The experiment was attended by highly satisfactory results, and at one P. M. another cast was taken at a point twelve miles nearer the South Farallon light-house, in 1,993 fathoms, with satisfactory results.

WASTE NOTHING.—The Chinese, more than any other nation, have reduced the saving of fertilizers to a science. It is well known that they scrupulously save, disinfect, and put to valuable use every particle of offal. In no other way could their land be so enriched as to support its teeming inhabitants. Liebeg traced the primal fall of Rome to the building of her great sewers, which conducted to the Tiber fertilizing material which should have been applied to her soil. It was the lack of breadstuffs, consequent upon the poverty of arable lands, which drove the Romans to foreign conquest, and ended in the overthrow of their own liberty. Our people are wasting every day substances, which, if properly utilized, would save them many a dollar and much tribulation.

MORE AID TO SCIENCE.—A gentleman of Milan, named Ponti, left his property, amounting to $165,000, to the three Academies of Science in London, Vienna, and Paris, and to the General Hospital in Vienna, the last-named institution being also entitled to any increase beyond the original sum; and the value of the property being now estimated at $360,000, the hospital is likely to receive a large share.

STOCK BREEDERS.

The Proposed Seven-Cross Rule.

Your correspondent, Giaour, overlooked an important point in his communication of last month. His plan of requiring only seven crosses, or seven more for that matter, would open the way to the record of many three or four-cross grades; for designing men, of whom there is no considerable lack, could give a straight grade pedigree of three or four crosses and fraudulently append thereto the names of bulls which did not belong in the pedigree at all. And such a fraud would be very difficult of detection. But if pedigrees are required to trace to imported animals, or animals heretofore recorded in the American Herd Book, the means of pepetrating fraud are largely diminished. There are plenty of good Short-horns in the country, and there is no reason for admitting grades to the Herd Book. The rule adopted at Indianapolis was a good one, and should be followed. The Cincinnati resolution would have been a good one to adopt seventy or eighty years ago, but its adoption would cause great injustice now by destroying the value of Short-horns in the herds of a large number of breeders.

To be sure, a seven-cross pedigree is a considerable guaranty against breeding back, but whether it is sufficient, is a question for discussion. Experienced breeders, as a rule, prefer long pedigrees, as their experience convinces them that peculiarities of very remote ancestors are liable to crop out oftener than is desirable.—*Cor. Live Stock Journal.*

Short-horn Blood in America.

Just before the sales of Messrs. Coffin, Parks and King, last spring, one or more of the English agricultural journals, in noticing the catalogues of the herds to be offered, plainly intimated that English buyers might be in better business than purchasing Short-horns in the United States. The home supply was ample—their readers were informed—and the result of these distant purchases would be, at best, but problematical. In response (saya the *Country Gentleman*, from which we quote), we took occasion to express the belief that the Short-horns thus far carried to England from this country had invariably brought a very large profit to their buyers, and that the English bidding at New York Mills was due "almost as much to the great success of previous importations from America, as to the demand for Duchess blood." If such was not the case, we asked for a correction, which has never come.

In lieu of a reply in words, however, we have the response offered by Mr. Cheney's recent sale—"the first occasion," says the London *Field*, "on which the offspring of the recent re-importation of fashionable Short-horn blood from beyond the Atlantic constituted the main feature of the day." Of 27 lots, the sires of 24 and the dams of 11 were bred in America; general result, an average, throughout, nearly $50 higher on each animal than had ever been reached before in Great Britain—even at the very extraordinary sales of the preceding fortnight.

On Breeding Horses.

An old breeder of Tennessee, George T. Allman, in the *Rural Sun*, gives his ideas of improving stock. He says: "I beg and urge each and all to patronize only pure-bred males and never a mongrel. 'Blood will tell' in everything from a chicken to a man. If you propose to breed trotters, or mules, you want a dash of blood to give the produce the staying qualities desirable on the farm or on the turf.

I prefer early foals, especially if thoroughbred. A few weeks' difference tells on the race-course or in the fair ring. They go through the first winter much better than the late ones.

Fillies, who have never produced, should be bred so as to drop their foals middle of April or first of May. The trouble with all young dams is to give milk enough for their offspring, hence the necessity of having the produce drop when there is plenty of luxuriant grass. I hold that our true policy is to breed only the best—have them well cared for. The days of pay and pleasure in handling inferior stock are numbered among the things that were. So of half-feed or poor accomodations for the comfort of your stock. A few good ones, well cared for, afford more pleasure and profit than a host of inferior ones, fed on shucks and promises. I find grass the cheapest feed I can grow for stock, and a meadow to pay the best of any land on my farm.

GOOD SHORT-HORN COW.—The first prize milch cow at the late Ohio State fair was a five-year old Short-horn, which gave 406 pounds of milk in seven days, on grass alone; the milk making 14 pounds 13 ounces of butter.

WM. PRINCHETT, of Pike county, Missouri, sheared from a Cotswold buck twenty-four pounds of wool and from two ewes forty-eight pounds.

WAPELLA, Iowa, is the banner county in the southern part of the state for fine grade sheep and wool, and good stock generally.

The Dairy.

Cooked Feed for Cows.

The *Live Stock Journal* says:—The following statement of Mr. Wm. Birnie of Springfield, Mass, has great force, having been continued for so long a period with a result so satisfactory. In a recent letter to us he says:

I still continue to steam the food for my stock, as I have done for more than fourteen years, and every year confirms more strongly my convictions of the great economy in food, as well as the comfort and thrifty growth of the cattle. For milch cows its advantages can not be too strongly urged. The saving is fully 33 per cent.

Effect upon Health.

I have seen some questions raised as to the effect of cooked food upon the health of the animals. I can only say, as to this point, that I have a number of cows, from seventeen years old and downwards, that have never been fed in any other way, except during the season of green feed, while they are now in perfect health and vigor. It is not, perhaps, too much to say that no more healthy stock of cows can be found than my herd of about fifty head, which has had this cooked diet for so many yearrs. This system enables me to get as good yields of milk in winter as in summer, with the quality excellent.

Barn and Steaming Apparatus.

My barn is built on a side hill, and is three stories high in some parts. The floor of the principal story is on a level with the ground on the highest side, and is used for storing hay, grain, etc. The story below opens on the barn-yard, and is used for stables; and the part under-ground for a root cellar. Under this is a manure cellar eight feet deep. In the stable story is located my apparatus for steaming.

My boiler is an upright tubular, of about the capacity of four horses, situated in the corner of this story, under the ground, in a room about ten feet square. The chimney is built of brick on the outside, and extends about six feet above the roof. The steam box in which the cooking is done is built of brick, and extends to the story above. It is lined with two-inch plank, tongued and grooved, six feet square inside, and eight feet deep, with a lid the whole size of the top, and opening on a level with the floor above. It has a door four feet square on one side near the bottom, out of which the feed is taken. The steam pipe runs directly from the boiler to the steam-box, extends around the four sides and across the middle, some six inches above the bottom.

This pipe, inside the box, is perforated with small holes for the escape of the steam. A cask holding two hundred gallons is conveniently located at one side and over the steam-box, which by a pipe is kept full of water for wetting the feed and filling the boiler. The fodder is cut by horse power, shovelled into the steam box, mixed with bran, or whatever is fed with it, and well wet. The fire is first started under the boiler, and then the fodder is cut while the steam is getting up. I only steam twice per week, finding that the feed will keep warm three days in winter; this saves much labor and fuel. My plan has usually been to feed steamed rations morning and evening, with hay at noon. This counteracts all tendency to looseness. I use about three tons of coal for the season's cooking. A change from cooked to dry food for a single day has sometimes caused a marked shrinkage in milk.

The Ayrshire Cow.

Of all our established breeds, the Ayrshire is undoubtedly the best and most profitable for the dairy. There is not a breed known in the world to outdo the Ayrshire in giving the largest flow of milk. Some writers attest that large milkers give milk of a poor, watery quality, while on the other hand, the milk of those that give least is rich in quality. Be that as it may, it is founded on practical experiments made on the milk of different breeds of cattle, of the same age, and having the same food, that the Ayrshire is an exception to the rule laid down by some agricultural writers, because of yielding a large flow of milk, sweet in taste, and excellent in quality. It is not rare to find an Ayrshire cow to yield 900 gallons of milk per annum.

The milking properties of this valuable animal are recognized and appreciated all the world over, wherever the breed is found, and in its own seat in Scotland, from which it takes its name, it commands the reputable desideratum of every intelligent dairyist.

The breed is hardy, and can subsist on scanty pastures where other animals would fail.

The color of the Ayrshire beast is either red or white and spotted or mottled, sometimes red, but rarely strawberry, and also brown and white. The head is small and clean, the face long and narrow at the muzzle, the eyes small and well formed, (the eye must be always forward.) The horns short, fine, and slightly twisted upward, and set wide apart on the skull; its neck thin; its body enlarging from the hind to lower quarter, narrow in front, and widening to the hind quarters; the back straight and narrow always over the ribs, but broad across the loins; its joints free, not full up with flesh; its ribs somewhat flat, hind quarters thin; the bone fine; tail long and fine, yet bushy at the tip; the hair generally thin and soft; the udder of a light color, and large, extending long forward under the belly; teats of a medium size, set regularly and wide apart, usually standing at right angles, and pointing to the ground; the carcass is usually light, particularly the fore quarter; the head is small; the neck is sleuder and loug; the legs small and short, with strong joints; the skin thin; the milk veins capacious and ramifyiug smoothly through the teats.

The greatest attention has been bestowed in developing the milking properties of the Ayrshire cattle recently by our modern breeders, and this accounts for the inaptitude of the animals to fatten under ordinary treatment. It is, however, true that Ayrshire cattle put up fat pretty rapidly while not giving milk, which leads us to believe that by blending together the two properties (of fattening and milking,) we could easily produce a herd of animals suitable for the dairy and for the market, and this could be easily done by crossing an Ayrshire dam with a Shorthorn sire. But let it not be forgotten that the efficacy of this time-honored breed consists in its adaptation for the dairy, a fact which should never be lost sight of, and consequently it is just to keep the breed pure, and use the utmost care in always bringing it to perfection.—*Mass. Plowman.*

ALFALFA FOR MILK AND BUTTER.—This season has brought to light in this vicinity more than any heretofore the superiority of alfalfa for milch cows. All along the Sacramento river on both sides more or less, the spring growth of the natural grasses was ruined by teh rise in the waters in in May and June, and although other summer grasses have come forward to take their places, these do not supply sufficient food for the stock on hand. As a consequence some of the farmers have been compelled to turn their milch cows into part of their alfalfa fields. Where this has been done, if only a very short time, the universal testimony is that the effect has been to greatly increase the quantity and improve the quality of the milk. In some instances the milk is said to have been increased fifty per cent., and the amount of butter in a greater proportion. This experience affords one of the best tests of the comparative value of alfalfa wo have met with, and taken in connection with the other fact, well established, that the same land in alfalfa will afford from three to four times the quantity of food that it will in any of the native grasses, gives to this grass an almost inestimable value for dairy purposes. *Sac. Record.*

The Horse.

Is the Practice Injurious?

PHILADELPHIA, July 11, 1874.

VET. ED. T. F. AND F: Please give us, through your columns, your opinion of the effect of washing the legs of driving horses, with a hose after a drive in warm weather, while the horse is still hot, wetting from the knees down. Some claim that it brings too much blood to those parts. I have practiced it for six weeks, and turned the water on as soon as the horse is unharnessed. His limbs keep very clean and free from any enlargements. Do you think the practice beneficial or injurious? THOROUGHBRED.

ANSWER—I do think it injurious, unless other conditions are complied with, viz.: The thoroughly drying, and if you choose, bandaging them. What is the object in applying the water, and what are its effects? I do not know what object a great many have for it. In many cases it is because they saw some one else doing it who owned a good horse, or, perhaps, a fancy of their own. Some think that it strengthens the tendons and cools the legs, and, as you say, keeps the legs clean, etc. But each one has his own object, or his own views, for so doing, whether he reveals it or not.

As I have already stated, I do think it injurious, when it becomes a daily occurrence, unless the legs be thoroughly dried and bandaged. We all know that the further the blood circulates from the heart the greater its capacity, consequently at the expense of its impetus; and the result is, we have the blood flowing much slower in the extremities than in other parts of the body, being further away from the heart. But the circulation becomes quite active when the animal is put in motion, the contraction and relaxation of the muscles of the extremities become quite an impetus to the flow of blood, and we easily appreciate this by the raising of the temperature in the same, which is quite perceptible to the touch. Now when cold water is applied, what are the consequences? Cold water acts as an astringent tonic to the muscular fibers of the vessels, diminishing their calibres, thus causing the blood to flow sluggishly and the temporature to diminish. The rest of the body remains to become cool by a natural process or less speedily. Now, if the legs are dried, and thoroughly rubbed and bandaged, we re-establish the circulation, and the parts are then placed in their normal condition. I think this daily or frequent application of water to the limbs without drying is the cause of many horses cracking in the heels on driving. The periodical diminution and increase in the flow of blood to the skin brings unhealthy action, and the skin becomes dry and hard and cracks. It is also injurious to the hoofs, by softening them, which afterward increases their evaporation, and they become dry and contract, and we have quarter and toe cracks as results. Yet when water is applied at the proper time it is as beneficial, if not more so, than any one article in materia medica; but it is like other good remedies—its good uses become mingled with its abuses, and its merits after a while become doubtful.—*Turf, Field and Farm.*

Horse Morals.

In selecting a horse or mare for breeding, speed and form are not all the qualities to be looked after? Never breed to a vicious or ill-tempered horse, no matter what may be his pedigree or antecedents; and reject at once any horse lacking a sprightly intelligence. There are as many degrees of intelligence in a horse as in the human race, and without intelligence a horse is always sluggish, stupid and awkward in his movements. The thoroughbred Arabian horse has generally that capacity necessary for learning any useful lesson, that all his work and labor for man is a pleasure to the owner and apparently the horse. We like to see a man proud of a noble horse, but more especially does it fill our heart with delight to see a horse proud of his master. There are clowns among horses, and they are always a vexation to the owner. Some will plod along the road, never looking where they step, and just as likely to step on a stump or in a hole in a bridge, as any other place. But the intelligent horse takes heed to his steps, and if anything happens dangerous to life or limb, of himself or his master, his judgment frequently prevents the accident. And a gentle and kind horse, with a development of social and intellectual powers, whiles away many a weary hour of the lonely traveler, or lightens the labor of the long days of the tiller of the soil.

In selecting breeders, great care should be taken relative to the social morals of both horse and mare. Like begets like, and in no case more so than that of the horse. A bad and vicious temper in a horse may be checked, but never eradicated, and he will be unpleasant, dangerous, and in his fretting and fuming, will unnecessarily waste his strength. Form and action have claimed the closest scrutiny, and those qualities have been given their full importance, but the social morals of the horse have been lost sight of, in the strife for speed and strength. Viciousness is almost invariably transmitted to the progeny, more certainly than color or points, and should be a serious objection to any horse as a good breeder.—*Iowa Register.*

HIGH-PRICED HORSES.—The following are prices paid for noted American horses: Kentucky, $40,000; Norfolk, $15,000; Lexington, $15,000; Kingfisher, $15,000; Glenelg, $10,000; Smugler, $15,000; Blackwood, $50,000; Jay Gould, $30,000; Dexter, $43,000; Lady Thorne, $30,000; Jim Irving, $30,000; Goldsmith Maid, $20,000; Startle, $20,000; Prospero, $20,000; Rosalind, $20,000; Lulu, $20,000; Happy Medium, $25,000; Clara G., $30,000; Pocohontas, $35,000; Edward Everett, $20,000; Auburn Horse, $13,000; Judge Fullerton, $20,000; Socrates, $20,000; Mambrino Bertie, $10,000; George Palmer, $15,000; Mambrino Pilot, $12,000; Flora Temple sold when aged for $8,000 for brood mare; $25,000 was offered and refused for Tom Bowling last summer; $30,000 was offered and refused for Bassett in his three-year old form; $25,000 will not to-day buy Baywood or Asteroid; $40,000 was offered and refused for Woodford Mambrino, and $30,000 for Thorndale.

Burnt or Missing Coal Vessels.

No less than *nine* vessels loaded with coal for California, are reported as having been destroyed by fire within two or three months past. The loss of life and property from spontaneous combustion of coal on shipboard seems to be rapidly on the increase of late years.

A return has lately been made to the British House of Commons from which it appears that 38 coal-laden sailing vessels and one steamer were reported as burnt or missing from 1868 to 1873 inclusive—involving a loss of 358 lives. Of the total number of lost and missing it is known that at least 24 were burned and it is but reasonable to suppose that at least one-half the "missing" were also burned.

The liability of coals to spontaneous combustion, if placed in bulk when wet, is well known; but it is not so well known that many coals will also generate heat when placed in bulk *dry*—yet such is the case, especially if they are so placed as to be subjected to great pressure, and the slight friction inseparable from a cargo of loose material at sea. The fire-damp which escapes from coal mines arises from slow decomposition (combustion) of the coal at a temperature but little above that of the atmosphere.

This decomposition or combustion is constantly going on with all coals, at all temperatures and under all conditions. But when it is placed (even dry) in bulk and subjected to accumulated pressure, this heat, unless the most perfect ventilation is kept up through the mass, will also accumulate until active combustion sets in. Even common charcoal, when in a fine state of subdivision, will ignite spontaneously when piled up in a dry room, in large bulk. There is really no positive safety in transporting soft coal in bulk, by sea-going vessels.

Useful Information.

How the Sun is Studied Scientifically.

When we telescopically examine that brilliant surface which we see daily with the naked eye (the photosphere), to study such of its phenomena as are here described, we do not need the spectroscope, but some means of protecting the eye from the blinding light and heat, and this should not involve the use of any colored shades. If we look into an unsilvered glass, as, for instance, into the panes of a shop-window from the street, we observe that it acts as a mirror, throwing back a feeble reflection of ourselves, or other objects without; most of the rays of which have gone altogether through the glass, while a comparative few are returned to form the image. It may occur to us, then, instead of looking directly at the solar image formed by our telescope, to let it fall on a piece of plain glass, placed diagonally, through which about nineteen parts in twenty of the light will pass and be thrown away, the remaining twentieth being reflected, and forming an exact though enfeebled image.

When this has been done, if the reflected image be still too bright, we may reflect it again, this time only a twentieth of the first twentieth reaching the eye, and so on to any degree; but it is strikingly illustrative of the intensity of the solar splendor, that, when by three such reflections the sunlight has been enfeebled 8,000 times, we yet find it intolerably bright. Instead of more mirrors it is better now to arrange that the third mirror may rotate, so as to *polarize* the light. When this is done the image of the sun appears distinctly, (if the optician has done his work well), colorless, and of any brightness desired.

The instrument thus described in general terms is known as the polarizing eye-piece. All danger and discomfort in studying the sun disappear with its use, and we may look at its unclouded face as though the eye had been strengthened to bear its light; in fact, many hours of scrutiny of the solar disk with this instrument wearies the eye less than a few minutes' telescopic examination of the moon does without it.—*Popular Science Monthly.*

MODE OF ASCERTAINING THE VARIOUS KINDS OF MATERIALS IN MIXED FABRICS.—A German industrial journal gives, after M. Vupp, the following treatment for fabrics containing silk and wool, with vegetable fibers. All vegetable fibers resist caustic alkaline solutions, even when boiling, and are dissolved by sulphuric, nitric, hydrochloric acids, even when diluted, with heat. Vegetable fibers when burnt do not give forth any alkalis, especially when hot; the sulphur which it contains combines with the alkali, and the solution becomes black when acetate of lead is added to it. In burning, wool produces the same smell as horn. Silk is dissolved both in the acids and the caustic alkalis, and produces an odor similar to that of wool; but it contains no sulphur, and, consequently, its solution in alkalis is not blackened by acetate of lead. In order to distinguish these materials in a tissue, it is treated first with concentrated hydrochloric acid, cold; the residue is then washed in a filter, and if necessary bleached, by means of water containing chlorine, and then washed again in pure water and boiled with caustic soda, which dissolves the wool, leaving the vegetable fiber intact. The wool is distinguished from silk by adding acetate of load to the liquid, as already mentioned.

MECHANICAL TREATMENT OF METAL.—It sometimes happens that by centering, etc., the interior diameter of a tire becomes so much too large that it will not fit the wheel. This defect may be corrected according to a German plan, by heating the tire red-hot, and holding it in that condition half immersed in cold water until cold, then heating again red-hot, and immersing the other half the same way. In the first operation the unimmersed hot portion must contract with the portion rapidly cooled, with a corresponding condensation of material, and consequent permanent diminution of diameter, and, in the second operation, a similar effect is produced on the other half. This resort is not confined to tires alone, an instance being recorded where a ring of Bessemer steel, to be used as a flange ring, had been entirely misshaped by an inexperienced workman, and was drawn into shape by heating fifteen times, and cooling different portions.

A remarkable and very beautiful shade of blue is noticeable upon many of the ancient ornaments found in the tombs of Egypt. Analysis some time since proved the color to be formed by a combination of soda, sand and lime, with certain proportions of copper, from which substances the Egyptians managed to produce three different products—first, a peculiar kind of red, green and blue glass; second a brilliant enamel; and lastly, the color to which reference is above made, and which was used for painting. By synthetical experiments, M. Peligot has succeeded in reproducing this peculiar shade of blue, by heating together 73 parts of silica with 16 of oxide of copper, eight of lime, and three of soda. The temperature should not exceed 800 deg. Fah., as, in such case, a valueless black product is the result.

Wood, saturated with paraffine, it is said, can be used in sulphuric acid works in place of lead-lined casks.

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I. G. GARDNER, State Agent; Executive Committee Rooms; Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, all at No. 6 Liedesdorf street. W. H. BAXTER, State Secretary, at Grangers' Bank, 415 California street, S. F.

NOTICE.

From and after this date, all moneys due to the State Grange by Subordinate Granges should be forwarded to the Grangers' Bank of California, No. 415 California street, San Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. OARRINGTON,
Treasurer State Grange.

November 4th, 1874. 19-v8-tf

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Butte.	Wm. M. Thorpe.	Chico.
Butte.	G. W. Colby.	Nord.
Colusa.	J. J. Hicok.	Grand Island.
Colusa.	D. H. Arnold.	Spring Valley.
Contra Costa.	R. G. Dean.	Antioch.
El Dorado.	A. J. Cristie.	Coloma.
Fresno	J. W. A. Wright.	Borden.
Humboldt.	H. W. Arbogast.	Arcata.
Inyo.	T. J. Furbee.	Bishop's Cr'k, Inyo.
Lake.	H. A. Oliver.	Gnenoc.
Los Angeles.	Thos. A. Garey.	Los Angeles.
Los Angeles.	Ed Evey.	Anaheim.
Mendocino.	R. M. Wilson	Cahto.
Merced.	H. B. Jouley.	Merced City.
Modoc.	I. S. Matthews.	Fort Jones.
Mono.	T. J. Furbeo.	Bishop's Cr'k, Inyo.
Monterey.	J. D Fowler.	Hollister.
Placer.	A. D. Neher.	Roseville.
Sacramento.	W. S Manlove.	Sacramento.
San Benito.	J. D. Fowler.	Hollister.
San Francisco.	I. G. Gardner.	San Francisco.
San Francisco.	J. H. Hegler.	San Francisco.
San Joaquin.	A. Wolf.	Stockton.
San Luis Obispo.	A. J. Mothorscad.	Moro.
San Luis Obispo.	Isaac Flood.	Old Creek.
Santa Barbara.	O. L. Abbott.	Santa Barbara.
Santa Clara.	G. W Henning.	San Jose.
Shasta.	J. T. Dinsmore.	Reading.
Siskiyon.	I. S. Mathews.	Fort Jones.
Solano.	J. B. Carrington.	Denverton.
Solano.	R. C. Haile.	Suisun.
Solano.	J. O. Merryfield.	Dixon.
Sonoma.	Geo. W. Davis.	Santa Rosa.
Sonoma.	A. B. Nally.	Windsor.
Sonoma.	T. H. Merry.	Healdsburg.
Stanislaus.	J. D Spencer.	Modesto.
Stanislaus.	J. D. Reyburn.	Modesto.
Sutter.	Geo. Ohlever.	Yuba City.
Tehama.	A. J. Loomie.	Farmington.
Tulare.	M. S. Babcock.	Kingston, Fresno.
Yolo.	Wm. Sims.	Buckeye.

General Deputies.

Alameda.	Ezra S. Carr.	Oakland.
Fresno.	J. W. A. Wright, (W. L.)	Borden.
Lake.	J. M. Hamilton, (W. M.)	Guenoc.
San Francisco.	W. H. Baxter, (W. S.)	6 Liedesdorff St.
San Francisco.	John H. Hegler,	San Francisco.
Solano.	John B Oarrington,	Denverton.
	NEVADA.	
.....	A. J. Hatch,	Reno.

Farmers desiring to organize Granges, can apply to J. M. Hamilton, (W. Master), Guenoc, Lake Co.; W. H. Baxter, (W. Sec'y), No. 6 Leidesdorff St., S. F.; J. W. A. Wright, (W. Lecturer), Borden, Fresno Co.; or to the nearest Deputy to their locality.

California Subordinate Granges.

[This list contains the names of Masters and Secretaries so far as reported to us, elected to serve during the year 1874. Secretaries and others will greatly oblige us by making needful corrections.]

ALAMEDA COUNTY.

CENTERVILLE, Cent.: JAS. SHINN, M.; J. L. BEARD, S.
EDEN, Hayward's: THOS. HELLAR, M.; WM PEARCE, S.
HAMILTON, Biggs' Station: H. L. LASSELLE-M. A. RANDALL.
LIVERMORE, Liv. Valley: D. INMAN-F. R. FARSETT.
SUNOL, Sunol Stat'n: E. M. CARR, M.; S. W. MILLARD, S.
TEMESCAL, Oakland: E. S. CARR, M.; JOHN COLLINS, S.

BUTTE COUNTY.

OHICO, Chico: E. HALLETT, M.; H. W. BARNES, S.
EVENING STAR, Bigg's Station: E. W. S WOODS, M.; C. F. BUTLER, S.
NORD, P. O. Nord: G. W. COLBY, M.; PETER KERN, S.

CALAVERAS COUNTY.

CALAVERAS, Jenny Lind: M. F. GREGORY-A. MILES.

COLUSA COUNTY.

ANTELOPE VALLEY: H. A. LOGAN-A. T. WELTON.
CENTER, Colusa: J. P. KIMBRELL-W. G. SAUNDERS.
COLUSA, Colusa: W. K. ESTELL, M.; R. JONES, S.
FRESHWATER, Colusa: P. S. PERDUE-R. A. WILSEY.
FUNK SLOUGH, Colusa: E. O. HUNTER-J. G. WOLFE.
GRAND ISLAND: WM. OGDEN, M.; J. H. DUFFIELD, S.
NEWVILLE: B. N. SCRIBNER, M.; S. OSBORNE, S.
PLAZA, Jacinto: F. C. GRAVES, M.; M. KENDRICK, S.
PRINCETON, Princeton: A. D. LOGAN, M.; R. R. RUSH, S.
SPRING VALLEY: D. H. ARNOLD, M.; L. T. HAYMAN, S.
UNION, Princeton: J. F. GARR, M.; W. W. DOLLINGS, S.
WILLOWS, Princeton: J. W. ZUMWALT-G. T. HICKLIN.

CONTRA COSTA COUNTY.

ALHAMBRA, Martinos: JOHN STRENZELL-W. A. FRAZER
ANTIOCH, Antioch: M. A. WALTON, M.; J. D. DARBY, S.
DANVILLE, Danville: C. WOOD, M.; JOHN B. SYDNOR, S
POINT OF TIMBER: R. G. DEAN, M.; J. E. W. OAREY, S.
WALNUT CREEK, Walnut Creek: NATHANIEL JONES, M.; WM. K. DALY, S.

EL DORADO COUNTY.

CLARKSVILLE, Clarksville: R. T. MILLS-I. MALTBY.
EL DORADO, El Dorado: C. G. CARPENTER, M.; J. M. B. WEATHERWAX, S.
PILOT HILL, Pilot Hill: P. D BROWN-A. J. BAYLEY.
SUTTER MILL, Coloma: A. J. CHRISTIE-HENRY MAHLER.

FRESNO COUNTY.

ADAMS, Big Dry Creek: T. P. NELSON, M.; T. WYATT, S.
BORDEN, Borden: J. W. A. WRIGHT, M.; J. FONTAINE, S.
FRESNO, Fresno City: D. C. LIBBY, M.; F. DUSY, S.
GARRETSON, King's River: W. J. HUTCHINSON, M.; W. W. PHILLIPS, S.
RISING STAR, Panochi: CALVIN VALPEZ-W. M. POUGE.
SYCAMORE: A. C. BRADFORD, M.; J. A. ALLEN, S.

HUMBOLDT COUNTY.

ELK RIVER, Eureka: THEODORE MEYER, M.; D. A. DE-MERRITT, S.
FERNDALE, Ferndale: F. Z. BOYNTON-J. A. DAVENPORT.
KIWELATAH, Arcata: H. W. ARBOGAST, M.; C. DANIELS, S.
MATTOLE, Petrolia; S. GOFF, M.; D. J. JOHNSON, S.
ROHNERVILLE, Rohnerville: H. S CASE-S. STRONG.
TABLE BLUFF: J. SAWYER, M.; B. H. C. POLLARD, S.

INYO COUNTY.

BISHOP'S CREEK: T. J. FURBEE, M.; W. T. WISWALL, S.
INDEPENDENCE: JOSIAH EARL, M.; J. B. WHITE, S.
LONE PINE: C. L. JACKSON, M.; R. A. LOOMIS, S.

KERN COUNTY.

BAKERSFIELD: S. JEWETT, M: JEROME TROY, S.
CUMMINGS' VALLEY, Tehaichipa; GEO. W. THOMPSON, M.; T. M. YATES, S.
LINN'S VALLEY, Glenville: A. B. DU BRUTZ, M.; S. E. REED, S.
NEW RIVER, Bakersfield: J. G. DAWES, M; J. DIXON, S.
PANAMA, Bakersfield: H. D. ROBB, M.; J. F. GORDON, S.
RISING STAR, Panoche: C. VALPEY-J. W. CRAYCROFT.
TEHACHIPA, Tehachipa: J. NORBOE, M.; J. PREWETT, S.
WELDON, Weldon: R. T. MELVIN, M.; J. T. H. GRAY, S.

LAKE COUNTY.

GUENOC, Guenoc: H. A. OLIVER, M.; A. A. RITCHIE, S.
KELSEYVILLE: D. P. SHATTUCK, M.; T. ORMISTON, S.
LAKEPORT, Lakeport: C. CUTLER, M.; N. PHELAN, S.
LOWER LAKE, Lower Lake: A. E. NOEL-G. H. SNOW.
UPPER LAKE: D. V. THOMPSON, M.; D. Q. MCCARTY, S.

LOS ANGELES COUNTY.

ALLIANCE, El Monte: S. S. REEVES-E. V. REEVES, S.
AZUSA, El Monte: W. W. MAXEY, M.; J. C. PRESTON, S.
COMPTON, Compton: C. W. COTTREN, M.; A. F. COTTREN, S.
EL MONTE, Los Angeles: G. C. GIBBS-J. H. GRAY.
ENTERPRISE, Los Angeles: A. M. SOUTHWORTH, M.; W. T. HENDERSON, S.
EUREKA, Spadra: C. BUBDICK, M.; P. C. TONNER, S.
FAIRVIEW, Anaheim: E. EVEY, M.; J. M. GUINN, S.
FLORENCE, Los Angeles: J. RUSSELL, M.; W. PORTER, S.
FRUITLAND, Santa Ana: N. O STAFFORD-G. L RUSSELL.
LOS ANGELES: T. A. GAREY, M.; S. A. WALDRON.
LOS NIETOS: J. F. MARQUIS, M.; W. S. REAVIS, S.
NEW RIVER, Los Nietos: W. NEWTON, M.; S. G. BAKER, S
ORANGE, Orange: J. BEACH, M.; J W. ANDERSON, S.
SILVER, Los Nietos: H. L. MONTGOMERY, M.; W. P. MCDONALD, S.
SPADRA, Spadra: A. T. CURRIER, M.; JOS. WRIGHT, S.
VINELAND, Tustin City: DR. A. B. HAYWOOD, M.; R. L. FREEMAN, S.
WESTMINSTER, Anah'm: M. B. ORAIG-W. F. POOR.

MARIN COUNTY.

NICASIO, Nicasio: H. F. TAFT, M.; J. W. NOBLE, S.
POINT REYES: N. H. STINSON, M.; A. H. STINSON, S.
TOMALES: WM. VANDERBILT, M.; R. H. PRINCE, S.

MENDOCINO COUNTY.

CAHTO, Cahto: R. M. WILSON, M.; J. P. SIMPSON, S.
LITTLE LAKE: B. G. MAST, M.; W. A. WRIGHT, S.
MANCHESTER: JOSEPH WOODEN, M.; B F. MCCLURE, S.
MENDOCINO COUNTY, Ukiah City; L. F, LONG, M.; J. A. KNOX, S., Sanel.
POMO, Pomo: J. MEWHINNEY, M.; GEO. B. NICHOLS, S.
POTTER VALLEY: L. A. PRESTON, M.; MRS. A. H. SLINGERLAND, S.
ROUND VALLEY, Covelo: P. HANDY-J. A. CRAWFORD.
SANEL, Sanel: ALEX. MARSHALL, M. JOS. A. KNOX, S.
UKIAH: W. D. WHITE, M.; G. MCGOWAN, S.

MERCED COUNTY.

BADGER FLAT, Los Banos P. O, A. P. MERRITT, M W. F. CLARKE, S.
COTTONWOOD: J. L. CRITTENDEN, M.; J. M DALEY, S.
HOPETON, Hopeton; JOHN RUDDLE, M.; T. EAGLESON, S.
LOS BANOS, Los Banos P. O.: WM. M. VINEY; M.; A. MCGLASHAN, S.
MERCED: W. E. ELLIOT, M.; JAS. B. RALSTON, S.
PLAINSBURG: P. Y. WELCH, M.; T. J. E. WILCOX, S.
SNELLING, Snelling: D. YEISER M.; W. L. HAMLIN, S.

MONTEREY COUNTY.

HOLLISTER: M. POMEROY, M.; WM. H. OLIVER, S.
MORNING STAR, Castroville: C. E. WILLIAMS, M.; F. BLAKIE, S.
PAJARO, P. O, Watsonville, Santa Cruz Co.: D. M. CLOUGH, M.; G. W. ROADHOUSE, S.
SALINAS: C. S. ABBOTT, M; CLARA WESTLAKE, S.

NAPA COUNTY.

BERRYESSA, Monticello: J. W. SMITTLE-O. SCHETTER.
CALI TOGA, Calistoga: J. N. BENNETT-L. H. HOPKINS.
NAPA, Napa City: J. M. THOMPSON, M.; MANUEL EYRE, S.
POPE VALLEY: J. A. VAN ARSDALE, M.; C. A. BOOTH, S.
RUTHERFORD, Yountville: G. S. BURREGE-H. W. CRABB.
ST. HELENA: J. LLEWELLYN, M.; J. L. EDWARDS, S.
YOUNTVILLE: J. M. MAYFIELD, M.; FRANK GRIFFIN, S.

PLACER COUNTY.

LINCOLN: M. WALDRON, M.; J. S. MARRINER, S.
ROSEVILLE, Roseville: A. D. NEHR, M.; J. D. GOULD, S.
SHERIDAN, Sheridan: D. H. LONG, M.; S. J. LEWIS, S.

SACRAMENTO COUNTY.

AMERICAN RIVER, Patterson: E. G. MORTON, SR., M.; CYRUS WILSON, S.
COSUMNES, Sheldon: J. A. ELDER, M.; J. H. ATKINS, S.
ELK GROVE: OBADIAH S. FREEMAN, M.; DELOS GAGE, S.
ENTERPRISE, Brighton: J. M. BELL, M.; M. TOOMEY, S.
FLORIN: CALEB ARNOLD, M.; WM. SCHOLEFIELD, S.
FRANKLIN: AMOS ADAMS, M.; P. R. BECKLEY, S.
GALT, Galt: J. C. SAWYER, M.; J. L. FIFIELD, S.
GEORGIANA, Rio Vista: F. M. KITRELL-G. A. KNOTT.
SACRAMENTO: W. S. MANLOVE, M.; A. S. GREENLAW, S.
SHERMAN ISLAND, Emmaton: J. M. UPHAM, M.; W. M. ROBBINS, S.
WALNUT GROVE: SOLOMON RUNYON-J. V. PRATHER

SAN BENITO COUNTY.

MOUNTAIN, San Benito: G. BUTTERFIELD-J. W. MATHEWS

SAN BERNARDINO COUNTY.

RINCON, Rincon: F. M. SLAUGHTER-JOHN TAYLOR.
RIVERSIDE, Riverside: E. G. BROWN-G. W. GABCELON.
SAN BERNARDINO, San Bernardino: R. SHELTON, M.; J. BRODHURST, S.

SAN JOAQUIN COUNTY.

ATLANTA, Morano: W. J. CAMPBELL-MRS. J. W. MOORE.
CASTORIA, Stockton P. O.: H. W. OOWELL, M.; MISS SALUDA REYNOLDS, S.
COLLEGEVILLE, Col'v'le: A. MAYBERRY-MRS. S. REYNOLDS
ELLIOT, Elliot: HENRY H. WEST, M.; N. S. MISINER, S.
FARMINGTON, Farmington: J. M. GROVES-E. O. LONG.
LIBERTY, Acampo: JUSTUS SCHOMP, M.; C. C. GARNER, S.
LINDEN, Linden: JOHN WASLEY, M.; JAMES WASLEY, S.
LOCKEFORD, Lockeford: G. O. HOLMAN-S. S. STEWART.
LODI, Lodi: J. W. KEARNY, M.; MRS. N. CROUCH, S.
RUSTIC, Lathrop: J. A. SHEPHERD, M.; H. MOORE, S
STOCKTON, Stockton: W. L. OVERHISER-W. G. PHELPS.
WASHINGTON: W. B. STAMPER, M., Comanche, Calaveras Co.; M. L. COOK, S.
WEST SAN JOAQUIN, Ellis: M. LAMMERS-G. E. MCSTAY.
WILDWOOD, Wildwood School House: JOS. LEIGHTON, M.; A. B. MCNEIL, S.
WOODBRIDGE, Woodbridge: J. L. HUTSON-A. S. THOMAS.

SAN LUIS OBISPO COUNTY.

ARROYO GRANDE, Arroyo Grande: W. H. NELSON, M.; B J. WOOD, S.
CAMBRIA, Cambria: O. H. IVINS, M.; H. OLMSTEAD. S.
MORO CITY, Moro: A. J. MOTHERSHEAD-H. Y. STANLEY.
OLD CREEK, Old Creek: ISAAC FLOOD-R. M. PRESTON
PASO ROBLES, Paso Robles: H. W. RHYNE-J. P. MOODY

SAN LUIS OBISPO, San Luis Obispo: WM. JACKSON, M.; E. L. REED, S.
SUMMIT, San Marcos: J. V. N. YOUNG-A. T. FOSTER.

SAN MATEO COUNTY.

CRESCENT: H. M. JEWELL, M.; JAMES COMPTON, S. Half Moon Bay.
LA HONDA, La Honda: M. WOODHAMS, M.; W. A. SAUNDERS, S.
OCEAN VIEW, Ocean View: I. G. KNOWLES-E. ROBSON.
PESCADERO, Pescadero: B. V. WEEKS-H. B. SPRAGUE.
SAN MATEO: A. F. GREEN, M.; W. H. LAWRENCE, S.

SANTA BARBARA COUNTY.

CARPENTERIA, Carpenteria: O. N. CADWELL, M.; G. E. THURMAND, S.
CONFIDENCE, Guadaloupe, A. COPELAND-J. T. AUSTIN.
SANTA BARBARA, S'taBarb'a: O.L. ABBOTT, M.; VIRGINIA F. RUSSELL, S.
SANTA MARIA, Suey Station: J. MILLER-M. D. MILLER.

SANTA CLARA COUNTY.

GILROY, Gilroy: W. Z. ANGENEY, M.; H. OOFFIN, S.
MAYFIELD, Mayfield: F. W. WEISSHAAR-J. PONCE.
SAN JOSE, San Jose: WM. ERESON, M.; Miss JETTORA WATKINS, S.
SANTA CLARA: H. M LEONARD, M.; I. A. WILCOX, S.
SARATOGA: F. DRESSER, M.; MISS JENNIE FARWELL, S.

SANTA CRUZ COUNTY.

BEN LOMOND, S'ta Cruz: JOHN BURNS-JAS. BURNS.
SANTA CRUZ: G. O. WARDWELL, M.; J. W. MORGAN, S
WATSONVILLE: J. MCCOLLIN-A. F. RICHARDSON.

SHASTA COUNTY

COTTONWOOD: G. G. KIMBALL, M.; JOHN BARRY, S.
MILLVILLE, Millville: E. WAGONER-G. W. WELCH.
READING: J. F. DINSMORE, M.; S. J. R. GILBERT, S

SISKIYOU COUNTY.

ÆTNA: JOHN MCBRIDE-J. MCCONAUGHTY.
FORT JONES, Fort Jones: J. S. MATTHEWS-J. W. TUTTLE.
MOUNT BOLIVAR, Callahan's Ranch: R. M. HAYDEN-J. A. COLE.

SOLANO COUNTY.

BINGHAMPTON: A. BENNETT, M.; E. A. BEARDSLEY, S.
DENVERTON: J. B. CARRINGTON M.; G. C. ARNOLD, S.
DIXON: J. C. MERRYFIELD, M.; B. F. KELLY, S.
ELMIRA: J. A. CLARK, M.; M. D. COOPER, S.
MONTEZUMA, Collinsville: T. HOOPER, M.; C. K. MARSHALL, S.
RIO VISTA: A. B. ALSIP, M.; J. H. GARDNER, S.
ROCKVILLE, Cordelia: W. A. LATTIN-J. R. MORRIS.
SUISUN VALLEY: R. C. HAILE, M.; A. T. HATCH, S.
VACAVILLE: E. R. THURBUR, M.; OSCAR DOBBINS, S.
VALLEJO: G. C. PEARSON, M.; CHAS. B. DEMING, S.

SONOMA COUNTY.

BENNETT VAL'Y, S'ta Rosa: I. DETURK-C. N. WHITAKER.
BLOOMFIELD: WM. H. WHITE, M.; A. B. GLOVER, S.
BODEGA, Bodega: E. S. PIUNE, M.; E. H. CHONEY, S.
CLOVERDALE: CHAS. H. COOLEY, M.; J. B. COOLEY, S.
GEYSERVILLE: C. M. BOSWORTH, M.; R. R. LEACH, S.
HEALDSBURG: C. ALEXANDER, M.; W. N. GLADDEN, S.
PETALUMA: L. W. WALKER, M.; D. G. HEALD, S.
SANTA ROSA: GEO. W. DAVIS, M.; J. A. OBREEN, S.
SEBASTOPOL: M. C. HICKS, M.; W. J HUNT, S.
SONOMA: WM. MCP. HILL, M.; W. A. BERRY, S.
TWO ROCK: S. Q. BARLOW, M.; HOWARD ANDREWS, S.
WINDSOR: A. B. NALTEY, M.; J. H. MCLELLAND, S.

STANISLAUS COUNTY.

BONITA, Crow's L'd'g.: J W. TREADWELL-A. B. CROOK.
CERES: W. B. HARP, M.; C. N. WHITMORE, S.
GRAYSON, Grayson: T. C. BROWN, M.; A. C. LANDER, S.
OAKDALE: A. S. EMERY, M.; C. B. INGALLS, S.
ORISTIMBA, Hill's Ferry: W. J. MILLER-E. H. ROBISON.
SALIDA, Modesto: B. F. PARKES, M.; A. M. ELMORE, S.
STANISLAUS, Modesto: J. D. SPENCER-V. E. BANGS, S.
TURLOCK: A. S FULKERTH, M.; W. S. ROBINSON, S.
WATERFORD: R. R. WARDER, M.; W. C. COLLINS, S.

SUTTER COUNTY.

NORTH BUTTE: B. R. SPILLMAN, M.; J. D. DOW, S. Yuba City.
SOUTH SUTTER, Pleasant Grove: THOS. BOYD, M.; ALEX. DONALDSON, S.
SUTTER, Meridian: W. C. SMITH, M.; J M. GLADDEN, S.
YUBA CITY: GEO. OHLEVER M.; S. R. CHANDLER, S.

TEHAMA COUNTY

FARMINGTON: ADDISON J. LOOMIS, M.; S. H. LOOMIS, S
NEW SALEM, Paskento: O. HARRIS-J. R. WHITLOCK.
RED BLUFF: R. H. BLOSSOM, M.; F. E. FONDA, S.

TULARE COUNTY.

CHRISTMAS, Visalia: A. B. COREY, M.; W. H. STUART, S.
DEEP CREEK, Farmersville: W. G. PENNEBAKER, M.; F. G. JEFFERDS.
FRANKLIN, Kingston: F. WYRUCK-P. A. KANAWYER.
LAKE, Kingston: M. S. BABCOCK, M.; J. S. ROBINSON, S.
MOUNT WHITNEY: G. W. DUNCAN, M.; A. THOMPSON, S. Portersville.
TULARE: D. E WILSON, M.; VICTORIA WRIGHT, S.
TULE RIVER, Porterville: G. A. WILLIAMSON, M.; N. T. BLAIR, S.
VISALIA, Visalia: T. FOWLER, M.; J. O. BLAKELEY, S.
WOODVILLE: J. A. SLOVER, M.; J. STEWART, S.

TUOLUMNE COUNTY.

SONORA, Sonora: S. S. TURNER, M.; R. F. WILLIAMS, S

VENTURA COUNTY.

OJAI, San Buenaventura: C. E. SOULE, M.; J. HOBART, S.
PLEASANT VALLEY: D. RONDEBUSH-P. BROWNING.
SAN PEDRO, San Buenaventura: J. Y. SAVIERS, M.; D D DENURE, S
SATICOY: MILTON WASON, M.; E. A. DUVAL, S.
SESPE, San Buenaventura: S. A. GUIBERSON, M.; THOS. MARPLE, S.
VENTURA, San Buenaventura: J. WILLETT, M.; CHAS. PREBBLE, S.

YOLO COUNTY.

ANTELOPE: W. J. CLARK, M; O. L. N. VAUGHN, S.
BUCKEYE, Buckeye: WM. SIMS, M.; L. MOODY, S.
CACHE CREEK: D. B. HURLBURT, M.; L. D. STEPHENS, S.
CAPAY VALLEY: R. R. DARBY, M.; P. M. SAVAGE, S.
DAVISVILLE: CHAS. E. GREEN, M.; JOHN KRIMMER, S.
HUNGRY HOLLOW, Yolo: G. L. PARKER-MRS. ANN E. DUTTON.
WE-T GRAFTON, Yolo: A. W. MORRIS-G. W. PARKS.
YOLO, Woodland: J. A. HUTTON, M.; D. SCHINDLER, S.
YUBA COUNTY.
MARYSVILLE: O. G. BOCKIUS, M.; JAS. M. CUTTS, S.

Nevada Subordinate Granges.

RENO, Reno, Nev.: A. J. HATCH, M.; T. B. KLOCHER.
EAGLE VALLEY: G. W. CHEDIG-O. A. F. GILBERT, S
CARSON VALLEY, Genoa: R. J. LIVINGSTON-J. S. CHILD.
WASHOE VALLEY, Franktown: ELIAS OWENS, M.; G. D. WINTERS, S
WILLINGTON, No. 6, Esmeraldi Co.: A. H. HAWLEY, M.; J. N. MANN, S.
MERIT, Mason Valley, Esmeraldi Co.: KIMBER CLEAVER, M.; CLARK CLEAVER, S.

☞ Deputies who organize new Granges are requested to send the list of officers, and the names of all charter members, with other facts of interest, for free publication in the RURAL PRESS, as early as possible.

WAREHOUSE COMMITTEE MEETING.—Worthy Master Hamilton was absent from San Francisco on Wednesday, attending the meeting of the Grange Committee at Vallejo, for considering the establishment of warehouses at some northerly point on the bay. This is important business for the different Granges there represented. A great deal can be said in favor of this movement, and we desire to give further information. Patrons, remember that fortune helps those who help themselves.

Dr. Carr in Southern California.

Dr. Carr has recently returned to Oakland from a tour in Southern California, where himself and lectures were popularly received. Following our readers are favored with some of his observations:

EDITORS PRESS:—When "Birdofredum Sawm" (in the "Bigelow Papers), felt very patriotic, he said: "Hnll Fourth of Julys seem to bile in my veins," and my feeling is akin to that after a three weeks' sojourn in the garden counties among the fraternity of teachers, and with the honseholds of faithful Patrons, of which Southern California is now pretty full. I am not going to anticipate Brother Wright's always interesting accounts of the prosperons Granges which we visited together, but I want to apeak my admiration for the enterprise which has effected such changes in Los Angelea since I visited it six years ago. The change is not so much in increase of population, though that is very considerable, as in substantial improvements, fine streets, beautiful school-buildings and business blocks, and in the general tone of society. It seems quite to have ontgrown the pre-Adamite Mexicano age, having entered upon the era of McAdam and railroads; the poetry of repose is profitably exchanged for the poetry of motion.

The orchards have grown vastly in breadth and extent, and I found the Alden fruit driers doing an extensive bnsinesa, eapecially with the Mission grape. I never before observed the difference between this variety at Los Angeles and in our middle region. It certainly is scarcely inferior to the Black Hamburg, as I tasted it there, and has a much larger and richer berry than with us. Mr. Davia, formerly of Oakland, is drying large quantities—believing that these *dried* grapes when packed will acquire more of the *raisin* flavor, bnt even if they do not, they can stand upon their merits.

In my former visit to Los Angeles, six years ago last February, I was engaged in stndying the agricultural resonrces of the State. I received many kindnesses from ex-Governor Downey at that time, and again his hospitable doors were opened to me, and in a home so much more in accordance with my ideas of what a "citizen's" home shonld be, than the palatial mansions which too often exhibit the ostentation rather than the usea of prosperity. I forgot the fruitless atruggle of the intervening years. I was comforted in the reflection that when men fail, ideas live, and work ont their special mission.

Los Angeles county is admirably adapted for the estsblishment of a noble agricultural school, and it it is not saying too much to prophecy, that in a very few years hundreds of young persons from less genial climates will be seeking its advantages for practical with theoretic instruction. The schools I visited, the teachers I met, show how strong the public sentiment is becoming in respect to the new edncation. The teachers' institute was well attended, Superintendent Peck need not fear a comparison with Alameda or any other conuty, for he holds jurisdiction over some of the best educational material of the State. Nor has Dr. Lucky less reason to rejoice in good work, faithfully done. Whether we look at this part of our State from the Grangers or educational stand-point, the banner of Hope waves over it. On my return I stopped at Santa Barbara and visited Bro. and Sister Abbott, their olive branches, and the flonrishing college, and saw, on a smaller scale, the same evidences of thrift and prosperity. And here again ia the proof that of all Americans the Californian has the best reason for keeping a Thanksgiving Day in a spirit of gratitude and faith.

EZRA S. CARR.

San Mateo, Thanksgiving Day.

"By Their Fruits."

EDITORS PRESS:—As we see from time to time accounts of the kind assistance the Brothers give each other in times of sickness and distress, I wish to let you know that the Sisters, too, can aid in other ways than making "niciea" for picnics and harvest feasts; and that lately I have had their kind assistance in making np a lot of children's garments dnring so long sickness, which prevented me attending to my own duties, an assistance which I hope I have fully appreciated.

In one of your late papers, yon allnde to some remarka made at the "State Grange meeting," by (I think) "Sister Clarke," with regard to ladies' dress; could yon not favor us with the same? Surely those who were not so fortunate as to hear them, wonld be benefited by reading them, for it is a matter in which there is so much room for improvement. The present fashiona are so unbecoming to the plain farmer'a wife, and yet we do not like to appear conspicuons by our old-fsshionedness (to coin a plain term). E. T. H.

Spring River, Nov. 25, 1874.

[If a copy of the remarks allnded to can be obtained, we will comply with the request of our correspondent.—EDS. PRESS.]

ANNIVERSARY DAY.—Thursday, Dec. 4th, was the anniversary of the establishment of the Order of the Patrons of Husbandry, which has now entered upon the ninth year of its existence. There is no calculating the amount of good which the Order has already accomplished, while the possibilities in that direction for the future are also beyond estimate. With good crops everywhere, and the surety of an early disenthralment from oppressive money and freight rings the future of the farmer is most hopeful and encouraging. May the good work of our Order so continue to increase and prosper until every department of society and business shall learn and freely acknowledge its patent, elevating and pacifying influences.

Election of Officers.

ELK RIVER GRANGE.—T. S. Stewart, M.; W. Fields, O.; A. Forbes, L.; R. A. Haw, S.; T. W. Gardner, A. S ; A. C. Spear, C.; A. Swain, T.; ——Knapp, Sec.; G. H. Shaw, G. K.; Mrs. E. Forbes, Ceres; Mrs. Knapp, Pomona; Mrs. E. Williams, Flora; Mrs. F. L. Meyer, L. A. S.

POINT ARENA GRANGE.—B. F. McClure, M.; T. Stewart, O.; A. Kendall, L.; ——, S.; J. C. Lane, A. S.; J. Shepard, C.; W. McClure, Sec.; David Cain, T.; Henry Vinegarholtz, G. K; Miss Nannie Lane; Ceres; Miss Mary McClure, Pomona; Miss Ella Cain, Flora; Sarah Stewart, A. S.

WESTTMINSTER GRANGE.—M. B. Craig, M.; J. Y. Anderson, O.; W. G. McPherson, L.; James A. McFadden, S.: Joseph Bingham, A. S.; Geo. Dauskin, C.; J. D. Bowley, T.; W. F. Poor, Sec.; Jesse Davis, G. K.; Miss Martha McCoy, Ceres; Miss Martha Edwards, Pomona; Miss Villa Marquis, F.; Miss Ella Jaquette, L. A. S.; Dr. Jas. McCoy, Trustee.

WATSONVILLE GRANGE, No. 124.—J. McCollum, M ; J. M. Ripley, O.; Mrs. Owen Tuttle L.; R. T. Gallagher, S.; Owen S. Tuttle, A. S.; D. Tuttle, C.; H C. Struve, T.; Sarah Redman, Sec.; M. Gagnon, G. K.; Mrs. Drew, Ceres; Mrs. V. Wescott, Pomona; Miss V. Ferguson, Flora; Mrs. J. M. Ripley, L. A. S.; James Rogers, Trustee; H. C. Struve, Agent; A. F. Ollinger, A. S.

SESIPE GRANGE, No. 164.—S. A. Guiberson, M ; J. A. Conaway, O.; F. A. Sprague, L.; Hudson Waring, S.; G. W. Rowel, A. S.; C. H. Decker, C.; Mrs. F. A. Sprague, T.; Thos. Marple, Sec'y.; B. F. Waring, G. K.; Mrs. Guiberson, Ceres; Mrs. Decker, Pomona; Mrs. Conaway, Flora; Mrs. Freer, L. A. S.

BISHOP CREEK GRANGE.—A. Dell, M.; H. Warnerfield, O.; G. A. Hastings, L.; J. W. Inman, C.; D. O. Watson, S.; H. G. Plumly, A. S.; E. W. Powers, T.; W. T. Wiswall, Sec'y.; J. C. Mills, G. K.; M. A. Clark, C.; A. W. Ford, P.; A. R. McLaran, F.; M. Inman, L. A. S.

TABLE BLUFF GRANGE. No. 101.—Jackson Sawyer, M.; E. C. Niles, O.; I. C. Foss, L ; T. I. Knight, S.; Charles R. Meller, A. S.; Louis Buyatte, C.; I. L. Burkdall, T.; Elisha Clark, Scc'y; H P. Dolen, G. K.; Mrs. T. Y. Clyde, Ceres; Mrs. Honnah Sawyer, Pomona; Mrs. Elizabeth Vanduzer, Flora; Miss Annie R. Meller, L. A. S.

PLYMOUTH GRANGE, No. 232.—Harding Vanderpool, M.; Reuben M. Ford, O.; James F. Gregg, L.; Jonathan Sallee, S.; Hugh H. Bell, A. S.; William A. McKenzie, C.; Eleazer S. Potter, T.; Stephen C. Wheeler, Sec'y; Christopher C. Forbes, G. K.; Mrs. Melinda Williams, Ceres; Mrs. Sarah Vanderpool, Pomona; Miss Sarah J. Sallee, Flora; Sarah L. Horton, L. A. S.

LODI GRANGE, No 92.—John Parrott, M.; Henry Wittin, O.; E. Lawrence, L.; S. P. Sabin, S.; George Hogan, A. S.; J. Daniels, C.; Mrs. Nellie Crouch, Sec'y; A. W. Gove, T.; W. A. Colston, G. K.; Mrs. Wm. Post, Ceres; Mrs. A. G, Ayres, Pomona; Mrs. S. Ferdun, Flora; Mrs. O. O. Norton, L. A. S.

ANTELOPE GRANGE, No. 98.—W. J. Clarke, M.; G. B. Lewis, O.; J. S. Rollins, L.; Mr. McEmerett, S.; D. Remode, A. S.; L. Clarke, C.; A. W. Dunmega, T.; T. F. Hughes, Sec'y; R. P. Glass, G. K.; Mrs. Jno. Byrnes, Ceres; Mrs. T. F. Hughes, Pomona; Mrs. J. S. Rollins, Flora; Miss J. Burgoyne, L. A. S.

GEYSERVILLE GRANGE, No. 67.—C. P. Moore, M.; A. Stites, O.; J. Schott, L.; G. W. Romine, S.; J. Patrick, A. S.; W. Beason, C.; E. Hamilton, T.; H. Wiedersheim, Sec'y; C. M. Bosworth, G. K.; Mrs. Bosworth, Ceres; Mrs. Hamilton, Pomona; Miss Walcott, Flora; Mrs. W. Beason, L. A. S.

GARRETSON GRANGE.—W. J. Hutchinson, M.; Joseph Burns, O.; P. R. Perry, L.; W. J. Hutchison, S.; Levi Lindsey, T.; A. Jackson, Sec'y; H. C. Higby, A. S.; L. W. Jones, C.; F. M. Odom, L. A. S.; D. E. Grooves, G. K.; Mrs. A. M. Miles, Ceres; Mrs. W. D. Black, Pomona; Miss Sallie Yeargin, Flora.

FLORIN GRANGE.—L. Fascette, M.; C. Arnold, O.; J. Chandler, L.; C. Lea. S.; T. Jenkins, A. S.; E. J. Taylor, C.; D. Rees, S.; J. J. Bates, Sec.; A. Wilson, G. K.; Miss Julia Wilson, Ceres; Miss Julia Williams, Pomona; Miss Sallie A. Warner, Flora; Miss Mary Maitland, L. A. S.

CARPINTERIA GRANGE.—C. H. Fish, M.; D. M. Whitford, O.; R. G. Pardee, L.; J. Walker, S.; E. H. Pierce, A. S.; Mrs S. A. Olmstead, C.; A. Martin, Treas.; S. H. Olmstead, Sec.; W. Harris, G. K.; Miss E. Walker, Ceres; Miss M. Fish, Pomona.; Miss J. Walker, Flora; Mrs. Barnard, L. A. S.

VISALIA GRANGE.—T. Fowler, M.; J. M. Graves, O.; J. Clark, L.; J. M. Patterson, C.; B. L. Conyers, T.; J. Cutler, S.; L. O. Preston, A. S.; J. O. Blakely, Sec'y; J. Parker, G. K.; Mrs. B. G. Parker, Ceres; Mrs. L. O. Preston, Pomona; Miss Alice Toombs, Flora; Mrs. J. O. Blakely, Shepherdess.

CORDELIA GRANGE.—W. A. Latten, M.; H. D. Tisdale, O.; John McCullen, C.; Ell Barhour, S.; H. N. Foster, A. S.; J. M. Baldwin, T.; W. W. Jerrow, L.; J. R. Morris, Sec'y; C. E. Peabody, G. K.; Miss Julia Kimball, Ceres; Miss Mattie Macy, Pomona; Miss Julia McEwing, Flora; Mrs. Ellsworth, L. A. S.

PLAZA GRANGE, COLUSA CO.—M. Kendrick, M.; J. W. Blunkall, O.; E. B. Kessellring, L.; Wm. Miller, S.; Z. E. Brown, A. S.; J. Miller, C.; H. W. Steuben, T.; J. W. Bowers, Sec'y; D. J. Lake, G. K.; Mrs. Kendrick, Ceres; Mrs. Bowers, Pomona; Mrs. Kessellring, Flora; Mrs. Brown, L. A. S.

MATTOLE GRANGE, HUMBOLDT CO.—Jacob Miner, M.; John Coon, O.; Lucien Wright, L.; James H. Goff, S.; Clem Shinn, A. S.; Mrs. Sarah E. Marshall, C.; Thomas Clark, T.; D. J. Johnson, Sec'y; Frank Gouchler, G. K.; Mrs. A. E. Cook, Ceres; Mrs. H. E. Crane, Pomona; Mrs. C. A. Miner, Flora; Mrs. A. A. Benton, L. A. S.

RINCON GRANGE, SAN BERNARDINO CO.—F. M. Slaughter, M.; T. B. Walkinshow, O.; J. C. Harris, L.; S. I. Rives, C.; F. M. Wood, S.; W. R. Rives, A. S.; S. B. Matthews, T.; John Taylor, Sec'y; Bartlett Vines, G. K.; Julia Matthews, Ceres; M. M. Hathaway, Pomona; Flora Wood, Flora.

TOMALES GRANGE, MARIN CO.—William Vanderbilt, M.; O. Hubbell, O.; S. C. Percival, S.; A. Gericke, L.; J. L. Blake, C.; R. H. Prince, Sec'y; Thomas Caruthers, T.; F. A. Plank, A. S.; A. S. Marshall, G. K.; Mrs. O. Huhbell, Ceres; Mrs. C. A. Keyes, Pomona; Miss Amelia Walters, Flora; Mrs. A. Plank, L. A. S.

ADAMS GRANGE, No. 143.—T. P. Nelson, M.; Thomas Hall, O.; B. C. Weir, L.; L. F. Potter, S.; J. B. Jack, A. S.; R. B. Freeman, C.; W. M. Shipp, T.; Thos. H. Wyatt, Sec'y.; J. M. Heiskell, G. K ; Mrs. Mary Hall, Ceres; Mrs. M. H. Nelson, Pomona; Mrs. Cally Weir, Flora.

Equality With Others.

The opinion seems to have obtained among many that the Grange aims to make the farmers a preferred class. Such is not the fact. Whatever public burden is borne by the farmers has to be borne in common with all other classes. If the farmer is over-taxed, so must other classes be; if the farmer—the producer—suffers by reason of the injustice of monopolies, in the matter of transportation or otherwise, the consumer is also a sufferer by reason of enhanced prices; if the farmer demands the privilege of fixing the price of his products, he asks no more than the mechanic or manufacturer demands and enjoys; if the farmer seeks to establish especial agencies for the sale of his products, he does no more than every extensive manufacturer or manufacturing corporation does. In short, the farmer seeks only to put himself on a par with other producers. No honest, intelligent man expects to separate the farmers' interests from the interests of either the trades or commerce. Each is necessary to the other. The Grange does not seek any such result. In all its plans and demands it aims to be actuated by justice and equity, and is ever willing to concede as much as it asks.

The farmers have heretofore been placed at the unrestricted mercy of the middlemen, as no other producers have been. They now seek only for those privileges which are granted to other producers—nothing more; and in their efforts to secure such they are entitled to the respect and sympathy of every other producing class.

The establishment of the Order of the Patrons of Husbandry seemed to be the only effective method of reaching the desired end. Agricultural life is necessarily isolated; hence the facility with which the farmers have been brought under subjugation to the middleman and capitalist. The Grange has been successful in the unification and concentration of the elements of agricultural industry, and has given them a direction and force which has broken the power of the middlemen, and has brought the farmer to the very front in the great battle of life. The great interest upon which confessedly rests all other interests, and which has long been the prey of the trafficking spirit of the age, is now able to assert its rights before the world, and maintain them too. The Grange is neither political, mercenary or leveling. It is, on the contrary, thoroughly conservative in spirit and in practice. It is aggressive only so far as is necessary for self-protection; and in this direction it simply advances so far as is necessary to throw up, as it were, a breakwater to disarm the waves of outside combination, which aims to deprive agriculture of the rightful possession and enjoyment of its own legitimate profits.

Notes of Grange Travel—No. 5.

[Written for the RURAL PRESS by J. W. A. WRIGHT.]

Ventura County,

San Buenaventura, Dec. 4th. This will be a celebration of the anniversary of the organization of the National Grange. In this celebration all the Granges of Ventura Co. will unite. Few Grange meetings accomplish more good results than these united gatherings of neighboring Granges. Their effect is to remove those local prejudices and rivalries which tend so much to cripple the power of the Grange for the greatest good. They are an important aid towards carrying out the spirit of our work as expressed in these words of our Declaration of Purposes.

"We shall earnestly endeavor to suppress personal, local, sectional, and national prejudices, all unhealthy rivalry, all selfish ambition."

Santa Barbara Co.

Carpenteria and Santa Barbara Granges at Santa Barbara, Dec. 5th, at 2 P.M.; Santa Maria Grange at Suey Station, Dec. 8th, at 2 P.M; Confidence Grange at Guadaloupe, Dec. 9th, at 2 P. M.

San Luis Obispo Co.

Arroyo Grange, Moro, and San Luis Obispo Granges, at San Luis Obispo, Dec. 10th, at 2 P.M.; Old Creek Grange, Dec. 11th, 3 P. M.; Cambria Grange, Dec. 12th, 2 P. M.; Paso Robles and Summit Granges will meet with us at the most convenient of the above points.

The meetings with the Granges of Los Angeles and San Bernardino have been the best attended and, all facts considered, the most successful of any series of official visits which it has yet been my pleasant privilege to make.

As Los Angeles is our banner county in the number of Granges, (17) so will it closely contest with any county its right to the banner for the zeal of its members, the variety and excellence of their products, and the success which has crowned their efforts in establishing several important practical enterprises of their own, made necessary by their isolated position in our jurisdiction.

In climate, soil, facilities for irrigation, including artesian wells, products, including semi-tropical fruits, and a bright future, I find Los Angeles, and San Bernardino counties all that has been claimed for them. Northern California will have to look well to its laurels, if it does not want Southern California, within a few years, to wrest them from its grasp. More anon, about this delightful series of visits.

San Bernardino, Nov. 19th, 1874.

True and Practical Grangerism.

BROS. DEWEY AND EWER:—It is customary once in awhile for Subordinate Granges to inform you of their condition.

I think our Grange is thriving if good deeds are any indication. A worthy brother being sick and his labor needed at the present in the field, his brother Patrons went to his aid, and seeded and harrowed in 60 acres for him, and left him if not in better health, at least easier in his mind.

This was only a prelude to what follows. Bro. Jackson, through bereavement and other unavoidable causes got behind hand, his brother Patrons came to his aid and gave him a benefit the other day. They went to his ranch and took it by storm. They did no further mischief but plowed and seeded 25 acres, and then left. Our brother is impressed with the idea that it pays to ho a Granger.

W. A. SMITH.

Florin, Nov. 22d, 1874.

A Noble Helper.

Compliments like the following are richer than fine gold—incontives to us to do our level best for the readers of the RURAL PRESS:

SAN LUIS OBISPO, Nov. 23, 1874.

MESSRS DEWEY & CO.,

GENTS:—Please find inclosed a check on Messrs. Stuart & Elder for $4.00, to pay my subscription for the PACIFIC RURAL PRESS for one year. Some two years since I was induced, at the solicitation of Mr. F. M. Shaw to become a subscriber for your *invaluable* paper. Have been a constant and attentive reader of its columns since that time. My interest increases with the reading. Believing, as I do, that no intelligent farmer, nor any one who wishes to become so, can afford to do without it, you can write me down as a *life subscriber*.

I believe there was a club made up in our Grange for the PACIFIC RURAL PRESS. My name was one of that club. Shall exert myself to have that club subscription continued and enlarged this year. I believe I also subscribed for a copy sent to Mr. W. R. S., Lake P. O., Ohio. When that subscription is about to expire please notify me, as I wish to renew it, and oblige.

Yours very respectfully,

G. S.

PROFESSOR CARR AND THE UNIVERSITY.—We have received an important pamphlet of 112 pages, entitled "The University of California and its Relations to Industrial Education," as shown by Prof. Carr's reply to the Grangers and Mechanics; Prof. Swinton's testimony before the Legislature; the New Education, by 'Columella;' Memorial to the Legislature by Joint Committee of the State Grange and Mechanics' Deliberative Assembly, and other Documents. Persons desiring copies can obtain them of the Secretary of the State Grange, No. 6, Leidesdorff St., S. F.

From the Granges.

Lodi.

EDITORS PRESS:—We receive your valuable and interesting paper weekly, and many an article finds its way into my scrap book for preservation. Our little Grange is still alive; we do not now increase very fast, as all the farmers either belong here or to neighboring Granges. Shall we still continue our harvest feast whether we have any inititations or not? I think so, as that keeps up the social part of our order we are sadly in want of.

MRS. NELLIE CROUCH.

Lodi, Cal., Nov. 23, 1874.

Dry Creek.

EDITORS PRESS.—Our Grauge is prospering finely at present, with a prospect of a large increase of members this winter. The rains have set in in earnest, which is a great surprise to the old settlers here, who prognosticated a dry season. There has been a great quantity of hay destroyed by the rain that was improperly stacked, which will be a good lesson for our improvident farmers. Our country here is settling up very fast. Along the foothills there is scarcely an acre worth having but what will have an occupant. There will be a larger area sown to grain this year than was ever known before in this county. The grass is more forward than I have ever known it at this season of the year. It appears to be of better quality than usual.

THOS. H. WYATT.

Dry Creek, Nov. 23, 1874.

Plymouth Grange.

EDITORS PRESS:—The Plymouth Grange, P. of H., No. 232, was organized by acting Deputy Manlove on the 17th of last September, with 16 male and 9 female members. From some cause we have not received books, rituals, etc., which we should have had long sinco. Harding Vanderpool is acting organizing Deputy for this county. Of course if the Worthy Secretary fails to send us the necessary tools, our farm cannot be worked to advantage. However, we hope to be able to report progress by the beginning of the new year.

S. C. WHEELER.

Plymouth, Amador county.

[The notice of election will be found in its appropriate place in another column.—EDS. PRESS.]

Carpenleria.

EDITORS PRESS:—The season is at least six weeks ahead of the average time, and most kinds of feed is growing splendidly, and stock can now maintain themselves where they have access to it. The country is looking beautiful with the grass growing so finely. The rain coming so much earlier than usual, and so much more of it, many of onr farmers were caught with their beans out, and consequently many beans are injured and some spoiled. The corn will also be delayed in getting to market, as little or none of it was under cover. The land is in good condition for the plow and planting trees. The weather is delightful and the prospect is encouraging.

C.

Carpentoria, Nov. 24.

The Grange in Placer County.

The Placer *Times* says: "Owing to the fact that the attention of our population is largely turned to mining, but few Granges have been organized in this county. The western portion of the county being mainly agricultural, the Patrons have gained a foothold there, having three flourishing Granges—one at Roseville, one at Lincoln, and one at Sheridan. They are all in a healthy condition and increasing in numbers. There is talk of organizing a County Council, but this will probably not be done till there are more Granges in the county. There has been some talk of forming a Grange here in Auburn, and with the large number of our citizens in agricultural pursuits, it seems that the thing could easily be done. Should our farmers and fruit-growers in this or any other section of the county desire to organize, A. D. Neher, of Roseville, who is the District Deputy of the Order, will furnish all necessary information and the required blanks. The Order has been a decided success in this State wherever introduced, and we see no good reason why the foothill farmers should not participate in the benefits to be derived from the organization."

GRANGE SHIP.—The "Ballochmyle" is now loading at Oakland by the Grange Executive Committee at £2 10s. It is expected that she will be full and ready to sail within two weeks. Grangers and farmers generally will do well to take advantage of the present low rates of freight. There can be little risk in shipping now to sell afloat or to arrive. If prices advance the farmer will have his wheat just where he wants it, to take full and prompt advantage of the market.

GRANGERS BUSINESS ASSOCIATION OF CALIFORNIA.—Bro. Baxter informs us that $1,700 was subscribed to the capital stock at Livermore last Saturday, and favorable information comes in from other localities. Let there be no delay in organizing this association in full strength. All who are able should subscribe liberally for the stock and work actively for the good of the Order.



Paying Her Way.

What has my darling been doing to-day
To pay for her washing and mending?
How can she manage to keep out of debt
For so much caressing and tending!
How can I wait till the years have flown,
And the hands have grown larger and stronger?
Who will be able the interest to pay
If the debt runs many years longer?

Dear little feet! How they fly to my side!
White arms my neck are caressing;
Sweetest of kisses are laid on my cheek,
Fair head on my shoulder pressing,
Nothing at all from my darling is due—
From evil may angels defend her—
The debt is discharged as fast as 'tis made,
For love is a legal tender!

People Here and There—No. 1.

[Written for the PRESS by MRS. ELISA E. ANTHONY.]

"Don't give liquor to children. Possibly you can do it with safety, but the chances are against it." RURAL PRESS, Oct. 17.

The above item struck my attention, and I take the liberty of using it for a text. It is said, because true, that some parents will give their children—mere babies in fact—intoxicating liquors. At first the child will greedily swallow the sugar that is left in the glass, but soon that will not satisfy him; he will cry for the wine, or whatever it may be, and to pacify him, the mother will give him "just a drop;" but a drop, often repeated, will be so relished by the child, that he will find more ways than one of obtaining it; and as the years pass, he will drink more and more, until he is degraded and lost to all sense of shame; and all may be charged to "only a drop" in his youth.

The following instance is fact, not fancy: There is a hard-working woman who lives not far from me, the husband earns from eighteen to twenty dollars a week—enough to support a family comfortably; but seldom does he arrive home with that sum; for on receiving his money on Saturday night, he enters a saloon, and carouses, "treating" this one and that one, until his money is nearly gone; he then staggers home, and lucky she may be if she escapes a blow; his verbal abuse, she cannot escape. She toils from morning until night, and often as late as twelve o'clock; she is an honest, good-hearted woman; but she has her "beer" nearly always in the house; and to both of her children, the eldest not yet five years of age, she gives the liquor freely. Whenever they want a drink, she gives them "beer." One day, while there on business, I saw her three year old child drink the liquor without a grimace and ask for more. I remonstrated with the mother, but in vain; she said she had never felt any ill effects from drinking it, and she had given it to her children since they were a year old. They were stout, and apparently healthy children, but the desire and liking for liquor will be apt to grow with them, until "beer" will not content them; and they may live to curse the day that their mother first gave them the deadly poison. In the words of the text, "Warn every mother wherever you go, never to give a drop to a child, as she values its future happiness."

San José, Oct. 16, 1874.

HINTS ABOUT BEAUTY.—There is nothing more unfavorable to female beauty than late hours. Women who, either from necessity or choice, spend most of the day in bed, and the night in dissipation, have always a pale, faded complexion and dark-rimmed, wearied eyes. Too much sleep is almost as hurtful as too little, and is sure to bloat the person with a pallid and unwholesome fat. Diet has also a marked influence upon personal beauty. Generous living is favorable to good looks, as it tends to fill out and give color and sleekness to the skin. A gross and excessive indulgence, however, in eating and drinking, is fatal to the female charms, especially where there is great tendency to "making flesh." Regularity of time in the daily repast and scientific cooking are the best means of securing not only good health but good looks. The appetite should never be wasted during the intervals between meals on pastry, confectionary, or any other tickler of the appetite, which gratifies the taste, but does not support the system. Exercise is, of course, essential to female beauty. It animates the whole physical life, quickens the circulation of the blood, heightens the color, develops the growth, and perfects the form of each limb and the entire body. It also gives beauty and grace to every movement.

"GIVE me a bid, gentlemen—some one start the cart—do give me a bid, if you please—anything to start the cart!" cried an excited Yankee auctioneer, who stood on the cart he was endeavoring to sell. "Anything you please to start it." "If that's all you wants, I'll start her for you," exclaimed a broad-backed country-man, applying his shoulder to the wheel, and giving the cart a sudden push forward, tumbled the auctioneer over the side. By the time the auctioneer had regained his feet, the countryman had started too.

An Indiana Farmer's History.

On Tuesday we were drivingby the residence of William Fleet, of Eden township, and we spied Mr. F——sitting by the roadside on the shade of a large maple tree, smoking his pipe. We said, "Taking comfort, Mr. Fleet?"

"Yes," said he, "I am enjoying the shade of a large tree, which, forty years ago, I trimmed with my jack-knife one day while I was at work splitting rails at $11 per month. They were clearing up the ground, and cut down many very handsome little maples, when I selected this tree and requested, as it stood in the fence row beside the road, that it be left standing to remember me by. It was then not thicker than my wrist. I was then a poor boy, and worked out for a living."

Mr. Fleet then gave a sketch of his adventures in Indiana, and his experience among the Indians, in his joking way. How he entered 1,000 acres of land on the Pattawottamie reserve, and afterwards traded a half interest in it for one hundred acres where his residence now stands, and how afterward he wanted to sell it and couldn't, and then how he shouldered his ax and waded into the forest and felled the timber on twenty-acres.

The relation of this bit of personal history was interesting, and more so since we know that forty three years after Mr. Fleet trimmed that little maple tree, while he was mauling rails at the small wages of $11 per month, he sits comfortably smoking his pipe under the same tree, which is now more than two feet in diameter at the trunk, and surveys over 1,100 acres of well improved and fertile land, worth $100 per acre. He does more; he counts his flocks by the thousand and his herds by the hundreds, his bushels by the thousand, and his wealth by the hundred thousand. All the result of hard labor, honesty and economy. All in forty years.—*Tiffin, O., Star.*

Concerning Chins.

A pointed or round chin indicates a congenial nature. A person with such a chin will have a beau ideal, and will not be easily satisfied with real men and women.

The indented chin indicates a great desire to be loved; hunger and thirst for affection. When large in a woman, she may overstep the bounds of etiquette and make love to one that pleases her.

A narrow, square chin indicates a desire to love, and is more common among women.

The broad, square chin indicates violent love, or at least devoted attachment.

The broad, round chin indicates ardent love, combined with great steadfastness and permanence of affection.

The retreating chin is indicative of the want of attachment and but little ardor in love.

The chin, in its length and breadth, indicates self-control, self-will, resolution, decision, etc.

Carnivorous animals have the upper jaw projecting, while those of a graminivorous nature have the lower jaw projecting. In a man with a projecting upper jaw will be found large destructiveness and love of animal food; when the lower jaw projects, then a love for vegetable food.

BE GENTLE TO THE LITTLE ONES.—A mother who was preparing flour to mix into bread, left for a few moments, when little Mary—with childish curiosity went to see what it was—took hold of the dish, which fell to the floor spilling the contents. The mother struck the child a severe blow, saying with anger that she was always in the way. Two weeks after, little Mary sickened and died. On her death-bed, while delirious, she asked her mother if there would be room for her among the angels. "I was always in your way, mother; you had no room for little Mary! And will I be in the angels' way? Will there be room for me?" The broken hearted mother then felt that no sacrifice would be too great, could she have saved her child.

IMPORTANT.—In buying a homestead from a husband and wife the purchaser should examine whether the wife has not been changed since the declaration of the homestead was filed. In the case of Johnson vs. Bush the Supreme Court has decided that when a homestead is the common property of a husband and wife, who have children, it does not become the exclusive property of the husband after the death of the wife without a will, or, if he should be married again, of him and his second wife; but part of the property is inherited by the children, and a sale without their participation does not confer a complete title.

DROSS.—Reader, suppose we—each of us—were put through the mental crucible and the dross taken out of us, how much would there be left? One has the dross of tobacco, another that of whiskey, another that of vanity, another preponderates in sensuality, another in a bad temper, another in selfishness. But it is possible, through the Christian religion, to so grow in grace as to eliminate the dross and to leave the pure metal.

SMYTHE was telling some friends about a wonderful parrot, hanging in a cage in the door of a store on State street. "Why," said he, "that parrot cries 'stop thief' so naturally, that every time I hear it I always stop. Now, hang it, what are you all laughing at?"

THE heart which is capable of receiving the purest rays of joy, must have been shadowed by the darkest cloud of sorrow.

A Pet of a Wife.

"Small size"—this is the echo of most men's wishes. They want some one to pet, to fondle, to protect, *they say;* and this is true when they feel good-natured. Cynical women say they want some one they can tyrannize over, but I am not inclined to take a cynical view of the subject. I believe very few men wilfully tyrannize over their wives and children, but the tyranny is there, nevertheless, and intellectual men, such as the world admire, are most prone to exercise it. They are so wrapt in their own plans, theories and speculations that they do not even discover the fact that their own households are famishing for the bread of love, and fainting for the gushing springs of sympathy. They are so accustomed to adulation abroad that the simple home affection seems tame and spiritless; as the purest water of the deepest well is tasteless to one accustomed to the sparkling and burning, but poisonous draughts of intoxication. In our zeal to vindicate the "lords of creation" from the charge of willful tyranny, we are leaving our two bachelors and their imaginary wives too long neglected.

Small size is a man's fancy, not the dictate of his physiological knowledge. It is an almost universal fancy. The larger, rougher, more burly the man, the more sure he is to prefer a small sized woman. "I am determined to have a wife whom I can pick up in my arms and carry her over all the rough places," said a young farmer, whose softest tones sounded like a clap of thunder. As he spoke he snatched the largest and heaviest girl in all his acquaintance, and lifted her over the brook. His words are echoed in the selection made by most large-sized and stentorian-voiced men. Their ideal is of something the reverse of themselves, and thus fragile figures and low tones, are to them, the perfection of feminine attraction.

My solution of the problem lies in the supposition that it is an uneducated action of Philoprogenitiveness, shown in the desire for some small creature to pet, to fondle, to caress. Those who have watched the world for fifty years know how often is enacted the sad tragedy which may be named, "The Bride of a Year." Those young men who are not specially desirous of enacting the part of the bravest husband of a buried wife, the helpless father of a puny babe, will be wise enough to let their Philoprogenitiveness wait until healthy, happy, full-sized wives give them that best blessing of the Lord, a good supply of healthy, happy little folks to pet.—*Phrenological Journal.*

A CALIFORNIA GIRL.—A correspondent of the Sacramento *Union*, writing from Sutter Creek, November 15th, gives this account of one of the girls of the period: The Atlantic papers sometimes tell us of a farmer's daughter who raked hay with a horse, or drove a mowing-machine; but I think California can boast of as noble a girl as any of them. A French girl, eighteen years of age, has hauled cordwood, two trips a day, five miles, swerging a cord and three-quarters to a load, over a rocky and mountainous road, with four heavy horses, nearly every day the past summer. She is usually the first on the road in the morning, and frequently the last one at night. She sits high upon her spring seat, with her whip and four lines in her hands, and her foot on the break, managing her team with as much grace and ease as any man. Her voice and appearance are entirely feminine, and she is of medium size. She is always accompanied by her father, who lifts the heavy sticks, but can neither drive a team nor speak much English. Her well-fitting, dark calico dress, her calfskin laced boots, her black, broad-brimmed palmleaf hat, and her long buckskin gloves, all seem to be well selected and fitted to her business. Her brown hair hangs in two neat braids over her shoulders. She is usually more or less dusty, but it can be seen that it is only the dust of that day. When she passes through the streets she turns her eyes neither to the right nor to the left, and seldom speaks to any one unless she is spoken to or has business with them.

COMMON SENSE is an element in which persons are wanting. Common sense implies sound perception, correct reason, mental capacity and good understanding. It is not to be acquired entirely by education; it is a sort of instinct. It may be polished and made more acute by experience. There is a great deal of sound philosophy in a little common sense sometimes, and the exercise of it upon certain occasions would save many men from much subsequent humiliation.

A LITTLE GIRL remarked to her mamma, on going to bed, "I am not afraid of the dark." "No, of course you are not," replied her mamma. "I was a little afraid once when I went into the pantry to get a tart." "What were you afraid of?" asked the mamma. "I was afraid I could not find the tarts."

AN opposition Senator says two years ago when he "lifted a corner of the vail which hid the public service, the odor of corruption tortured the nostrils of the nation." What will be the result when the Democratic Congress rolls up the curtain?

A LITTLE boy caught his foot in some worsted with which his sister was working the sentence, "God is love," in perforated card-board, and got a blow on the ear that will lay him up for a fortnight—if it does not injure him for life.

Mind Reading

The professors of Yale College, New Haven, Conn., have lately been entertained by the performances of J. R. Brown, the mind reader. The learned professors indulged in hiding coins, pencils, cards, etc., in books, corners and drawers. Brown was then placed *en rapport* with the hider, that is, he took the hand of the person who hid the article, or took hold of a line held by that person. Brown, although blindfolded, would lead the individual to the exact spot, and find the article. Professor Thatcher purposely imagined a pain located under his nose. Brown immediately placed his finger on the precise spot. Professor Marsh imagined a particular word, wrote it on paper, and gave it to another person. Brown spelled it out at once by pointing to the respective letters in an alphabet written on a blackboard. The venerable Ex-President Woolsey concealed a coin under some books, but his mind was probably hazy, for Brown could not quite find it, though he came near the spot. But when put *en rapport* with a younger man, Professor Whitney, Brown immediately found the coin. Professor Brewer placed a tape measure in a distant apartment; Brown promptly went, blindfolded, to the place and found the article. Professor Fish gave a pencil case to Professor Johnson, who gave it to Professor Thatcher, who concealed the article. Brown led the latter directly to the spot, and found the pencil. Professor Lyman held a paper, on which words were written by Professor Fisher, and, blindfolded, Brown spelled the words without difficulty! Having witnessed so many of these curious experiments, it is to be hoped that the learned professors of Yale will be able to explain how they are done.

Economy.

Money is a question of industry, and as long as we have health, there is money stored up in our brains and in our sinews, of which we are the lawful bankers, and which is subject to our draft; but, when we contemplate the economy of something that once lost is lost forever, the question assumes a new importance. For instance, our vitality is part of our stock in trade. We start out in life, usually, with a portion sufficient to our needs. To illustrate, we will suppose, when upon the eve of a journey, a man was given a sum of money sufficient to carry him to his destination in comfort and safety, but assured that this would be the extent of the supply, and, that, if he grew careless or wasteful, he would be set upon by robbers or perish by the wayside, would we be called upon to pity him if he should wantonly waste this precious capital? Yet this is but a true picture of our extravagance in the matter of vitality; we fling it away upon our amusements, our appetites, and our avarice; and, before the shadows of middle life fall athwart our paths, we are set upon by robbers in the shape of disease, or sink down upon the threshold of usefulness, utterly drained of strength and vigor.

Nature intended that we should live temperately, and her penalties are severe and certain in the end. We are always ready enough with promises of reform, but somehow that artful villain, Self-indulgence, always has a key that will fit the locks of our resolutions, and he just glides in and takes us by surprise, and, once face to face with him, we are cowards in our own cause.—*Phrenological Journal.*

THE STILLNESS OF NIGHT AND HOME.—"It is night now, and here is home. Gathered under the quiet roof, elders and children lie, at rest. In the mid-st of a great calm the stars look out from the heavens. The silence is peopled with the past—sorrowful remorse for sins and shortcomings, for memories of passionate joys and griefs rise out of their graves, both now alike calm and sad. Eyes, as I shut mine, look at me, that have long since ceased to shine. The town and the fair landscape sleep under the starlight, wreathed under the autumn mists. Twinkling among the houses, a light keeps watch, here and there is what may be a sick chamber or two. The clock tolls sweetly in the silent air. Here is night and rest. An awful sense of thanks makes the heart swell and the head bow, as I pass to my room through the sleeping house, and feel as though a hushed blessing were upon it.—*Thackeray.*

AN experienced editor pays a high and deserved compliment to the fair patron of the Press. "Women," he says, "are the best subscribers in the world to newspapers, magizines, etc. We have been editor forty years and never lost a dollar by female subscribers. They seem to make it a point of conscientious duty to pay the preacher and the editor—two classes of the community that suffer more from bad pay and no pay at all than all the rest put together."

RECENTLY, a telegraph clerk in France refused to transmit a message in these words: "Third epistle of John, verse 13 and 14," under the law which forbids transmission of despatches not written in plain language. Reference to the text indicates that the despatch was merely an economy of the words: "I have many things to write, but I will not with pen and ink write unto thee; but I trust I shall shortly see thee, and we shall speak face to face."

MISS BACON and Mr. Beans were married out West, the other day. We take this to be a "right smart" couple; for he was shrewd enough to "save his Bacon," and it can hardly be said that she "don't know beans."

Some of the Trials of a Woman.

The hardest trial to a womsn of nervons energy, ambition and occnpation, is the daily demand made upon her time by her acquaintance of the day. Women she may have met accidentally, and been thrown with for an hour or an evening, call upon her, ask favors of her, try her sadly, and then depart to come again, seemingly with the intent to get the benefit of her diligence and efforts. Men who in the business dealings have learned to know her, csll, to settle some trifling point, and then come again because it is agreesble to them to do so, never stopping to consider that they are a tax, and oftentimes a bore, and never so necessary to her existence that they need stay an hour to transact a matter that is of no importance to any one but themselves.

A woman of this stamp should early learn to avoid fovors; they cost too dear. A bouquet of flowers. an evening at the opera, or any other unnecessary kindness, often is paid for by hours of hard service at entertaining, or else by attentions that are undesired and undesirable to a woman, who, to grow in strength must grow apart, and who to succeed must not be embarrassed by so called friends. Learn early the value of personal independence; strive to live above society, and aspire to that culture and grace which render it unnecessary. Rejoice in your single-heartedness; delight in being magnanimons; for a woman to be really independent must be lofty of soul and above the masses in every moral attribute. Rid yourself of women who hamper you by their society; avoid, as you would a pestilence, women of vulgar instincts and ordinary attainments. Poor society is worse than solitude to even less earnest women than yourself; to you who have a life-pursuit, and are pursuing it, it is simply a calamity. You may offend, but the loss of strength to you is more than the good will of small natures.—*Phrenological Journal.*

Daughters.—An intelligent writer says: "It is not possible to over-estimate the advantages which would result from men in trades and professions allowing tbeir daughters some participation in the work of their daily lives. What girls want is a larger observation of tbe world and a deeper knowledge of human nature. There are few of our merchants and manufacturers and professional men who could not largely avail themselves of the services of their educated and competent daughters; and if such service could be rendered generally available, it is not too much to say that a wider and more fertile social life would arise for mankind Men's occupations would in no sense be prejudiced, whilst women would at once find that outlet for their faculties, for which so many of them have been so long striving. A certain responsibility would increase their self-reliance. A capacity for earning would remove their sense of dependence; and a definite occupation would bring both health and cheerfulness, and the larger experiences of life would give force aud completeness to their mental character.

A Beautiful Sentiment. — In Augustin Daly's play, "Under tbe Gaslight," Laura Courtland uttered these beautiful sentiments: "Let the woman you look upon be wise or vain, beautiful or homely, rich or poor, she has but one thing she can really give or refuse; her heart. Her beauty, her wit, her accomplishments she may sell to you, but love is tbe treasure. without money and without price. She only asks in return that when you look upon her your eyes shall speak a mute devotion; and when you address her your voice shall be gentle, loving and kind. That you shall not despise her because she cannot understand all at once, your vigorous thoughts and ambitious plans, for when misfortune and evil have defeated your greatest purposes, her love remains to console you. You look upon the trees for strength and grandeur. Do not despise the flowers because their fragrance is all they have to give. Remember love is all that a woman can give; but it is the only earthly thing which God permits us to carry beyond the grave."

Idea of Death.—That death and sleep are very much alike, the sages all tell us; but see how attractively Leigh Hunt describes the latter. "It is a delicious moment, certainly, that of being well nestled in bed, and feeling that you shall drop gently to sleep. The good is to come—not past; the limbs have been just tired enough to render the remaining in one position delightful; the labor of the day is done. A gentle failure of the perceptions come creeping over one; the spirit of consciousness disengages itself more with slow and hushing degrees, like a mother detaching her hand from that of her sleeping child; the mind seems to have a balmy lid closing over it, like the eye; 'tis closing, 'tis closing—'tis closed. The mysterious spirit has gone to take its airy rounds."

The mosquito is an insect that has no blood, except what he steals. As an agency for sinking artesian wells he is unsurpassed. Confidence in his powers is the reason he always sings at his work.

If you want to kiss a pretty girl, why, kiss her—if yon can. If a pretty girl wants to kiss you, why, let her—like a man.

Boys who are sent on errands after dark generally make the best whistlers.

Young Folks' Column.

Hoe Out Your Row.

One lazy day a farmer's boy.
Was hoeing out the corn,
And moodily had listened long
To hear the dinner horn.
The welcome blast was heard at last,
And down he dropped his hoe;
But the good man shouted in his ear,
"My boy, hoe out your row!"

Although a "hard one" was the row,
To use a plowman's phrase,
And the lad, as sailors have it,
Beginning well to "haze,"
"I can," said he, and manfully
He seized again his hoe,
And the good man smiled to see
The boy hoe out his row.

The lad the text remembered,
And proved the moral well,
That perseverance to the end
At last will nobly tell.
Take courage, man! resolve you can,
And strike a vigorous blow;
In life's great field of varied toil
Always "hoe ont your row."

A Prompt Boy.

A boy borrowed a tool from a carpenter, promising to return it at night. Before evening he was sent away on an errand, and did not return home until late. Before he went he was told tbat his brother sbould see the srticle returned.

After he bad returned home and gone to bed, he found ont that the tool had not been sent to its owner. He was much distressed to think that his promise had not been kept, but was persuaded to go to sleep, and rise early snd carry it home the next morning.

By dsylight he was up, and nowhere was the tool to be found. After a long and fruitless search, he set off for his neighbor's in great distress, to scknowledge his fault. But how great was his surprise to find the tool on his neighbor's door-stone! And then it appeared from the print of little bare feet in the mud, that the lad got up in his sleep and carried the tool home, and had gone to bed agaiu without knowing it.

Of course a boy who was prompt in his sleep was prompt when awake. He lived respected, had the confidence of his neighbors, and wss placed in mauy offices of trust and profit.

If all grown folks felt as this boy did, there would be a good many tracks of bare feet found some of these bright mornings; and what piles of tools and books would be found at their owners' doors!

The Whistling Tree.

Did any of our young readers ever hear of a "whistling tree?" A writer in the *St. Nicholas*—a paper printed for the young people, says he he has, for he hss birds that tell him everything.

The whistling tree is found in Africa. It is a strange looking object, with branches white as chalk. It has long horns, the inside of which is the favorite of some tiny insect. When this creature crawls out to see the world, he of course, leaves the door open behind him—that is to say, a small hole through which he crawled. Now, the wind blowing through the trees when the leaves are off make a musical noise in those hollow thorns, so that it sometimes sounds like thousands of flutes playing at once. The natives call it the whistling-tree.

We've a whistling tree in our meadow, but it is'nt of the African kind. It bears boys, with cheeks as red as peaches. I've heard half-a-dozen of them whistling in it at a time. And they come down out of it with their hats full of wild cherries.

"Whistle, Jim."—We noticed yesterday a youth, about fourteen years old, doing his work in a very surly manner and heard a companion say to him: "What's the nse of grumbling? Whistle, Jim, and the work won't be so hard." That's it, my little man, thought we—for we have always noticed that those who sing or whistle while at work, find the labor less heavy and tedious. We don't believe in one puckering up his mouth and going through the world on one long whistle, but we dont believe in singing and whistling, provided the time and place is appropriate, while one works. There is a great relief in it. A writer says that he had once a hostler who whistled pretty much the whole time, except when sleeping or eating. It is hardly necessary to say that he was a cheerful and good-natured fellow, or that his industry was helped rather than hindered by his music. Whistling is essentially an out-door practice In the house it is apt to be too sharp and piercing for the delicate ears. But, in a large shop, or in the fields, it is good company for any man, and helps on his work. It may seem ludicrous, yet it is true that whistling alleviates drudgery. The very efforts will throw the mind into a new channel, and the music, poor as it may be, will seem like good company. So we say: "What's the use of grumbling. Whistle, Jim,"—but in making this suggestion we hope all the enterprising musicians in Vallejo will not open whistling school at once.—*Ex.*

A boy was asked what trade he would like to follow. "Well," said he, "I guess I'll be a trustee, for ever since father has been a trustee, I've noticed we always get pudding for dinner."

To secure a result, lock it up.

Bad debts—owing grudges.

Good Health.

Insects as Agents in Propagating Disease.—The article published in another part of this number on the fertilization of flowers by insects suggests some considerations relative to the part which insects perform in the propagation as well as tbe prevention of disease. It is well known that putrefying organic matter attracts flies and other insects to seek it as a nidus for their eggs, where their larvæ find an abundant supply of food as soon as they are hatched. The ulcerations and eruptions which characterize many infectious diseases attract flies, and it is reasonable to suppose that, after alighting upon an infectious ulcer or pustule, they often carry away with them small quantities of virus, which may infect healthy persons upon whom the insects may subsequently alight. The disease known popularly as carbuncle has been attributed to the action of certain insects supposed to carry with them virus generated in certain diseases to which bovine animsls sre liable. It seems very possible that small-pox may be communicated frequently in this manner. To what extent insects act as carriers of pollen from flower to flower, does not seem to bave been investigated as the importance of the subject demands. That they act also as scavengers, devouring substances the decay of which would pollute the air with unhealthy gases, and perhaps miasma, cannot be doubted; and the old notion that a scarcity of flies denotes an unhealthy season, and *vice versa*, may have a scientific foundstion.—*Ex.*

Diptheria and Croup.—An idea prevails among physicians that diptheria and croup are both diseases that can be prevented by proper attention to hygiene, and can be cured by oroper treatment at the beginning of the attack. As to what the hygenic rules and the medical treatment, should be, however, there are differences of opinion. The New York *Times* of the 17th instant publishes a long article with statistics showing that in the last week of October the deaths by diptheria were 12 per cent. of the total mortality in New York city; 14 in Patterson, New Jersey; 8 in Brooklyn; 3 each in Baltimore and Philadelphia, 2 in Boston; 1 in Washington and less than 1 in Chicago, wbile there were none in Cleveland, Memphis and Nashville. An examination of tbe cities by districts shows that diptheria is most fatsl in places where the ground is swampy, drsinage bad, pools of stagnant water nnmerous, and the dwellings filthy. The epidemic of diptheria was followed by another of small-pox, which was most prevalent in the districts where the other disease had done the least harm. Is there any lesson in these facts for San Francisco?

Decaying Leaves.—The *Sanitary Record*, of London, calls attention to the mischief which fallen leaves are capable of prodncing under certain circnmstances, and especially on heavy lands: "The gronnd that is strewn with leaves becomes a nursery of morbid influeuces. The delightful odor that fallen leaves diffuse in woods suggests their harmlessness; but on the roads and walks where the leaves are hourly crushed, and the dropping rain makes a paste of them, they are, without doubt, pestiferons nuisances, which should be removed as quickly as possible by parochial authorities and private proprietors."

Application for Burns.—M. Lebigot. in the London *Lancet*, recommends the following mixture as having been very successful: Cape aloes, four ounces; water ten ounces; alcohol (90°), three ounces. The ingredients are to be melted together in a china plate over a slow fire, sllowed to cool, and then filtered; after which three more ounces of alcohol are to he added. It is then ready for use. A tablespoonful of the liquid mixed with a teaspoonful of acetate of lead and twenty tablespoonfuls of water constitutes an excellent remedy. It is to be aplied morning and evening on the burnt parts.

Death from Lightning Painless.—Owing to the velocity with which the elecric current moves, it is certain tbat a person struck by lightning has no premonition of the blow which he receives. When we see the zigzag of the flash, we see only the effect produced by the current which has already passed away. Tyndall says: "The nervous system requires a certain interval of time to become conscious of pain. The time of an electric discharge is but a small fraction of this interval; hence, as a sentient apparatus, the nervous system is destroyed before consciousness can set in."

Remedy for Dysentery.—The following simple remedy, says the *Druggists' Circular*, (good authority) has been known to cure the most obstinate and malignant forms of dysentery when all the ordinary methods were ineffectual: Take hot water, one-fourth of a piut; vinegar, half a pint; mix; then continue to add common salt as long as it will be dissolved, stirring and irritating it freely and frequently. Give for an adult one tablespoonful every hour until the bloody discharges cease, or until it acts freely on the bowels.

To Prevent "Day Dreaming."—Study mathematics; engage in solving problems; bring your mind down to matters of fact; read works on natural history, on the natural sciences; give up romance, novels, etc.; try your hand at mechanism; invent and use machinery; finish what you begin and you will cultivate application and prevent the mind from wandering.

Domestic Economy.

How Often May We Eat?

It has been demonstrated that, at certain intervals, when food is received into the stomach, gastric juice is secreted to digest it, and that no more gastric juice is secreted than is required for the digestion of the proper quantity of food.

If a person eat twice or thrice a day, at regular periods, the gastric juice is secreted by the stomsch to digest the food it has received. If, while the food is being digested, more food is introduced into the stomach, digestion (in regard to the food already in the stomach) is arrested. For instance: a person takes in the morning a piece of bread and several potatoes; now, it will take about three hours for the stomach to digest that food. Suppose the person, about an hour after eating this food, takes a piece of bread and an apple or two, what would happen? The digestion that was going on in the stomach would immediately stop, and not be resumed until the food that was received last was brought into the condition of the first. Suppose he took food every hour, what would be the consequence? The stomach would become prematurely worn out, and could do nothing perfectly, working all the time without rest. But if the person possessed a good constitution, and a large amount of vital power, he would not feel, at first, this drain upon his system, but sooner or later he would have to pay tbe penalty of outraged nature. For instsnce: a person may have a large capital in bank; he can live upon the interest very well, but he draws upon his capital. He does not feel this drain at first, because he has so large a bank account; but if he keeps on, he will become, sooner or later, bankrupt. Some persons have an enormous amount of vitality—good constitutions. It is said of these persons nothing hurts them—they can eat and drink with impunity. This is a fatal mistake. See how many years of life they are cutting off by such foolishness. If such persons live to the age of seventy or eighty, they might have reached the sge of one hundred or more years, by better dietetic habits.—*Science of Health.*

Lemon Syrup.—Lemons are recommended as very wholesome and useful in certain states of the system. People often crave an acid of some kind, particularly in the warm days of spring and summer. When lemons are cheap they should be made into syrup for future use. Press out the juice of the lemon and remove the seeds, which give a bitter taste; separate the pulp from the peel, and boil the former, in the proportion of a dozen pulps to a pint of water, to extract the acid. Ten minutes boiling is sufficient; strain the water into the juice; add a pound of white sugar to a pint of the juice; boil the whole ten minutes and bottle it. One or two tablespoonsful of this lemon syrup in a tumbler of water will make a cooling, healthful beverage.—*Germantown Telegraph.*

Patron's Fruit Cake.—"Mrs. A. M. D.," of Colnsa, sends us the following receipt which she thinks housekeepers, whether Patrons or not, will find worth the trial: "The day before you make the cake, stew two cups of dried apples till soft, chop fine and simmer in two cups of molasses from one to two hours. Next morning add one cup of sour milk, two small teaspoonfuls of soda, one cup of sugar, one nutmeg grated, one teaspoonful each of cloves and cinnamon, butter the size of an egg, and flour enough to make as stiff as gingerbread; raisins improve it. Bake with a steady fire. Time improves it and iceing will keep it from drying and getting hard.

Keeping Meals Waiting.—Little things often interfere with our comfort very much, and one small annoyance is for men to delay coming to dinner when called. Sometimes they have an hour or more of work which they will do before quitting, and then they go to the house to find the dinner cold, and the cook discouraged. Nothing is more disheartening to a tired woman than a table full of dirty dishes, ornamenting the table an hour and a-half later in the day than usual. Punctuality is a virtue that men should learn if they are in the habit of being uncertain about coming to meals. Any woman worthy the name of housekeeper will be regular with her meals, if it lies within her to have them so.

Rye and Indian Loaf.—Scald three pints of very coarse corn meal (as coarse as that ground for horse feed) with three pints boiling water. Add one gill of molasses and three pints of rye meal (rye graham); mix all together very thoroughly, and make into loaves three or four inches thick. Set on the stove where it will simmer up and not burn, and let it stand until it rises enough to crack all over the surface. Then put into a moderate oven and bake three hours, or bake two hours and steam two hours, or put into a pretty good oven, with a declining fire, at night, and have it ready for breakfast the next morning. Serve warm or cold; better warm.

Apple Tartlets.—Peel six large pudding apples, boil to a pulp, mix with sugar, cloves and lemon-peel, to the taste; let this mixture stand till cold, then mix it with two ounces of dried currants. Make a light puff paste, take a large flat baking tin, and pour the mixture in. Cover with the pastry, and bake half an hour in a very hot oven.

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SAN FRANCISCO:

Saturday, December 5, 1874.

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WHAT THEY SAY ABOUT IT IN OHIO.—As evidence of the correctness of statements recently made by us in regard to the superiority of our paper in the Atlantic States, we give the following from the *Buckeye Farmer*, of November 7th, the acknowledged leader of the agricultural press of Ohio: "The RURAL PRESS, San Francisco, Cal., comes with the murmur of the Pacific and spice ladened from California to instruct us in their mode of cultivation, and to let us know what the indomitable Grangers of the golden coast are doing. It is good. It is valuable. Welcome PRESS, to our humble office. Press on to victory!"

SAN JOSE INSTITUTE BUSINESS COLLEGE.—The next term of this popular college commences on January 1st, 1875. Considerable improvements have been made during the present vacation.

Longevity ot Seeds.

The ways and conditions of field and garden seeds are not altogether "past finding out," though there are few subjects involved in more doubt and uncertainty. We have on former occasions devoted considerable space and labor to clesr the way of tho seed purchaser and make his path straight, and shall continue to make a proper nse of such information as we can obtain on the subject.

The following table, showing at what sges seeds of different kinds are supposed to lose their germinating power, has been going the rounds of our exchanges of late. The estimates were evidently made from an Eastern standpoint, and after consulting parties who are well acquainted with the habits of these seeds in California, we have made such alterations in the supposed longevity of seeds, as tho difference between the climate of California and that of the Atlantic States would warrant. These differences are in all instsnces in favor of our State; though this, like some other characteristics of the country, is barely worth bragging about. On the contrary, the longevity of seeds is extended in California by means of what is known to be our greatest climatic misfortune, the dryness of our atmosphere. We think it will be safe to consider the following seeds good in California for the length of time named:

	Years.		Years.
Artiehoke	5	Lottuce	5
Asparagus	4	Maize	3
Garden Bcans	5	Melons	10
French Boans	2 to 3	Mustard	5
Beets	5	Nasturtium	3
Cabbage	5	Onions	2 to 3
Carrots	4	Parsnip	1 to 2
Cauliflower	7	Parsley	3
Celery	7	Peas	4 to 5
Garden Cress	5	Pepper	4
Water Cress	4	Potatoes	2
Cucumber	10	Radishes	5
Dandelion	1	Rhubarb	2 to 3
Egg Plant	7	Salsify	2
Fennel	6	Spinnach	4
Gourds	9	Strawberry	8
Leeks	2	Tomato	5
Thyme	2 to 3	Turnip	

As we stated above, the conditions that favor the germination of seeds are such as lessen the period of their longevity. Exposure to the long and severe winters of the Eastern States would not extend the longevity of seeds, but passing through one of their short, hot summers would arouse the latent germinating power, and thus the period of their longevity is at once shortened. Imported seeds that have passed through the tropics are materially damaged in this respect; so much so that careful seedsmen will not handle seeds that have been thus exposed. It is not necessary that such exposure should be open, and the seed come in direct contact with the heated atmosphere. It is believed that germinating influences penetrate the most carefully sealed packages, and when germination commences, decay begins.

In connection with seeds that are known to be good for a long time we have heard experienced farmers and gardeners declare—and from our own observations we are inclined to endorse the declaration—that such seeds are improved by age, and that they may advantageously be left to a period approximating that of their supposed fertility. It is hardly probable that the properties of germination are entirely dormant or stationary at any stage of their vegetable life; and are we not justified in supposing that these long-lived seeds are really undergoing a steady though slow process ot maturing up to the time when natural decay commences? And is it not probable that the apparent inevitable "running out" of some grains and vegetables, is attributable to sowing seed that has not been allowed the maturing time which nature has allotted it?

In response to enquiries recently put forth through the columns of the RURAL PRESS, in regard to seed tests, a veteran California nurseryman called at our office lately, and submitted his test which he declares to be perfectly reliable. His theory is that the presence of the germinating property in the seed is to be recognized by an oily substance which exndes from the seed when crushed. It is well known that some kinds of seeds on being crnshed yield more oil than othors; but the test consists in taking a number of any variety of seed, and crush them upon a sheet of paper, giving a space to each seed, then examino each with a magnifying glass, when the relative proportion of the germinating property may be ascortained by the percentage of the vital oil which they have emitted. Persons accustomed to using this test on certain kinds of seeds will learn what amount of vital oil they ought to give forth, and be able to judge of their fertility accordingly.

The germs of all seeds should be of a pearly whiteness, and when the degree of whiteness of any given variety of seed is ascertained, any varying shade should be taken as evidence of deterioration. Grass seeds exhibit less oil than most seeds.

In studying the nature of seeds, a wide field is opened to philosophical investigation. Practical experience, close observation and common sense will do something toward solving these mysteries, and the aid of science cannot be dispensed with, still there is little to be expected in matters like this from the parrots of science who amuse the community with their chatterings. The man who obtains a work on geology, mineralogy, bottany, etc., and stores away cords of newpap r clippings on these subjects, is supposed to be qualified for writing dissertations on these sciences and he accordingly copies from these limited resources without giving credit, and without evolving any ideas from the information obtained, or even catching a glimpse of the philosophy embodied in the seemingly barren facts witn which he deals.

Such a system of science is a dead weight in any field of investigation, snd especially in agriculture, which is really possessed of more vitality, and gives at present more scopo to philosophical reflection than any other subject with which science is connected. The "scientists" of the day are not up to the requirements of the time in a large class of subjects; popular science being on an equal footing with popular literature in its incentive to labor, and in the benefits resulting from its labors; the intellectual talent which it attracts being of about the same caliber. The fact that much of this scientific talent and acquired information is being diverted from less promising fields to those of agriculture, is a matter that calls for condolence rather than congratulation. Agricultural science is in need of earnest, venturesome pioneers.

Raisin Growers' Notes.

We again have the pleasure of laying before the readers of the PRESS a very interesting communication from W. A. Sanders, and have the still further satisfaction of promising more "of the same sort" at an early date. Our friend gives his observations in Yolo county as follows:

In conformity with our business of learning all that can be learned on the subject of raisin culture, we recently made a trip to

Yolo County.

We first stopped at Davisville to look over the fruit farm of G. G. Briggs, Esq., the pioneer fruit raiser of California. While other men in the two or three years following '49, were thinking only of gold mining Mr. Briggs was making the celebrated Briggs fruit farm near Marysville. The overflow from the Yuba river has entirely destroyed this farm; bnt many of the pioneers will remember its excellent fruits—peaches snd apples sold for a dollar a dozen on the farm, and as high as one dollar each away in the distant mining regions.

For some years Mr. Briggs has lived near Davisville. We found him at home, and immediately announced our business of learning as much as possible pertaining to fruits, and raisins in particular. He remarked in a quiet sort of regretful manner: "I am afraid that I can tell you but very little, I am but a learner myself." "But Mr. Briggs, you own this immense fruit farm extending a mile away to the eastward and which produces many of the choicest and earliest fruits sent to our San Francisco market, also the Big Wolfskill vineyard farther up the creek, and you superintend all work in person, do you not?" "Oh, yes," said he, "and if there are any simple facts pertaining to my business that you wish to get I shall be pleased to give them." I took down his statement in shorthand, from which I condense the following:

"I have 40 acres of grapevines in my vineyard. This year I have made 1,750 boxes of raisins containing 25 pounds each. When the rains came on this fall I had about 400 tons of grapes nearly cured for raisins lying on the ground drying. The rain spoiled all of them. Had our rains held off this fall, as they usually do, I should have made this year over $20,000 worth of raisins, bnt our very early rain destroyed more than three-fourths of them. Last year I made no raisins, on acconnt of the late frost having killed my grape crop; bnt year before last I made a quantity that sold readily for 10 or 11 cents per pound. My raisins are made from Muscat grapes. They yield well with me every year. The crop this year was very good, We gathered over 12 tons of grapes from one acre of vines, many vines produced 150 pounds each, while the average was about 60 pounds per vine—this, too, without irrigation. I have set a new vineyard of 160 acres, near the Cache Creek ditch. I have chosen that locality so that I can irrigate them when, from drought or other cause, there shall be any necessity for doing so. Those vines I have set 10 feet apart each way. I think that will insure a better growth of vines with larger grapes, and it will enable me the more perfectly to work among them with a plow."

The Fruit Farm

Extends for a great distance on both sides of the railroad, on the south side of Davisville. We walked over it with Mr Briggs. He has 6,000 peach trees, 1,600 almond trees—but we will not enumerate. Here are all kinds of fruit and nut-bearing trees grown in Sacramento valley; though of chestnuts and pecans he has but a few dozen each, and these only just beginning to bear.

He informed us that he had gathered as high as 40 pounds of almonds from a single tree only six years old. These, at 20 cents per pound, and 125 trees per acre, woutd give $1,000, an amount that I believe will often be realized, yearly, from many acres of trees now planted in our State.

On the Wing.

From here we took the cars to Merritt's Station with the purpose of visiting Mr. Blowers' raisin farm. After the train had gone we went over to the only house at the station and were assured that there was no place anywhere about there, where we could stay over night. 'Twas sun down, and the nesrest tavern was at Woodland, six miles distant. We inquired for Mr. Blowers' place, and it was pointed out to us about two miles away. We started for it on foot, but when about half way there, our valise got so heavy that we stopped at a small house by the wayside and asked the privilege of leaving it till the next day. The woman of the house, eyeing us through the half open door, asked: "Is there anything in the valise?" We said, "Yes, 'tis full and heavy. That's why we wish to leave it." "If there's anything in it," said she, "I dont want it here." So we trudged on another weary mile, and very tired and in the darkness arrived at Mr. Blower's place, when we learned that we were at a nephew's of the raisin man, and a bachelor's hall at that. But we met with a right royal welcome, and after supper watched the "boys" for an hour in the interesting and intellectual game of "pedro," in the mysteries of which one of them volunteered to instruct us, but he soon found we hadn't the intellect for it.

The next morning we took an early start, and at day-light were at

R. B. Blowers' Raisin Farm,

Near Woodland, at which place we ought to have got off the cars instead of at Merritt's. Mr. B. is one of the pioneers in raisin making. When in future years California shall supply the world with large, rich, luscious, sugary raisins, and when from the abundance and excellence of that supply the world shall consume a hundred fold as much as it now does of that healthful and desirable article of food, then the history of raisin making shall be written, and prominent among its pioneers will be the name of R. B. Blowers. We looked through his vineyard. His vines have made the most prodigious growth that I have ever seen. I condense from my short-hand notes of our conversation a summary of his statements:

"I irrigate my vineyard by covering the ground with water when the Muscats are about the size of small peas. If irrigated earlier they drop their fruit, if later the ground remains too wet at time of ripening, and causes mildew. Two years ago I did not irrigate all the vineyard. On some portions that I did not irrigate I raised 20 ponnds of first crop and 50 pounds of second crop per vine. Bnt where I irrigated the yield was still larger; so much so that I determined always to irrigate in future. I can raise on larger vines 50 pounds average at the two crops; this will make 17 pounds of raisins, which, at present prices, will sell for $2—this much for raisins from each vine. I set 500 vines per acre, which gives $1,000 per acre for Muscat raisins. I have made raisins of the Flame Tokay grapes—they are not good; the seeds are too large and too hard. They yield larger crops than the Muscats, but the superiority of raisins from the latter more than compensates for the difference. Besides, my Muscats grow very large; I have measured them five inches in their longest circumference.

It costs one days' labor for every 250 pounds of fresh grapes that we pack in boxes for the San Francisco market; but when picking for raisins they do much more than this. Each hand will pick and lay out for drying 800 pounds per day.

I have only 26 acres of vines. They are of all ages, from six years downwards. I raised about 100 tons of grapes thia year. Many of them were sent to San Francisco for table use. I am going very slowly in raisin production. Shall not try to do any more than I can do well; but I've already done enongh to see that when once master of it that 'twill be a most pleasant and very profitable business."

I lost about 250 boxes this year by the rain. But snch a spell of wet weather so early in the season was never known before."

He showed us samples of his raisins fully equal to the best we have seen produced in our State. As a vineyardist he is eminently successful, his vines being the most thrifty and productive for their age that we have seen. He

Pastures Sheep

In the vineysrd after vintage—a custom that has long been followed in Spain. The object of this is to trample all insects, larvae, dead leaves, etc., into the ground, also to remove all autumn growth of wood before frost. Groat cere must be taken, however, that sheep do not eat too much on first being turned into the vineyard, as many sheep are lost every year by carelessness in this matter.

In my next I will give an account of the San Joaquin valley orange, and lemon production there, the Red Mountain vineyard, and other items, to be read or skipped, just as the reader chooses. W. A. SANDERS,

San Francisco, Nov. 30.

ON FILE.—"More about Potatoes at Los Angeles," W. R. "Inquiry about Melons," J. M. "Return into California," W. E. J. "Letter from Rio Vista," Bello. "Our Bay Nurseries," No. 2.

"St. Mary of the Pacific."

The accompanying illustration represents the institution, the name of which stands at the head of this article. We give from the *Pacific Churchman* the followiug account of the character and management of the school:

"This Church School has now been in operation in its present elegant building three and a half years. The location is one of the finest in the State, whether as regards natural scenery, or healthfulness of climate, or the beauty of its grounds. It occupies an entire block in the most desirable portion of the village of Benicia. Ornamental and fruit trees to the number of about 800 cover the grounds, forming the most pleasing avenues. Arbors of picturesque appearance invite the pupils to their seats in recreation hours, while hard cement gravel walks, lined with trees, afford the young ladies and their teachers, in the rainy season as well as in the dry, daily exercise in the open air.

The building has, without and within it, the appearance of a gentleman's residence, and is in a social way educating to its inmates in no ordinary degree. This is a feature not to be lost sight of in the training of our daughters, who are so soon to adorn domestic life. The house is lighted throughout with gas, and is furnished with hot and cold water in the bathrooms, and in each story of the building. It is also heated with the most approved furnace, which warms the house throughout with an equal temperature. There are in the house piano rooms, with six pianos and a parlor organ. The lady in charge of the music is Miss Nettie Foster, who for several years was the responsible resident teacher of this department in the Mills' Seminary at Benicia and Alameda. She is assisted by Mlle. De St. Omer, a Parisian. The French languago is taught in its greatest purity of accent, and hy conversation, by this latter lady. The room set apart for pencil and crayon drawing and painting is admirably lighted for the purpose. St. Mary's School has a primary department for children from eight years old and upwards; also a senior and graduating department, besides the intermediate forms. Special attention is paid to the elementary branches of a sound English education. For these are provided efficient teachers, viz: Miss Annie Snyder, graduate of an Eastern institution, and for some years experienced there in the art of teaching; Miss Althea Sprague, educated in our State Normal School, who, along with Miss H. Stiles and Miss N. Harley, under the efficient discipline of Mrs. A. P. Ashe, form the Faculty for the English Department. Professor H. Mouron is the instructor in the German tongue. Miss Powers, of San Francisco, visits the school each week for the purpose of giving instruction in vocal class music.

Thus fully is this Church School equipped for its work of Christian education. The present term numbers thirty-nine boarders and eleven day scholars—fifty pupils in all, the average attendance being forty-six. Rev. Dr. and Mrs. J. Lloyd Breck reside in the building, and are responsible for the care and education of the young ladies committed to their keeping. Gentleness, with strict discipline, characterizes the government of the school. The young ladies are looked after with parental solicitude. They are never permitted to walk outside the school grounds without a teacher; and they never receive visits save with the parents' written permission, addressed to the principal of the school, and their correspondence is in like manner restricted and guarded.

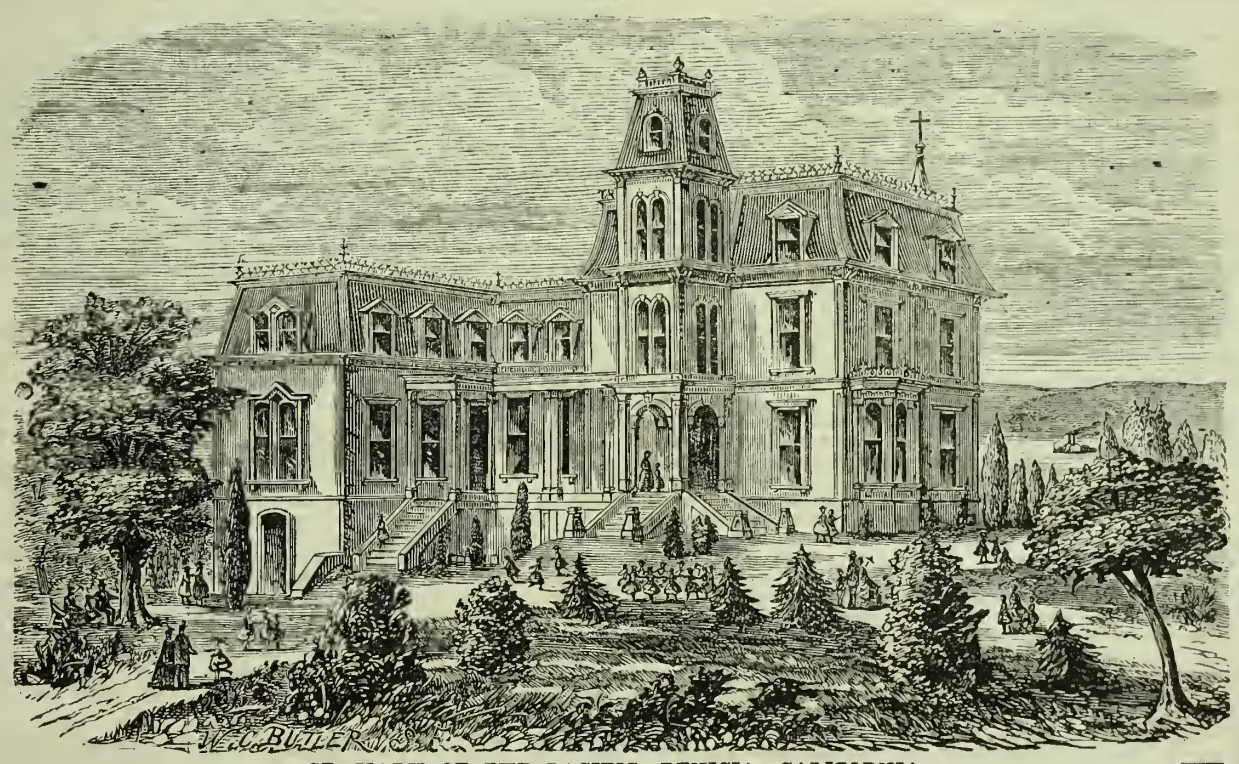
This school is. intended to be a home for Christian daughters, and thereby to fit them for the discharge of the sacred duties of their after-life home.

The religious atmosphere in which these young ladies are trained will evermore be their true Alma Mater, when *mother* shall be their own high vocation for moulding the immortal souls committed to their keeping. Such is "St. Mary of the Pacific" for a new and vigorous diocese, provided the Bishop elect shall be pleased to accept it as his Diocesan school. It is, however, as its name imports, a school for the Pacific coast as well, and will never he confined to the circumscribed limits of a single diocese or State. Its present pupils are from Utah and Nevada Territories, as well as from California, and they represent the religious views of several Christian denominations. These latter will ever be treated with the highest consideration, and no step in the Christian life is ever permitted to he taken by any pupil excepting with the cordial consent and approbation of parents or guardians.

The new term of this school opens on Thursday, January 8th, 1875, and catalogues may he had by addressing Dr. Breck of Benicia.

Should parents wish to visit the school they may do so daily by the following boats, viz.: 7:15 o'clock, A. M., the "New World," via., Vallejo, and thence by stage six miles to Benicia; 12 o'clock (noon) the Stockton hoat; 3:30 o'clock, P. M., the "Parthenius" boat; 4 o'clock, P. M., the Sacramento boat. These all stop at the Benicia wharf, where a coach is waiting to convey passengers to the school one mile distant. Also Benicia is reached from Sacramento at 6:30 o'clock, A. M. by railroad to the Vallejo crossing and by stage as before, or at 10:30, A. M., by tho boat. Also from Stockton daily by the regular line of steamboats.

Thus Benicia is fully as accessihle as can be desired by parents who place daughters away from home for the purposes of education. School discipline, to be effective, requires the utmost attention on the part of the pupil, with the least possible interruption during term time. The vacations of four weeks at Christmas and eight weeks in the summer season, are surely ample for all amusements and for the rest required by the real student.



ST. MARY OF THE PACIFIC, BENICIA, CALIFORNIA.

Notes From Olema, Marin Co.

Our agent in Marin county furnishes us with some local facts and incidents connected with the late heavy rains. He says the bridge at the junction of the Petaluma and San Rafael railroad was washed away. Both of these railroads were impassable on account of landslides in this district. Abont one-fourth of a milo of the railroad track slid into tho river. Two wagons and two carts were washed in to the river, the drivers and their teams escaping with their lives. About 30 cords of wood were also washed away. The bridges on both the Petaluma and San Rafael roads were rendered impassable.

Feed in the neighborhood of Olema is excellent; better than in April; grass being over four inches high. This is a dairying district, and the dairymen are reported to be in good spirits, and are confident that the coming year will be a good one for their business. We sincerely hope so, for the sake of the consumers as well as the producers. It was fondly expected here that butter would "come down" as the grass came up; and the thanks which San Franciscans rendered for the rain were accordingly rather sincere; but when they realize, as they now do, that butter and grass keep pace in their upward tendency, they begin to suspect that the benefits of the late glorious rains have really fallen upon the dealers only.

Like good dairy districts generally, that of which we are writing is described as being very attractive, and Olema is getting to be quite a summer resort for San Franciscans. The location of the town is a very pleasant one.

Our agent visited the Grangers' hall at Olema, and speaks of it in extremely complimentary terms. In size it is forty by twenty-four feot. It is well furnished and tastefully adorned with suitable emblems, everything indicating a prosperous and energotic Grange.

IMMENSE LAND SLIDE.—A great land slide occurred on the eastern side of Mount Tamalpais, soon after the late storm. The slide extended from the highest peak to the canon below. The slide appears to bo over 100 feet wido, and carried trees and rocks before it with impetuous force. A smaller slide occurred on Monday last on Telegraph hill in this city.

SEVEN STORIES.—The seventh story of the Palace Hotel has been completed and the mammoth building is now heing roofed in. Work is progressing upon the structure night and day—some 200 gas lights being required for the night work.

THE deaths in San Francisco last week were 38 males and 42 females.

The Late Storm and its Effects.

The metoorological phenomena developed in this State during the past season have been the most remarkable on record. The frequent thunder storms, during summer, were supplemented by an unusually early setting in of the fall rains, which havo been both continuous aud abundant, culminating, for the present, with the very severe storm of Suuday, Monday and Tuesday of last week. The table of rainfall for the season, which we annex hereto, shows that rains have been general throughout the State, although the pluvial favors have been rather unequally distributed. The neighborhoood of Petaluma, San Rafael, St. Helena aud Santa Rosa seems to have heen the most abundantly favored of any portion of the agricultural districts. At the latter place 8.84 inches of water fell in twenty-four hours, as recorded, with only a slight variation by two ganges.

Considerable damage was done by the storm in Sonoma county, and all the way thence to quite a distance up the Feather river. The railroad embankment was badly washed away near Petaluma and Tomales. Much damage was also done along the line of Russian river.

At San Rafael the rainfall was the heaviest ever known, and the streams were higher than at any time last winter. The streams that rise in the Sonoma mountain were higher than at any time since the memorable winter of 1862.

The Clipper sawmill at Stewart's Point lost logs to the value of $75,000, and the Russian gulch bridge was washed away. Abont $30,000 worth of grain in sacks was destroyed in Colusa county. About 1,500 head of cattle disappeared from a ranch on the river bottom a few miles below Yuba City. The Feather river was never known to make such a sudden rise as on Monday of last week.

The levee was broken on the west side of the Feather river, near Nicolas; also at Star Bend, ten miles below Yuba City.

We append the rainfall at various localities as we have been able to gather the facts from our exchanges and other sources.

Our Rain Guage.

NAME OF PLACE.	LATEST REPORT.		TOTAL.
San Francisco	Nov. 18 to Nov. 24	2.00	6.80
Sacramento	Nov. 17 to Nov. 23	1.07	5.30
Santa Rosa	Nov. 22 to Nov. 23	8.84	15.00
St Helena	Nov. 23	8.50	15.75
Davisville (Yolo)	For the Season	....	6.05
San Rafael	" " "	....	18.41
Petaluma	" " "	....	8.81
Santa Cruz	" " "	....	5.22
Antioch	" " "	....	6.22
Sonora	" " "	....	10.10
Gilroy	" " "	....	7.00
Pine Flat	Nov. 22 to Nov. 24	1.80	....
Colusa	" " "	3.43	7.37
Napa City	" " "	6.19	11.75
Chico	" " "	5.53	....
San Mateo	" " "	2.49	....
Yolo	" " "	1.97	6.05
Weaverville	" " "	6.75	11.87
Forrestown	" " "	16.00	23.00
Grass Valley	" " "	10.32	18.86
Yreka	" " "	1.15	....
Monterey	" " "	1.65	7.00
Stockton	" " "	2.27	4.77
Martinez	" " "	2.35	5.50
Shasta	To Nov. 23	....	11.12

If our exchanges and correspondeuts will continue their reports (weekly) throughout tho season, we will take pleasuro in collating them, as abovo, for the benefit of the State. Rainfall reports, as heretofore given for two or three localities, have very little general valuo; but such a report as the above, from a great number of localities in all parts of the State is of inestimable valne.

WELCOME TO THE KING.—Sau Francisco has nearly exhausted itself during the past week in doing honors to King Kalakaua.

Seasonable Hints.

No. 2.—Tree Planting on the Farm.

The farmer who is intending to "beautify the place of his habitation," as the Psalmist hath it, will appreciate the desirableness of enclosing his fields with live fences. He has doubtless wondered if screens of growing timher would not be the hest protection against the blighting "northers," and counted the cost of such provisions for his pleasure and protection. If I were so blossed as to have a farm of my own, I should take immediate steps to secure these ends, and this is the way I should set about it:

I should make up my mind that I could not grow wheat forever; that with diversified crops I should want fields of moderate size, and plan for the most important subdivisions, making an accurate survey, that I might know to a nicety the details of profit and loss per acre in all my cultures. Along the line of one or more of these prospective divisions, I should put in a double row of locusts, planting tho seeds and thinning out afterwards, or in other words, making a temporary nursery where I meant to have my trees remain permanently. A hundred dollars invested in this way, and all of it except the bare cost of seed, in the necessary labor, will add a thousand dollars to the value of any farm in ten years. And you may collect your own seed from the trees abounding in almost all the older portions of tho State.

Yellow locust timber used to bring fifty cents per cubic foot in the Eastern markets, it is of great valne for many purposes in the arts, and eight or ten years is large enough for fence posts, ties, and other similar uses. As a screen or wind break it is admirable for California, as ours are *summer*. The valne of timber being equal, a deciduous tree is more valuable than an evergreen, because in winter we want the full effect of sunshine upon the soil, and the fine spray of the locust does not intercept it.

The Seed Bed

For a locust plantation should be well drained, ploughed and harrowed; the seed prepared hy immersion in *boiling hot water*, and an after soaking for twenty-four hours in the same, then hy rolling in plaster guano, or old slaked lime in order to dry it enough to prevent the rotting of the germs. This coating also promotes a rapid growth from the start. Sow abont *half as thick* as nurserymen do, or half as thick as you would sow beet seed, in drills far enough apart to use the cultivator freely, the young plants may then be tended as easily as corn. The following spring you can thin out half the plants, selling or transplanting into your own grounds, and you can keep on thinning out by transplanting the suckers for an indefinite time. The plow will cut off the suckers unless you wish to preserve them.

If the farmer wishes to grow

Locust Timber for Profit,

An acre, planted exactly like a cornfield, four feet apart each way, will contain over five thousand trees, which will gain an inch in diameter annually for the first five years. The *thinnings* after that time will more than repay the cost of the first planting and after tillage. The valuo of these will increase every year.

In treating the locust simply as a screen, I should, after a few years, cut the main trunk of every third tree off within five inches of the ground, allowing two of the thrifty shoots to grow up in its place.

This systematic trimming and thinning out would supply the wood-pile, or furnish very handsome and durable rails or stakes. Tho locust as food for the hive, for timber, and for its bark, which furnishes one of the strongest textile fibres, and also an excellent material for printing paper, deserves and will amply repay cultivation.

Having thus stated the claims of the locust in veriest prose, we may be pardoned for introducing tho poet's version:

"Oh, listen to the bees!
Weaving their honied harmonies
In the white bloom of the locust trees.

Oh, faint, and soft, and low,
Come the delicious winds that blow
Through these sweet drifts of summer snow."

JENNIE C. CARR.

THE RENTON COAL CO. are now dolivering coal to its subscribors in San Francisco and Oakland at $8 per ton, and to other customers at greatly reduced rates from those of other dealers. Their coal, which is a good article, still improves with tho developements on the veins.

Traps for Sewers and Water-Closets.

The importance of trapping the communication between sewers, cess-pools and in-door water-closets, basins, etc., is generally appreciated, but information concerning the construction of traps, the circumstances which render them ineffectual, and the expedients, temporary or remedial, by which noxious gas may be shut out of dwellings, should have more publicity.

An elaboration of the subject would require an illustrated treatise, but I will crowd as much as I can within a moderate compass, regardless of rounded periods.

Different Kinds of Traps.

We have box-traps, bell-traps, globe-traps, p-traps, s-traps, bow-traps, basin-traps, and a combination of the last named with others. Some are made of wood, some of masonry or earthenware, some of porcelain, some of iron, some of brass, some of lead, and some of tinned iron or copper. Their names are suggestive of their several forms. My remarks will refer chiefly to those ordinarily used in dwellings.

The Depth of a Trap.

Theoretically, the efficiency of a trap depends upon its depth; that is, the vertical distance between the surface of the water it will contain (in a state of rest,) and the "drop" or "dip" of the trap. Technically, the water which is designed to shut out the noxious gas is called the "seal;" so, the depth of the trap, and the depth of the seal are convertible terms, and it is correct to say, "the deeper the trap the deeper and stronger the seal."

The Dangers.

There are sundry contingencies to which even good traps are liable, if not guarded, each of which will admit noxious gas into the house.

First, the water forming the seal may evaporate; second, it may be siphoned; third, it may be sucked out; fourth, it may be blown out; or, fifth, it may be forced back by the pressure of gas in the water-pipes. The first occurs when there is too little water for the surface exposed, or when the receptacle, above, remains long unused. Hence, *idle basins* are sometimes dangerous.

The second is of very common occurrence, and results from the most inexcusably bad construction. The trap and waste are made to form an infallible siphon which will empty the deepest trap when the plug is withdrawn from a full basin or tub.

The third and fourth are likewise due to bad construction. Several basins, at different elevations, are made to discharge into a waste system so defective that the water from one sucks the trap of another, by creating a partial vacuum in the intermediate pipe. Or, if the main waste becomes "air-bound," which is not uncommon, a full pipe and a rapid flow will compress the retained air sufficiently to blow out the contents of one or more traps, and leave them comparatively empty. Again, when a street sewer is full of rapidly flowing water, traps in houses communicating with it, through a defective waste system, are liable to be sucked; and, even when the sewer is not full, if the waste system discharges beneath the surface of a rapid current, the liability is the same. After the current subsides, houses with open traps are liable to receive the benefit of the noxious gas from their own wastes, at least. Hill-side residents should remember this.

The fifth contingency referred to is, perhaps, the most dangerous, for it frequently remains undiscovered until after the funeral. The pressure of gas which forces back the water in a trap comes from well known sources, yet I will briefly enumerate them: First, pressure from accumulation in unventilated sewers, cess-pools, or "air-bound" house wastes; second, pressure from choked sewers and drains; third, pressure from back-water in sewers, or the filling of close cess-pools with water.

The pressure of the gas gently "backs" the water in the traps, just enough to allow the messenger of death to sneak silently into your house, in the form of infinitesimal globules, which noiselessly escape from their watery film, and mingle with the breath of your nostrils.

Considering our defective sewerage system, our numerous cess-pools, the contingencies above mentioned (which are by no means small), and the fact that the seal of the trap is the only barrier between the gas of sewers and cess-pools and our living and sleeping apartments, it is an alarming reflection that the greater proportion of the traps in San Francisco(and I doubt not in many other cities) are liable to the contingencies referred to.

Temporary Protection.

The only temporary expedient available as a protection against unreliable basin traps is also applicable to those of bath-tubs. When empty, turn the faucet a little, and let the water run slowly until there is an assurance of a full trap. Then plug the outlet and cover the plug with water. Finally cover the overflow holes with several thicknesses of wet paper, or its equivalent. This expedient, which experience has taught to many, should be known to all.

It is almost impossible for a trap to be sucked with the air passages thus closed. Evaporation is retarded, and so is the ingress of gas —provided the overflow escape is made secure.

The Remedy.

The only remedial expedient which is worthy of trial is that of leading one or more air-pipes from the waste system to the roof of the building. This is a device well known to intelligent architects, and to plumbers. Its adoption in the building of a house involves only a trifling cost, and renders every good trap infallible; yet it is not commonly noticed in architects' specifications, or in plumbers' work.

A ventilating shaft built in conjunction with a kitchen chimney, is a most valuable aid in relieving a waste system, and in default of that the chimney can thus be utilized.

The Way They Do It.

Remarkable to relate, wash-basin traps, as supplied by plumbers in San Francisco, vary in depth from half an inch to three inches. By far the larger number in use are made by bending a section of lead pipe in the form of a horizontal S, or a horizontal loop. The caliber of the pipe is generally contracted in bending. By filling the pipe with sand, before bending it, the liability of contracting the caliber is decreased; but even that is too much trouble, in cheap work, and the difficulty in avoiding the contraction is the incentive to make shallow traps. As a rule a gentleman's stable is trapped more securely than his bed-chamber.

I will not describe the several kinds of traps made of cast-iron or brass, lest I should extend my remarks too far. The cast-iron traps imported from the East are about one inch deep. They are adopted by some plumbers and rejected by others.

Reliable Basin Traps.

The most reliable indoor traps are of sheet lead, made of two pieces, hammered into form, matched and soldered. For wash-basin, kitchen and laundry traps, they should never be shallower than three inches. Plumbers disagree concerning the proper depth, but it is conceded that San Francisco requires deeper traps than New York.

Closet Traps.

Soil-pipes should be double trapped. Four inches is the approved caliber of the pipe and main trap, and the depth of both traps should be one inch and a-half. No single-trap closet should be allowed within a dwelling. What is known as a "basin closet" is the best. A general description of one will suffice. Say the porcelain basin is encircled by an outside flange, about midway of its depth. It is set partly into an iron bowl that has a flanged rim which fits the flange on the basin. The two are fastened together with some intermediate putty, so that no gas can escape. The main trap is attached to the bottom of the iron bowl. The second, or auxiliary trap, is the movable one formed of the metal basin which is in sight, and which is under command of the lever-rod. It traps the vent of the porcelain basin, and is a "basin-trap" in the double sense. It may be termed an "inverted bell-trap." It works within the iron bowl, and thus the double trapping is accomplished. The apparatus which governs the basin trap is outside of the iron bowl; and, being complex, it should always be accessible, and generally is. The raising of the lever-rod removes the metal basin, and flushes both basins and the iron bowl; and the same water flushes the main trap.

The flushing causes so gradually that it insures full traps, even if a mass of paper, etc., escaping from the main trap, causes a momentary suction; nor is the supply of water sufficient to siphon it.

As a rule, a double-trap closet, if kept clean, is less dangerous than a wash-basin that communicates with the same sewer or cess-pool. The noxious gas from such closets emanates from the filth which is allowed to accumulate above the main trap. If the basin is cleaned daily, and the iron bowl and the soil-pipe, as far down as the trap, are cleansed twice a week, there will be no offensive smell. The best cleansing implement is a common hearth-broom, which should be kept for the purpose. Nevertheless, it is a wise precaution to run an air-pipe from every soil-pipe. The bath-waste should not enter a soil-pipe. The alternate expansion and contraction caused by the use of a large amount of hot water at one time, followed by a sudden rush of cold water, is particularly injurious, in San Francisco experience.

Trapping the Drain.

Where a waste system concentrates into one drain-pipe, it is well to trap the drain before connecting it with the sewer, remembering always that two traps on the same pipe or drain will not operate without an air-pipe.

It is to be hoped that my remarks will contribute toward popularizing the fact that there is no economy in cheap plumbing, if the cost of repairs, doctors' bills and funeral expenses are considered. In conclusion, I will add that much cheap plumbing is attributable to the parsimony or ignorance of those who build houses "For Rent;" much is due to competition among architects and contractors, and the failure of architects to draw specifications clearly and fully; and much to the tricks of dishonest plumbers, who rely upon their ability to cheat nine-tenths of the architects and 99 hundredths of the owners.—*Pacific Medical and Surgical Journal.*

West of the San Joaquin.—From that dry section of country, the west side of the San Joaquin, the weather reports are most favorable for farmers. There has been an abundance of rain for the present, and the soil is in fine condition.

The Screw Propeller.

Who first discovered the screw propeller is almost universally disputed; Americans, English, French, Germans and Italians all put in a claim, and that not for an individual of each nation, but in some countries more than one of their sons—or rather their descendants—dispute the honor of being its author. An impartial student will probably come to the conclusion that experiments to discover the means of applying the screw as a motive power to ships were at different periods spontaneously, independently, and sometimes simultaneously made in various places by inquiring minds, who were perfect strangers to each other and to each other's discoveries and appliances. So far back as 1726 David Bushnell, a native of England's American colonies, made experiments by means of a screw to propel a submarine torpedo. Evidently his essays were not successful, or those infernal machines would have been heard of sooner. In 1836, John Smith, an Englishman, formed a company and built the first sea-going screw steamer, appropriately named the Archimedes, from which date the success of the screw propeller was an accomplished fact. Between 1726 and 1836 many inventors took the matter up, but it was not until 1832 that one of the experimentalists, Frederic Sauvage, hit upon the idea of applying steam to the screw as a motive power. Up to that period it had been sought to drive the screw by a capstan manned by men, or other cumbrous and non-practical means. In France, Frederic Sauvage is considered to have the largest share of merit in practically applying a machine which is the production of many minds, and which even now is being continually improved. The town of Boulogne-sur-Mer, where Frederic Sauvage was born on the 20th of September, 1786, has lately gone to considerable expense in awarding him posthumous honors, which recently culminated in the uncovering of a monument to his memory. The monument over his grave is a square pediment in three portions, made of grey marble, of the same kind as the Napoleon column is built, and obtained from the Marquise quarries. It rises to the hight of 14 feet, and on the top a bronze heroic-sized bust of Frederic Sauvage is placed. On either side of the monument is an inscription setting forth the date of his birth, death—19th July, 1857—the translation of his remains, and a list of his inventions. On the front are the two words "Frederic Sauvage," and a bronze relief showing a vessel with a screw propeller, a pantograph—*procede Collas*—a physonotype, a horizontal mill for sawing marble, and a soufflet hydraulique for raising water, all of which were invented or perfected by F. Sauvage, who, in addition, invented the conformateur, an instrument for measuring the head, the physionométre, and an automatic boat. The bronze bust and bas-relief were modelled by Mr. John Hopkins, an Anglo-Boulonnais, and were cast by Messrs. Thiebaud et Fils, of Paris. Frederic Sauvage's life was similar to those of many other inventors, in that he spent his days and fortune in perfecting inventions which brought him no profit. Having lost his own money, he borrowed from others, and, being unable to repay, was thrown into a debtor's prison, which he afterwards exchanged for a madhouse, and where he died on the 19th of July, 1857. The monument was designed by M. de Bayser, town architect of Boulogne.—*London Times.*

Hands vs. Brains.—Nothing is perhaps becoming more evident than the fact that rude labor, requiring only a certain amount of practice and dexterity, is now generally better paid than that which involves more or less of education, brainwork and skill. In many places the clerk is not earning half the income of the carpenter. In short, all kinds of manual labor, both skilled and unskilled, are at a premium; while all that is sedentary and involves chiefly, if not exclusively, the work of the brain, has become a drag in the market. Day laborers grumble when receiving only $2 for eight hours work, while clerks can be had by the hundred for $8 or $10 a week, with hours of almost any length. All the professions are crowded. The candidates for sedentary work increase at a far more rapid rate than the demand for them, and hence is coming round the strange anomaly that education, instead of fitting the young for earning higher wages and getting on better in the world, is actually becoming a bar to their progress, and condemning them to a life-long course of pinching and unremunerative struggle. The fact is undoubted, whatever may be its cause, and however society may seek to apply a remedy. —*Chicago Inter-Ocean.*

Petroleum for Alcohol.—M. Masson, a Lyons chemist, struck by the saving which might be effected by the substitution of purified petroleum for alcohol, in a great many preparations, set himself to work to make experiments and now announces that he has discovered a simple and economical means of purifying, disinfecting and deodorizing mineral oils; and that a saving of 70 per cent. may be made by substituting this sort of petroleum for alcohol in chemical preparations.

Land in Lake County.—It is estimated that there are 100,000 acres of good agricultural land in Lake county. There are but few farms which exceed 160 acres in extent. Good, improved land sells at from $30 to $50 an acre, according to locality.

There is as much feed on the ranges around Gilroy as there was last February.

Utilizing Wave Motion.

The *Melbourne Argus* says: "Regarding Mr. R. S. Deverell's experiments with ocean-wave power machinery, Mr. Ellery, in his address at the Royal Society's meeting, gave the following information: Some months ago Mr. Deverell devised an apparatus by which the movements of a ship at sea could be registered. This was placed in charge of his brother, who went to England in the ship "Norfolk" for the purpose of making observations with it on the voyage. From the results of these, Mr. Deverell deduced the following:—'The duration of the voyage was 2,026 hours. During that time the ship made 1,764,088 beam oscillations or rolls, and 1,041,137 fore and aft oscillations or pitches. The average number of oscillations in both directions per minute was 14. The aggregate arc of pendulum registering beam movements was over 15 million degrees, while that of the fore and aft movements was nearly 5 million degrees.' Mr. Deverell also considered he had definitely established from these observations the following propositions: 1. That between ocean limits the swell of the ocean is unceasing. 2. That the oscillation of a vessel in an ocean fetch is unceasing. 3. That the motion of an independent body within a ship on the ocean is unceasing. Here then was represented an immense amount of conservable energy, and the question remained, 'Could a practicable method be found for conserving it for use on board ship?' Mr. Deverell believed it could, and to a sufficient extent to be useful in auxiliary propulsion. Mr. Deverell expected to be in a position in a few months to detail his method of putting his propositions into practice, and promised to bring it before the Royal Society of Victoria as soon as it was matured. Mr. Ellery mentioned that Mr. Bessemer had purchased from Mr. Deverell the instrument the "Norfolk" voyage observations were made with, for his famous saloon ship. This fact had probably led to a report which appeared in print some time ago that Mr. Bessemer and the Admiralty were building ships on Mr. Deverell's principle, but which was entirely without foundation.

Colored Inks.

The following recipes have been well tested and are commended by good authorities as preferable to the solutions of aniline dyes which are now so extensively used as colored inks:—

Green. Two parts acetate of copper, one part carbonate of potash, and eight parts water. Boil till half is evaporated, and filter.

Blue. Three parts Prussian blue, one part oxalic acid and 30 parts water. When dissolved, add one part of gum-arabic.

Yellow. One part fine orpiment, well rubbed up with four parts thick gum-water.

Red. With the aid of a gentle heat, dissolve four grains of carmine in one ounce of aqua ammonia, and add six grains of gum-arabic.

Gold. Rub gold leaf, such as is used by bookbinders, with honey, till it forms a uniform mixture. When the honey has been washed out with water, the gold powder will settle at the bottom, and must be mixed with gum-water in sufficient quantity.

Silver. Silver-leaf treated in precisely the same manner gives a silver ink. Both these inks may, when dry, be polished with ivory.

Black. Three ounces crushed gall-nuts, two ounces crystallized sulphate of iron, two ounces gum-arabic, and twenty-four ounces water.

White. Fine French zinc-white, or white-lead, rubbed up with gum-water to the proper consistency.

Steam-Power in Europe and America.—Some statistics compiled by the Prussian statistical bureau seem to show that while our American free-traders are lamenting over the decay of American commerce, our country is really one of the foremost nations in the world in the use of steam. In stationary engines the comparison stands thus: United States, 40,191 engines, 1,215.711 horse-power; England, 40,000 engines, 936,405 horse-power; France, 27,041 engines, 325,507 horse-power. We also lead in locomotive engines, viz: United States, 14.223 engines; Great Britain, 10,933; France, 4,933. Total steam engines, both stationary and locomotive, 3,800.000 horse-power in the United States, and 3,300,000 in Great Britain. It is only in ocean steamers that we are behind; viz: Great Britain, 3,061 steamers, 2,624,431 tonnage; United States, 403 steamers, 483,040 tonnage; Germany, 225 steamers, 171,039 tonnage. Before 1880 the account will stand very different. But in the meantime, on land we are indisputably supreme in steam power, being 500,000 horses ahead of England.

To Soften Hard Putty.—The following from a correspondent in Falls City, Pa., under date of July 25, 1874, is worth making a note of: "In your number for July you give a method of softening hardened putty by an application of caustic potassa. A plan I have used with great success is to apply a hot iron to the putty; the kitchen poker, bent at the end, answers as well as anything else. The iron should be heated to a cherry red, and applied a sufficient time to scorch the putty, after which the putty can be taken out, leaving the sash perfectly clean. With a reasonable amount of care the sash need not be scorched."

The Proposed Substitute for Steam.

The interesting announcement of a substitute for steam as a motive-power has been recently made in Germany from a source entitled to a hearing. The rapid consumption of the earth's fuel supply and the drain on its forests, attended hy so many disastrous consequences, have stimulated scientific inventors to find a successor for steam, and it is to be hoped the present discovery will prove a success. The new motor is carboleum, and its application to machinery is claimed for Dr. Beins, of Groningen, who has devoted many years to its study and utilization. Experiment first taught him that when the bicarbonate of sodium is heated in a closed space, at a temperature of eight hundred degrees Fahrenheit, liquid carbonic acid is distilled out of it, having the expansive force of fifty or sixty atmospheres. Carboleum is not dangerous as an explosive, and the fact that, thus employed as the German inventor proposes, it is possessed of enormous motive power, was attested by scientific men to whom the experiments were shown. The heat required to hring out this motive power of the carbonic acid in the new carboleum engine is apparently very small when compared with that requisite for producing a high pressure of steam in the ordinary engine. In the former it is only three pounds of coal per hour for each horse-power represented by the engine—an amount so small that it would be unnecessary in ships driven by the new process do devote much space for fuel. The chief value of the invention, however, is claimed to be its practicability in large factories. The author thinks that for the great industries the carboleum engine can, in nearly every instance, take the place of steam.

The scientific value of this discovery is immense, if mechanical ingenuity can successfully apply it in the direction indicated hy Dr. Beins. If it is said that the supply of carboleum is not as plentiful as that element from which steam is made, it may be answered it is almost as large as that of coal in some parts of the world. Carboleum is found inexhaustible in heds of common chalk in all parts of the earth. As common chalk contains carbonic scid to the amount of half its weight it will yield double its volume of carboleum. And the chalk resources of the earth are vast heyond computation. The cretaceous rocks cover a large extent of subterranean Europe and Eastern Asia, and ahound in North and South America. The chalk beds which cross under the English Channel at Dover have been gauged at five hundred feet thickness, and similar beds have heen found in France, Germany and Denmark, while the soundings of the ocean bottom show that they prohahly exist in a growing state in many geological districts. In the United States few formations are more widely distributed than the chalk, varying in thickness (according to some authorities) from four hundred feet along the Atlantic seaboard to two thousand five hundred feet in the Upper Missouri valley.

It is evident, therefore, that the proposed successor of steam, if mechanically applied, would be used over the larger part of the world as an invaluable auxiliary of steam, with an enormous economy of wood and coal. The successful introduction of such a motive power, minimizing the fuel consumption, would be a boon of incalculable importance in the manufactures and arts. That the principle upon which its introduction is claimed to be feasible is scientifically correct seems hardly to be doubted. If the immeasurahle chalk heds are stored with mechanical energy, as we know the coal beds are, the anxiety of physicists and economists, lest the world's fuel supply may fall short in the lapse of a few centuries, is dissipated. The utilization of the new fuel would give an impetus to all industries, and might revolutionize the commerce of manufacturing nations whose wealth and political power are mainly due to their coal supplies.—*N. Y. Herald.*

Renewing the Body.—When science discovered that the human hody underwent an entire change during a period of seven years, it was thought very remarkahle, but Dr. Lyon Playfair read a paper a few days ago hefore the British Social Science Congress, wherein he declared that all the particles of the body change in a space of time even less than a year. The same eminent authority wisely declares that the substance of all our sanitary science, accumulated by the ages, might be summed up in the pregnant advice of the prophet: "Wash and he clean." This learned physician says that for a thousand years after the civilization of the Egyptians, the Jews, the Greeks and the Romans had faded, there was not a man or a woman in Europe that ever took a bath. To this fact he attrihutes, in a large measure, the wondrous epidemics of the middle ages, which cut off one-fourth of the population of Europe—the spotted plague, the black death, the sweating sickness, and the terrible mental epidemics which followed in their train—the dancing mania, and the mewing mania, the biting mania and witchcraft.

Sugar for Scrofula.—The *Druggists' Circular* says that children of a weak and scrofulous habit should be allowed all the white sugar they desire. It improves digestion and strengthens the blood.

The students in agriculture are engaged in classifying the plants on the University grounds and in the propagating houses.

Lord Shaftesbury on Scientific Inquiry.

In a recent address the Earl of Shaftesbury says: If he had the wealth of Glasgow, or the wealth of a few people in it, so far from fearing the progress of science, as many people did, he would spend no end of money to encourage it. He would urge upon these masters of wisdom that they did not plunge deep enough; they should go further and wider and higher. He wished a thousand times as many minds were engaged in scientific pursuits. A few eminent men held a monopoly, and they crushed the public with their crude and abundant fancies. But there was no greater folly than that committed by those who would maintain revealed truth by counter theories. The Bihle has suffered far more from its friends than from its enemies. In their timidity they have deprecated inquiry, and so have appeared to distrust their own Zion. In their over zeal—as if the Bihle could not take care of herself—they have proceeded to give explanations and interpretations which the language of Scripture would never justify, and then some clever scientific man laid hold of it, and in his criticisms has overthrown the faith of many by his just and his ridiculing observations. Had he the wealth of Glasgow he would say to Max Muller and his Orientalists: "Here is the sum of £50,000; collect the facts you require. Send ahroad your men. You say languages are dying out; send abroad and take the dying speech, the last confession of these dying tongues." He would send the same sum to Professor Tyndall and say to him: "Accumulate the facts; I don't care ahout your theories, hut turn your powerful intellect to the pursuit of facts." He firmly believed that if Glasgow or any wealthy city were to come down with such a means of advancing science they would see that in less than 10 years that grand old hook would be like the ark upon the top of Mount Ararat, surveying the suhsiding of the waters and rejoicing in the restoration of life and joy.

The California Acclimatizing Society reports an increased demand for the Eastern speckled trout for stocking private waters on this coast. The society during the present season has sent East for 100,000 eggs. It has introduced into the State salmon-trout from the St. Lawrence river and the great lakes east of the Rocky mountains; and other important additions to our stock of fish are contemplated.

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For California Fruits: also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradsmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A Lusk & Co., Pacific Fruit Market, San Francisco, Cal.
3v4-1y

Hooper's South End Grain Warehouse

Japan and Townsend Streets.

San Francisco, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, ret proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurence effected at the lowest rates. Storage taken at lowest current rates. 4v8-tf

Brittan, Holbrook & Co., Importers of

Stovee and Metals, Tinners' Goods, Tools and Machines, 111 and 113 California, 17 and 19 Davis streets, San Francisco, and 178 J street, Sacramento

Railroads.

Chicago and Northwestern Railway.

Miles in Operation:

Illinois Division	486.5
Iowa "	432.8
Wisconsin "	585.4
Michigan "	168 7
Minnesota "	291.8
Dakota "	38.5
Total Miles	2,003.7

IN CONNECTION WITH THE

Central and Union Pacific Railroads,

—THIS IS THE—

PIONEER LINE

Betwcen the Pacific Coast and the

EAST,

And was the first to connect with the great Pacific roads, and form the

OVERLAND ROUTE.

THIS LINE IS THE

Shortest Rail Line

—BETWEEN—

OMAHA and CHICAGO.

The track is of the

BEST STEEL RAIL,

And is well ballasted, and as free from dust as a road can be made; the hridges are strong and durable, and all the appointments are first-class in every respect.

The trains that run over this road are made up of elegant

New Pullman Palace Drawing Room and Sleeping Coaches,

Built Expressly for this Line,

Luxurious, well lighted and well ventilated Day Coaches, and pleasant lounging and smoking cars; all built hy this company in their own shops. The cars are all equipped with the

Miller Safety Platform,

—AND—

PATENT BUFFERS AND COUPLINGS,

WESTINGHOUSE SAFETY AIR BRAKES,

And every other appliance that has been devised for the safety of passenger trains. All trains are run by telegraph, and are so regularly on time that one can safely set his watch hy their arrivals or departures.

IN A WORD, THIS

Great California Line

Has the

BEST AND SMOOTHEST TRACK,

AND THE MOST

Elegant and Comfortable Equipment

Of any road in the West, and has no competitor in the country. It is eminently the favorite route with Californians traveling East, and is acknowledged by the traveling public to be the popular line for

Chicago, New York and all Eastern Cities.

Through tickets by this favorito route can he procured at all offices of the Central Pacific Railroad, and at the office of the

CHICAGO AND NORTHWESTERN RAILWAY,

306 Montgomery street.

H. P. STANWOOD, Gen. Ag't for Calif'na.

M. HUGHITT, General Sup't. Chicago.

W. H. STENNETT, Gen. Passenger Ag't, Chicago.

10v8-1am-1y

Miscellaneous Notices.

POISON! POISON

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Ooast have been spending money in experimeuting to find a safe, cheap and efficient way of ridding their grain fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grein every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granutated Squirrel Exterminator

Is just the thing the fermers of California have been looking for. It is SURE DEATH. One or two greins of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. Tho Poison is put up nay end in granular form, and easily handled; in one pouud tins at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and deelers generally through the country. The following are some of my testimonials, viz:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ.:—Your Squirrel Exterminator was ussd according to your directions, on my *Quito Farm* with excellsnt success, end in my estimation is just the thing the fermers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminetor a feir trial and find it to he en economical and very destructive preparation, and I osn safely rscommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meets, etc.

For full particulars call at the company's

Office, 422 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.
11v7-6m

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.

Works, King street, bet. Second and Third. fel5-eow

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Soisnces, Gymnastics end Dancing taught without extra charge Vocal and Instrumental Music receive partionlar attention. Pupils furnish *only* a pair of heavy blankets. Nsxt term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER.
22v6-1y President Board of Directors.

CO-OPERATIVE MARBLE WORKS.

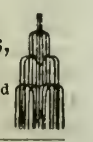
JOHN DANIEL & CO.,

Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.
21v2-1y



YOSEMITE HOUSE,

STOCKTON, CAL.

JAMES COLE, Proprietor.

This House contains all modern improvements; Saloons, Bath Rooms end Telegraph.

The only first-class Hotel in Stockton.



LOOK!

ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rebbits, etc. Also Eggs for hetching from the finest of imported stock. gg and Fowls at reduced prices. end for Price List.

ALBERT E. BURBANK,
1v8-3m 43 & 45 Co. Market, S. F

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St.,
4v17-3m bet. Montgomery and Kearny Sts. S. F

A. W. THOMPSON,

Attorney at Law,

No. 6 Leidesdorff street, - - San Francisco

sep17-tf

To Correspondents.

Sweet Potatoes.

G. N. P.—You will find no difficulty in growing the Sweet potato in yonr locality. Take sound tubers and place them under glass in rich, mellow soil, covering as you would the common potato in planting. This being for the propagation of sprouts only, the tubers can be set quite closely. When the sprouts are fairly growing, lift the glass occasionally, while the condition of the atmosphere is favorable, gradually increasing the exposure in order to harden the young plants. When the condition of the plants seem to warrant transplanting, and there is no more danger from frost, lay out your ground in raised rows, about eighteen inches apart. A warm, sandy soil is preferable. Take up the parent tuber snd remove the sprouts by outting out the eyes from which they grow, leaving a portion of the skin and flesh of the potato attached. Plant these in the raised rows about as far apart as you would common potatoes in drills. While they are under glass, and for a short time at least after transplanting, treat them to water occasionally. The snbsequent cultivation should correspond with that usually bestowed upon the common potato; keeping clean, stirring the earth, and hilling slightly. The tubers may be nsed in drills, but more plants can be had hy removing the sprouts as above described.

Alfalfa.

W. E. This orop will nndoubtedly do well in the Platte valley, and you will have no more difficulty in growing it than with red clover. Give the former an equal chance with the latter in location and cultivation, and it will far outstrip it in every desirable quality. Its productiveness is trnly wonderful, and in regard to its hardiness we can assure you from our own observations, that it will resist the trying climate of central New York. It will last twenty-five years without re-sowiug. San Francisco is the hest market in the world to ohtain the seed. It varies in price here from 18 to 22 cents per ponud, by the hundred pound; bagging, drayage and freights extra. About 20 lbs. per acre is required, though 30 lbs. are sown sometimes where immediate pasturage is reqnired. Do not fail to give it a trial. It will prove a blessing to the Platte valley. We again assnre you that no "work on the subject" is requisite. The above is all the information that any farmer will need.

Let us hear from you on this or any other subject connected with farming.

No Local Preferences.

For a popular paper to manifest preferences for certaiu places, or anything like prejudice against others, would be extremely injudicious, to say nothing of the injustice of the transaction. The RURAL PRESS has never been accused of any such partiality. It has been as ready to sympathize with the inhabitants of the less favored localities, and to lend a helping hand to remove the hindrances that obstruct the road to prosperity, health and happiness, as it has been to congratnlate those who have been more fortunate in the localities in which they have pitched their tents. But while we do not admit within the colnmns of our paper any "blowing," in writing up some places, or anything really depreciatory of others, it will be seen that we encourage and solicit any information in regard to any and every locality on this coast; and it might be expected that in obtaining this information from local correspondents, casual visitors or flying tourists, something may be said that might possibly hnrt the sensitive feelings of people living in the localities written about. Chronio dislikes will occasionally crop out in the communications of resident oorrespondents; home sickness will often tinge the letters written hy casual visitors; while the tourist is too often governed in his estimation of a country hy the accompanying evils of travel, or by the temporary condition of his stomach or purse. Any fancied slight which a locality may receive nnder the above circnmstances should not be considered hy its residents; and all mistakes or misrepresentations that inadvertently get into print can at once be corrected in print; such corrections being the most effective of advertisements.

It may be that we are somewhat over-nice in our allnsions to thia matter; but as our circulation extends through the hyways as well as the highways of California farm life, we take this occasion to reassure our friends of our hearty sympathy with all of them, and that we shall still endeavor to supply the newspaper wants of every locality.

THE P. O. department has run behind, the past fiscal year, about eight million dollars, on a total expenditure of about thirty two millions.

WOODWARD'S GARDENS embraces an Aquarium, Museum, Art Gallery, Conservatories, Tropical Houses, Menagerie, Seal Ponds, and Skating Rink. Admission, 25 cents; children, 10 cents.

AGRICULTURAL NOTES.

ALAMEDA

TOBACCO RAISING.—Oakland *News*, Dec. 1: William Meek, the well known farmer of San Lorenzo, and Regent of the State University, is the man on whose land the tobacco was raised a sample of which has recently been sent to Louisville, Kentucky. Mr. Meek furnished fifty acres of land to Mr. Prather, a Kentuckian, to raise a tobacco crop. The prodnct is about 40 hogsheads of 1,500 ponnds each, of very handsome tobacco. Five hogsheads of this have been sent to Louisville. The tobacco resembles that nsually grown in Florida. The leaf is perfect and the curing has been by the ordinary process. The yield of this fifty acres has been extraordinary, and if the product is of fair quality, and good judges think it is, tobacco will fignre as an important product hereafter.

ALPINE.

SPRING-LIKE.—Alpine *Courier* Nov. 28: It is a remarkable fact that this county is now favored with a visit from the feathered songsters the same ss in early spring. The squirrels are also around, as usual, at an altitude of 9,000 feet the manzanita is blooming. Does this not indicate an open winter?

COLUSA.

THE WEATHER.—Colusa *Sun*, Nov. 28: It is the general remark that this has been in all respects the best weather up to this date, we have had since the settlement of California by the Americans. There have been two or three seasons that commenced with wsrm rains and remained free from frosts or freezes nntil quite late, but we do not remember any quite so free from them as this has been.

BREAKS.—We learn that the levee across the head of Wilkins' slough broke last Wednesday. and that there were several other breaks in the levee below Diefendorff's. The Wilkins' slongh itself would fill the basin thought to have hoen reclaimed, aud for this we are truly sorry.

CONTRA COSTA COUNTY.

THE RAIN.—Contra Costa *Gazette*, Nov. 28: It began here with a light west-south-west wind and slight drizzle Sunday evening, and rained quite freely in almost constant showers from about two o'clock Monday morning nutil near the same hour on Tuesday, making a measure of 2.35 inches. During the rain, and since, we have had a mild temperature that has favored the growth of grass, though the rain suspended farming operations. The total rain measure of the season to this date of November is 5¼ inches, and this will answer all purposes for the next six weeks, should uo more come. It would, indeed, have suited the farmers of this region as well, generally, if this last rain had held off for soveral weeks, as, before it came, the adobe soil was in better condition for working than it can be again this winter; still, the season promises to he a very favorable one for getting in the seed crops early.

EARLY RAINS.—Antioch *Ledger*, November 28th: With the first early rains many of the farmers became discouraged. The theory, based upon experience, was that the drenching rain wonld destroy the feed, while the new grass would he nipped by early frost, resulting in great loas to the agricultural community. In addition to this, it was thought so abundant early rain was not a favorable indication of a good season. These fears were, happily, not well gronnded. And now with the recent heavy storm all fears have vanished. The ground is thoroughly soaked, and much of the volunteer and early-sowu grain covers the ground and is growing rapidly. This valley, usnally left out in the cold, as regards the quantity of rain, has been especially blest. The wind during the late storm was from the southeast, and the amount of rain has been fully equal on this side of the San Joaquin to that of other parts of the State. Onr farmers are jubilant, and our merchants and business men generally have taken courage.

FRESNO.

FARMING PROSPECTS.—Fresno *Expositor*, Nov. 25th: A. M. Days has leased of H. Voolman three sections of land adjoining Eggers' farm, and about four miles from town. He is now preparing to put in a large crop of cereals, etc., on the land. The Easterhy farm will be conducted by a gentleman named G. W. Boggs, this season. He is now on the farm, preparing his land, etc. We notice in evory direction an increased activity among the farmers. The auspicious commenoement of the new season seems to infuse life, hope and activity in the breasts of the tillers of the soil. Stockraisers and woolgrowers also seem well satisfied with the state of affairs; in the foothills of the Sierras and in the Diablo mountains the grass is two or three inches high, and has sufficient strength to afford good food for all classes of animals ranging upon it. In fact, stock is already beginniug to gain flesh. On the plains the grass is less forward, but is np sufficiently to afford good browsing. Thus far the season is the most favorable that has been experienced for many years.

HUMBOLDT.

POTATOES.—Eureka *Times*, Nov. 28: Reports from the country state that most of the potatoes on Eel river bottom were still in the ground at the commencement of the late storm, and the prospects of a good shipment were very poor. If poor potatoes are shipped to the San Francisco market, it will not be long before the good price which they now bring will vanish like our summer air.

A letter to the *Times* from Ferndale contains the following: The potato crop is a partial failure. The yield is nniversally light, five tons to the acre being considered a good crop, whereas in former times 10 tons to the acre was nothing nnusual. Then again, this year the potatoes are affected with a blight or rot, or whatever it may be. This will reduce the total amount of the crop considerahly, and those potatoes that will keep over will no douht command a good price before next spring.

MARIPOSA.

GROWING WEATHER.—Mariposa *Gazette*, Nov. 28: The rains, so far, have cleared up with warm weather. The last storm, that of Monday last, was followed hy a succession of densely foggy nights. Grain, grass and vegetation generally, is fairly jumping from the ground.

MONTEREY.

A HUGE POTATO.—Hollistor *Enterprise*, Nov. 28: Henry Houghton presented this office with a potato the other day, which we venture to say was the most ponderous of its race. It was the prodnction of a corner lot in the new town of Lompoc. It was 28⅛ inches long, 19 inches in circumference, and weighed 21 pounds.

M. Browne shipped 12 cars of flour this week from the Hollister mills. It is now well established that San Benito county wheat produces the best flonr in the State, hence the increasing demand for the flour manufactured at this mill. It has no superior in the country, and has an excellent reputation, even in Europe.

NAPA.

LARGE WHEAT SALE.—Nspa *Register*, Nov. 28: Messrs. James H. Goodman & Co. last week sold over 62,000 sacks—3,000 tons—wheat, to I. Friedlander; terms private. This, we believe, is the largest transaction in that line that has ever been made in Napa. The Messrs. Goodman have still about 46,000 sacks left.

NEVADA.

PEACHES PROFITABLE. — Foothill *Tidings*, Nov. 28. As thia is the time to look about for trees to plant new or extend orchards, we have a word to say about peaches. In most counties very early, and in a less degree very late peaches, are the most profitable to the grower for market. Here it is different. The earliest peaches grown here in the foot-hills come into market after the same varieties become plentiful in the hot vallies below, and therefore are no more profitable, except for home market, than those two weeks later; for shipping they must compete with an abundant supply from below. For the same reason—later maturation—the very latest varieties of peaches, coming into market as they do, ten days or two weeks after those in the vallies are gone, will always command a good price. There are a few trees in this vicinity hearing a noble peach, that would readily bring ten cents a pound in San Francisco or over the mountains, because they are at their best when there are few if any good peaches to be had.

SANTA BARBARA.

ALMOND ORCHARD.—Santa Barbara *Index*, Nov. 26: Mr. Olmsted, of Carpinteria, has finished picking his crop of almonds. He will have from his orchard this season over five tons of the Languedoc or soft shell almonds. Mr. Olmsted's orchard is only four years old, and, of course, is not yet full bearing. His trees bore a few nnts when only two years old. The third year the average yield to the tree was about five pounds. Two rows in the orchard, covering ground oquivalent to two acres, that received great care in planting, and special culture, produced 2,000 pounds of dried almonds. The yield, at the wholesale San Francisco market price for the soft shell almond, will give Mr. Olmsted about $230 per acre, after paying all expenses of the year's culture; gathering, sacking and marketing. One reason of Mr. Olmsted's success in the cultivation of the almond is the fact that he keepsthe ground clear, cultivating nothing between the trees, nor allowing weeds to grow up to rob them. Thorough cultivation is required for the almond—and the trees should be at least twenty feet apart each way.

SACRAMENTO.

GOOD FEED.—*Folsom Telegraph*, Nov. 21.—The foothills are being covered with a mantle of green, and the dairy and stockmen are jubilant, as the feed is excellent, and has a good, healthy start, and is said to be better than it has been for many years. We hope it may so continue, not only for the benefit of the stock and their owners, but also for the sake of the butter and beef eaters.

SAN JOAQUIN.

SEEDING TIME.—San Joaquin Valley *Argus*, Nov. 21: There never was a time since farming commenced in this valley that people were more busily employed in plowing and seeding their lands than at the present time. Preparations for farming are being made upon an extensive scale, the early rains giving some two months more time for planting than usual, and the consequence will he a largely increased acreage put in cultivation in wheat. Immigrants are pouring into this and the counties south of here rapidly, and settling upon the wild lands, many of them have already plowed large tracts of country and planted seed for the crop of 1875. Sufficient moistnre has fallen to bring up grain and keep it growing throughont the winter, very little douhts exist of sple ndid crops being raised all over the valley. The rains thus far have been general and farmers everywhere are in good spirits and exerting themselves to the utmost to get all the lands seeded early. The indications are that the San Joaquin valley will heneeforth become the greatest grain-producing section in the United States and perhaps the world.

SONOMA.

WINE.—Healdsburg *Flag*, Nov. 26: Messrs. Colson & Bloch, of Dry Creek, a few miles above Healdsburg, manufactured this year 20,000 gallons of wine. Enough grapes went to waste in their neighborhood to have made 40,000 gallons more. James Whitlock lost the entire product of a fifteen acre vineyard for lack of a market.

THE Petaluma *Argus* says that a potato weighing 3 poudns and fourteen ounces, raised on P. Hinshaw's ranch in Two Rock valley, may be seen at McCue's Mill.

SOLANO.

VEGETATION.—Vallejo *Chronicle*, 28: The farmers in this vicinity say that they were never blessed with better weather for their purposes than they have thus far experienced. Enough and no more than enough rain has fallen to permit plowing, so that they can get in their crops at an exceptionally early period. The warm weather succeeding the rains has also given the grass a quick and vigorous growth, thus affording the best pastnre to stock. In some places the vegetation stands seven or eight inches high.

STANISLAUS.

RAIN.—Stanislaus *News*, Nov. 27: Within the past few days the rainfall at this place has been quite heavy. Still, owing to the favorable nature of our soil, farmers in this immediate vicinity were only stopped from ploughing but a short time. They are now all at work with heavy forces. Some of them doing excellent, whilst others are following the old rule of scratching over the surface, with an immense number of plows ganged together.

QUIET.—The farmers are all quite busy in this section. In fact, it is only on Saturday afternoons that they can be seen in town at all.

DEATH OF D. B. FRINK.—The telegrsph brings us intelligence of the death of Mr. D. B. Frink, editor and publisher of the Truckee *Tribune*. A secret vigilance committee had been formed in the town, and he was supposed to be a member of the same. While in the street on Tuesday, between 11 and 12 o'clock, he received, without warning, a death shot in the breast by some nnknown hand. Report says he was probably shot by a vigilante, by mistako. Mr. Frink was an old resident of Nevada City, and well-known in that place and Grass Valley for his industrious and irreproachable character. He was a good thinker and writer, and a successful journalist; the *Tribune* being one of the most frequently quoted local journals of California. A vein of humor accompanied the good sense of much of Mr. Frink's writing. For years past, some of his most pungent articles have been copied in *Frank Leslie's Journal*, with ideal cuts, illustrating the novel points suggested. Mr. Frink leaves a grown-up daughter, to whom he has seemed entirely devoted since the death of his wife, some eight years since. As an energetic, honorable man and a true friend, we deeply deplore his loss. And all who knew him well, we daro say, will sincerely feel his death as a personal and public calamity.

POSTAL CHANGES ON THE PACIFIC COAST.—The following postal changes have been ordered for the Pacific Coast: Postmasters appointed—George Hogeman, at Bell's Station, Santa Clara county, California; Lewis H. Wiseman, at Kirkville, Sutter county, California; Henry Washington, at La Porte, Plumas county, California; Byron D. Beckworth, at Lodi, San Joaquin county, California: John W. Middleton, at Hamilton's Fort, Iron county, Utah. Office discontinued—Lake Mente, Polk county, Oregon.

PATENTS & INVENTIONS.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[FROM OFFICIAL REPORTS FOR THE MINING AND SCIENTIFIC PRESS, DEWEY & CO., PUBLISHERS AND U. S. AND FOREIGN PATENT AGENTS.]

By Special Dispatch, Dated Washington, D. C., Dec. 1st, 1874.

FOR WEEK ENDING NOV. 17TH, 1874.

MACHINE FOR MAKING BOTTLE COVERS.—Earl K. Cooley, S. F., Cal.

QUARTZ MILL.—Samuel H. Cowlos, Sacramento, Cal.

EXPLOSIVE COMPOUND.—Joseph W. Millard, S. F., Cal.

TRADEMARK.

FOR DAIRY SALT.—The Union Pacific Salt Co.

The patents are not ready for delivery by the Patent Office nntil some 14 days after the date of issue.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

W. L. CHURCH, formerly newspaper agent, will please address this office.

Agricultural Items.

THE LOMPOC LAND SALE.—The result of the sales at Lompoc may be summed up thus: The stockholders paid $500,000 for the property and sold $700,000 worth of it at auction. An offer of $350,000 for the balance was refused. The stockholders have evidently made a big thing; whether the late purchasers will do well remains to be seen. The success of this enterprise, as well as that Anaheim, Riverside, etc., shows the feasibility of emigrant colony schemes in this State. We would suggest, however, that the emigrants rather than speculative middlemen should be allowed to reap at least a portion of the benefits to be derived from the increased values of the land.

POISONED GEESE.—A lot of wild geese were lately killed on the San Joaquin river and given to hogs to eat. The next morning the hogs were found dead. It is thought that the geese were poisoned from feeding in the fields where farmers have used phosphorus or strychnine to poison squirrels, and the hogs were thus also poisoned. A warning which should he heeded by the consumers of wild geese in this city and elsewhere.

BANANAS IN THE OPEN AIR.—H. H. Messenger, of San Gabriel, near Los Angeles, has succeeded in raising bananas in the open air, from bulbs brought from the Sandwich Islands. The bulbs were planted only 22 months ago. They are small, but equal in flavor to any imported, and Mr. Messenger expects much finer fruit from the new bulbs which will grow from the old ones.

DEBRIS FROM THE MOUNTAINS.—A gentleman, who had the opportunity of observing, says that the amount of sand of last week which came down the American river when it rose on Tuesday was almost beyond belief. It came along in vast waves, with a loud, rushing noise, almost like that of a train of cars, and for some time there was apparently more sand than water moving.

LARGE GRAPE YIELD.—A yield of five or six tons of grapes to the acre has been quite commen in Sonoma county this season—so says the Sonoma *Democrat*. The fruit has also been superior in quality, as where ordinarily 14 pounds are required for a gallon of wine, they have this year averaged a gallon to 12 pounds.

TALL WHEAT.—The Stockton *Independent* of Nov. 19th says it had received the day before a sample of early wheat growing on the ranch of I. H. Bostwick, near Grayson, Stanislaus county. The stalks of the bunch averaged 15 inches in length and were a fair sample of a field containing 1,000 acres.

GRAPES PLENTIFUL.—So plentiful and cheap have grapes become in the vicinity of Stockton that the owners of excellent vineyards propose to root out the roots and vines together, and devote the land to other crops. Better convert the poor vines into better, by grafting—say into raisin grapes.

LEVEEING NEAR STOCKTON.—J. M. Fisher, superintendent of the Tide Land Reclamation Company, No. 162, has seventy-eight Chinamen at work leveeing on the Calaveras slough, near Stockton. The levee costs him 13 cents a cubic yard.

THE annual meeting of the members of the Sonoma and Marin District Agricultural Society, at which officers are to be elected to serve during the ensuing year, will he held in Petaluma to-day—Saturday.

A NEW TRADE.—The Starr mills at Vallejo have taken large orders for flour from Central America. The first consignment of 3,000 barrels will go down by steamer shortly, and others will follow at intervals.

THE Sacramento river rose, under the influence of the late storm, to 19 ft. 4 in. ahove low water mark, on Wednesday of last week. Since then it das been gradually declining.

LAND SALE.—Eighty acres of the estate of the late B. B. Munday, in Vallejo Township, were sold a few days ago to J. H. Benson—price, $65 per acre.

ACORNS are very plentiful this season. The Napa *Register* says they might be scooped up hy the bushel in Pope valley. Good for the hungry swine.

WHEAT is doing remarkahly well in San Diego county, when but a short time since most of the flour was imported for home consumption.

HOP PROFITS.—Grant & Richardson's hopyard of 20 acres near Healdsburg has paid a profit, this year, of $150 per acre.

IMPORTING MULES.—S. E. Wilson, a Sutter county farmer, last week imported two carloads of mules from Missouri.

FLOUR MILLS.—There is talk of erecting a flour mill six miles north of Point Arenas, and another at Tehama.

TALL GRASS.—The Petaluma *Argus* of Nov. 20 notices grass on the plaza in that town 12 inches high.

HORSES WANTED.—Farmers in the upper end of Solano county are troubled by a scarcity of horses.

STRAWBERRIES are still to be had in this market.

S. F. MARKET REPORT.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Dec. 2d, 1874.

The week closes with fair prospects for an advance in the groat staple wheat, as well as in many other articles of produce. Private advices from Liverpool note an advance of 2s, or 48c per quarter, though the telegraph shows but 10c advance on the quarter. With the thermometer at 3 degs. below zero in the East, and the canals and rivers frozen up, an advance must soon take place. Freights hence to Liverpool are nominal at £2 5s. Receipts of Flour, Wheat, Oats and Potatoes have increased this week. Onions are not in so good receipt, owing to the rains, and are likely to be higher on account of it, until better weather. Poultry is in good demand, though a little off to-day, and the wants for the approaching holidays will be large. Indeed, many vegetebles have advanced owing to the small surplus.

Barley is probably a little weaker than last week, but it is still firm and in demand. Receipts for the week, 10,791 ctls.

Beans, though slightly fluctuating, are quotably unchanged. Week's receipts 5,164 sks. They are in good demand.

Broom Corn is likely to be bigher, for good quality, owing to damage to the crop by the storm, and making a good article scarce.

Corn is a little off, tbough receipts are small.

Cotton—Receipts for the week are 56 bales, market unchanged, with sales of 950,000 lbs. at 15½c, and 60 beles at 15c.

Eggs—Weaker and receipts increasing.

Flour—Receipts increased, showing 27,250 qr. sacks. Yesterday's China steamer took 4,556 bbls., and it is in good demand.

Freight—To Liverpool £2.5s.

Fresh Meat—Quotations are unchanged.

Hides—Have declined in New York, and are weaker here, also.

Honey—Unchanged in rates. Receipts for the week 413 cs. and 13 bbls. Two car loads went East.

Hops—Are in small receipt and little demand, particnlarly for Eastern. Receipts for the week, 90 bales. California can now more than supply the demand. The yield of the Pacific Coast is given at 6,000 bales, 4,000 of whicb have been exported.

Nuts—Are in small supply and demand but light.

Oats—Receipts for the week 2,024 ctls. Firm and in fair demand, particularly choice grades.

Onions—Receipts small, owing to tbe recent storm, but with good weather they will likely be abundant.

Potatoes--Are weak, with an overstocked market.

Poultry—Keeps up, and will continue in good demand as the bolidays approach.

Tobacco—Whicb has had a good trade, like most otbers is slackening up, with no change in quotations.

Vegetables—Owing to light receipts, have advanced.

Wheat—Is little different from last week's rates, and it is generally quoted steady. Receipts for the week, 284,406 ctls.

Wool—Market dull and unchanged. Receipts for the week only 800 bales. Four car loads, or 80,000 lbs., shipped East by one firm.

FRUITS AND VEGETABLES.

WEDNESDAY M., Dec. 2, 1874.

FRUIT MARKET.			
Tahati, Or. ₱ M	—	@40	00
Lorita, do	—	—@—	—
Cal. do	—	—@—	—
Limes, ₱ M		—@15	00
Cal.Lemons,₱ M	—	—@25	00
Australian do	—	—@40	00
do Sicily ₱ b'x	—	—@—	—
Bananas, ₱ buch	3	00@4	00
Cocoanuts, ₱1000	—	@60	00
Pinsapples, ₱dz	—	@—	—
Apples, ₱ box	50	@1	75
Cherrics	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries₱lb	—	@	25
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	—	@	—
Peacnes, bskt.	—	@	—
do, ₱ box	—	@	—
do ext Mountain,₱	—	@	—
Pears, Bart't, bx.	—	@	—
do Cooking	50	@	75
Crab Apples	—	@	—
Neotarines	—	@	—
Wat'rmel's₱100	—	@	—
Muskm'l's₱100	—	@	—
Pomegran's₱100	—	@	—
Figs		@	6
Grapes,Bl'k H'g	1	00@1	50
do Muscat	2	50@4	00
do Malavo'e	—	@	—
do Sweetw'r	—	@	—
do Mission	2	00@	2 50
do Rose of Peru	1	00@1	50
do Tokay	1	50@	2 00
do Morocco	1	50@2	00
do St. Peter	—	@	—
DRIED FRUIT.			
Apples, ₱ lb		5½@	6½
Pears, ₱ lb		9	@10
Psaches, ₱ lb		8	@ 9
Apricots, ₱ lb		10	@12½
Plums, ₱ lb		5	@ 6
Pitted, do ₱ lb		13	@15
do Extra, ₱ lb		—	@—
Raisins, ₱ lb		5½	@12½
Black Figs, ₱ lb		5	@
White, do		10	@15
Prunes		8	@13
do German		14	@ —
Citron		@21½	32½
Zants Currants		8	@ —
Dates			12½@
VEGETABLES.			
Asparagus		—	@—
Beots		—	@ 1
Oabbage, ₱ 100 lbs		.50	@ 75
Carrots, per ton		62—	@—
Cauhflower, doz		—	@—
Celery, doz		—	@—
Garlic, ₱ lb		—	@10
Green Peas			2½@ 3
Green Corn ₱ doz		.20	@22
Sum'rSquash per ton		—@8	00
Marro'fat Sq'sh,tn	8	00@10	00
Articbokes,₱ doz	..	40	@75
String Beans,₱lb			5@—
Lima Beans			5 @—
Parsnips			12½@15
Sbell,Beans			7 @10
Peppers, grssn, box		75@1	25
Okra, Green			5 @ 6
Cucumbers, box			.50 @
Tomatoes, box		.62½@1	00
Egg Plant, box		1	25@—
Rhubarb			8 @10
Lettuce			10 @—
Turnips, ton		10	00 @—

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ₱ lb*			35
do unpared, ₱ lb†			32
Peaches, do, ₱ lb†			16
do parsd, ₱ lb*			33½
do do ₱ lb†			30
Bartlett Pears,pared,lb*			45
Pears, pared (sliced) lb*			30
Pears,10-lb hoxes,family use,extra			35
Currants, stemmed, lb*.			30
Royal AnnCherries,pitted, ₱ lb*			25
KentishCherries,pitted, ₱ lb			55
Apples, pared(ring) lb†			12½
do do (whole,)₱ lb†			12½
Apples, 10-lb boxes family use, extra			18
Plums, pitted, ₱ lb†.			25
do do ₱ lb*.			40
Rhubarb, ₱ lb†.			35
Corn, ₱ lb†.			32½
Beans, ₱ lb†			60
Potatoes, ₱ lb†			14
Sweet Potatoes, ₱ lb†.			15
Onions, ₱ lb†.			40
Beef, ₱ lb†.			40
Tomatoes, ₱ lb†.			75
Squash, ₱ lb†			26

*In caddies. †In bulk.

DOMESTIC PRODUCE.

WEDNESDAY M., Dec. 2, 1874.

BEANS.			
Beans, sm'l wh. lb		3½@	—
do. butter		3½@	5
do, bayo		2¾@	—
oo, pink		2¾@	—
do, pea		3½@	—
BROOM CORN.			
Per lb	5	@	8
COTTON.			
Cal. 1874, ₱ lb	15	@	15½
DAIRY PRODUCE			
Butter, Oel. ohoice			
lb	45	@	60
do, good	40	@	45
do, inferior	30	@	40
do, firkin	30	@	35
do, pickled	35	@	42½
Oheese, Cal. new	15	@	17
do. Eastern	15	@	20
EGGS.			
Eggs, Cal. fresh	60	@	—
do, Orsgon	35	@	—
do, Eastern	—	@	—
do, Ducks'	40	@	45
FEED.			
Bran, per ton	—	@19	00
Middlings	—	@28	50
Hey	12	00@17	00
Straw, ₱ bale	—	@—	—
Oil ceke meal	—	@30	00
Corn Meel	31	00@32	00
FLOUR.			
Extra	4	75 @5	12½
Superfine	4	20 @4	75
FRESH MEAT.			
Beef, fr quality..lb	7	@	8
do, second do	6	@	7
do, third do	4½	@	5
Veel	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed.	6½	@	6½
do, dressed	8½	@	8¾
GRAIN, ETC.			
Whset, coast	1	40 @1	45
do shipping	1	50 @1	52½
do milling	1	55 @1	57½
Barley, coast	1	20 @1	30
do brewing	1	40 @1	50
Oats, ohoice	1	65 @1	75
do common	1	35 @1	55
Corn, White	—	@1	45
do, Yellow	—	@1	45
Buokwhsat	2	00 @2	25
Rye	1	12½@—	—
HOPS.			
California,1874		35 @	37½
Eest'rn,'74 cb'ice		50 @	—
MISCELLANEOUS.			
Beeswax,per lb		25 @	27½
Honey in comb		18 @	22½
do Strained		5 @	10
Pulu		8½@	9
Onions	1	60 @1	50
NUTS—JOBBING.			
Cal. Walnuts		10½@	12½
Peanuts per lb		7 @	9
Chils Walnuts		8 @	9
Pecan nuts		13 @	15
Brazil do		14 @	16
Alm'ds h'rd shell		10 @	12½
do, soft		20 @	25
Filberts		17 @	18
Cocoanuts, 1000,—60	00@	—	
POTATOES.			
Swsst, per cwt	—	@1	25
Cuffee Oovel	—	@—	
H. M. Bav	1	30 @1	50
Pigeon Pt	1	50@1	60
Humboldt	1	50@1	60
Tomalss	—	@1	50
Mission	—	@	—
Salinas	—	@	—
Bodega	—	@	—
St Barhara	—	@	—
Sac. River	—	@	—
POULTRY & GAME.			
Live Turkeys, hens per lb	17	@	20
do gobblers	15	@	17
Hens, per dz	—	@7	00
Roosters, young,	5	00	@6 00
Broilers, small	2	50	@4 00
do lerge	4	00	@1 50
Ducks, tame,doz	7	00	@8 00
Geese, per pair	2	00	@2 50
Hars, per doz	3	00	@3 50
Snipe, Eng., doz	—		@—
Quell, per doz	1	50	@1 75
Mellard Ducks	4	00	@ 4 50
do small	1	50	@ 1 75
Wild Geese, grey	—	@	—
do white	—	@	—
Doves, per dozen	50	@	75
Preirie Chickens	—	@	—
Grouse	—	@	—
Rehbits	1	25	@1 50
do hams	5	00	@6 00
Venison, per lb	7	@	9
PROVISIONS.			
Cal.Bacon,Light	—	@	17
do Medium	—	@	16½
do Heavy	14	@	15
Eastern do	—	@	16
Hems, Cel	14	@	14½
do Whittakers	17½	@	18½
do Duffield, ch	17½	@	18½
do Plankton & Armour	—	@	16½
do Boyd's	—	@	—
do Stewert's	—	@	16
Eastern Should's	9	@	10
do new hams	—	@	—
Cal.Smoked Beef	9	@	10
Lerd	14½	@	17
SEEDS.			
Alfalfa, Chili	—	@	12
oo Californis.	—	@	15
Canary	8	@	10
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	—	@	8
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quelity	30	@	40
Millet	12	@	15
Musterd, whits	2	@	3
do. Brown	1¾	@	2
Italian Rys	30	@	40
Perennial do	30	@	40
Rape	11	@	12
Timothy	11	@	12
Sweet V Grass	1	00 @1	50
Orchard do	30	@	35
Red Top do	25	@	30
Hungarian do	10	@	13
Lewn do	50	@	60
Mesquit do	15	@	20
Clover Red	—	@	20
do White	—	@	65
WOOL, ETC.			
FALL—			
Good to choice	18	@	20
Fair grade	16	@	18
Heevy free	14	@	16
Defective	12	@	15
Hides, dry	19	@	20
do wet salted	8½	@	9
Tallow, Cruds	5	@	6
do Refined	6	@	7

GENERAL MERCHANDISE.

WEDNESDAY M., Dec. 2, 1874.

BAGS.			
Eng. Stand Wht	—	—@12	
Detrick's Machine Sewed, 22x36 E	.12	—@12½	
do 22x36, do E W	—	—@13½	
do 20x40, do A	—	—@13½	
Flour Sacks ½s	9½	—@11½	
" " ¼s	6	—@ 7	
Stand. Gunnies, double seam	13	@14	
single seam	13¾	@14	
" Wool Sacks	60	@67½	
Barley Bags 24x36	13	@14	
do 22x40	—	@14½	
do 24x40	—	@15	
do 23x36	—	@16	
Oat Bags, 24x40	16	@16½	
do 28x36	—	@17	
Hessian 40-in.gds	9½	@ 9¾	
do 45	10½	@11	
do 60	—	@16	
CANNED GOODS.			
Asst'dPie Fruits in 2½ lb cans	2	80 @ 2	75
do Table do	3	50 @ 4	00
Jams & Jellies	3	75 @ 4	00
Pickles ½ gl		@ 3	50
Sardines,qr boxl	80	@—	—
do hf boxes	3	20 @—	—
COAL—Jobbing.			
Australian,₱ ton	10	50 @12	50
Coos Bay	—	—@10	00
Bellingham Bay	—	—@ 8	50
Seattle	—	—@11—	
Cumberl'd, cks	—	—@18	00
do hulk	16	00 @17	50
Mt. Diablo	6	25 @8	50
Lebigh	—	—@17	00
Liverpool	10	50 @11	50
West Hartlsy	—	—@14	00
Scotch	10	00 @11	00
Scranton	—	—@13	50
Vancouver's Isl	11	00 @11	50
Charcoal, ₱ sk	75	@	—
Coke, ₱ bbl	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Amerio'n	20	@	22
Costa Rica par lb	23		24
Guatemala	20	@	22
Java	—	@	26½
Manilla	19	@	20
Ground in os	—	@	27
Cbicory	9	@	10
FISH.			
Pac.Dry Cod,new	5	@	6
cases	—	@	7
do boneless	11	@	12
Eastern Cod	8	@	8½
Salmon in bbls	9	00 @9	50
do ½ bbls	4	50 @5	50
do 2½ lb cans	—	@2	80
do 2lb cens	2	65 @2	75
do 1 lb cans	1	75 @	—
Do Col. R. ½b	—	@	—
Piok. Cod, bbls	22	00 @	—
do ½ bbls	11	00 @	—
Boa . Sm'k'd Hor'g	40	@	50
Mack'l,No.1, ½bls	9	00 @11	00
" Extra	—	@12	00
" in kits	2	00 @2	50
" Ex mess	3	00 @3	50
" Ex mess, ½bs	—	@13	00
Pio'd Herr'g, bx	3	00 @ 3	50
NAILS.			
Assorted size, lb	5	37½@7	50
OILS.			
Pacific Glss Co. Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No.1	—	@1	25
do do No.2	—	@1	12½
Cocoanut	1	47½@1	50
Olivs Plagniol	—	@	—
do Possel	—	@	—
Palm lb	9	@	—
Linseed, raw	—	@1	05
do boiled	—	@1	10
China nut in os	77½	@	82½
Sperm, crude	—	@1	40
do bleached	1	90 @2	25
Coast Whales	45	@	—
Polar, refined	50	@	52½
Lard	1	15 @1	30
Coal, refined Pet	37½	@	—
Oleophine	21	@	24
Devoe's Bril't	25	@	28
Long Island	21	@	24
Eureka	—	@	—
Devoe's Petro'm	21	@	24
Barrel kerosene	21	@	24
Olive	4	20 @9	25
Downer Kerose'e	—	@	37
Gas Light Oil	—	@	26
PAINTS.			
Atlan. W. Lead	6	@	10
Whiting	—	@	2
Putty	4	@	5¾
Cbalk	—	@	2½
Paris White	2¾	@	—
Ochre	2	@	5
Venetian Red	3½	@	5
Red Lead	—	@	11
Litharge	10	@	11
Eng. Vermillion	2	00@2	10
RICE.			
China No. 1, ₱ lb	6½	@	6¾
do 2, do.	5¾	@	6
Japan	6	@	7
Siam Cleaned	7	@	—
Patna	6	@	6½
Hawaiian	7¼	@	8
Carolina	10	@	10½
SALT.			
Jal. Bay,per ton	10	00@14	00
do Common	5	00@ 7	00
Carmen Island	11	00@13	00
Liverpool fins	—	—@24	00
do coarse	16	00@—	—
SOAP.			
Castile ₱ lb	10	@	11
Local brands	5	@	8
SPICES.			
Cloves	50	@	55
Cassia	26	@	27
Citron	33	@	35
Nutmeg	1	20 @1	30
Whols Pepper	21	@	23
Pimento	—	@	15½
Gr'nd Allsp'rdz	—	@1	12½
do Cassia do	—	@1	50
do Cloves do	—	@1	50
do Mustard do	—	@1	20
do Ginger do	—	@1	00
do Pepper do	—	@1	00
do Mace do	—	@2	00
SUGAR, ETC.			
Cal. Cubs per lb	11	@	—
Partz' Pro. Cubs bbl or 100 lb bxs	—	@	11¾
do in 50 lb hxs	—	@	12
do in 25 lb hxs	—	@	12¾
Dircle A crushed	—	@	11½
Powderod	—	@	11
Granulated	—	@	11½
Dry granulated	—	@	11½
Golden C	—	@	10¾
Hawaiian	8	@	10½
California Beet	10¾	@	11½
Cal. Syrup in bls	—	@	67½
do in ½ bls	—	@	70 1
do in kegs	—	@	75
Hawaiian Molasses	25	@	30
TEA.			
Oolong,Canton,lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial,Canton	25	@	40
do Pingsuey	30	@	80
do Moyune	60	@1	00
Gunpo'der,Canton	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@1	25
Y'ng Hy.,Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ ohests, bulk	30	@	75
Japan,lacquered bxs,4½s and 5 lbs	45	@	67
Japan do,3 lb bxs	45	@	90
do pl'n bx,4½ lb	35	@	65
do ½&1 lb paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys	50	@	80
Dark do	50	@	55
Dwarf Twist	70	@	72½
12 inch do	60	@	70
Light Pressed	70	@	80
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Ohio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine ot ohe'g,kr	8	50 @9	25
Fine ont ohewing, bue'ts	—	@	—
Banner fine cut	9	00@9	25
Eureka Cala	—	—@9	00
TURPENTINE.			
Eastern	55	@	60

LEATHER.

WEDNESDAY M., Dec. 2, 1874.

City Tanned Leather, ₱ lb		26@	29
Santa Cruz Leather, ₱ lb		26@	29
Country Leather, ₱ lb		24@	28
Stockton Leather, ₱ lb		25@	29
Jodot, 8 Kil., per doz		$50 00@	54 00
Jodot, 11 to 19 Kil., per doz		66 00@	90 00
Jodot, second oboice, 11 to 16 Kil. ₱ doz		55 00@	72 00
Cornellian, 12 to 18 Ko		57 00@	67 00
Cornellian Females, 12 to 13		63 00@	67 00
Cornellian Females, 14 to 16 Kil		71 00@	76 50
Simon Ullmo Females, 12 to 13, Kil		60 00@	63 00
Simon Ullmo Females, 14 to 15, Kil		70 00@	72 00
Simon Ullmo Females, 16 to 17, Kil		73 00@	75 00
Simon, 18 Kil., ₱ doz		61 00@	63 00
Simon, 20 Kil. ₱ doz		65 00@	67 00
Simon, 24 Kil. ₱ doz		72 00@	74 00
Robert Calf, 7 and 9 Kil		35 00@	40 00
French Kips, ₱ lb		1 10@	1 15
California Kip, ₱ doz		40 00@	6? 00
French Sheep, all colors, ₱ doz		8 00@	15 00
Eastern Calf for Backs, ₱ lb		1 00@	1 25
Sheep Roans for Topping, all colors, ₱ doz		9 00@	13 00
Sheep Roans for Linings, ₱ doz		5 50@	10 50
California Russett Sheep Linings		1 75@	4 50
Best Jodot Calf Boot Legs, ₱ pair		5 00@	5 25
Good French Calf Boot Legs, ₱ pair		4 00@	4 75
French Calf Boot Legs, ₱ pair		4 00@	—
Harness Leather, ₱ lb		30@	37½
Fair Bridls Leather, ₱ doz		48 00@	72 00
Skirting Leather, ₱ lb		33@	37½
Welt Leather, ₱ doz		30 00@	50 00
Buff Leather, ₱ foot		17@	2
Wax Side Leather, ₱ foot		17@	
Eastern Wax Leather		—@—	—

LUMBER.

WEDNESDAY M., Dec. 2, 1874.

CARGO PRICES OF PUGET SOUND PINE —Retail Price.

REDWOOD.		REDWOOD—Retail.	
Rough, ₱ M	$16 00	Rough, ₱ M	— —
Rough refnse, ₱ M	12 00	Fencing and Stepping, M	— —
Rough cleer, ₱ M	32 50	Fencing, ₱ lineal foot	1c
Rough clear refuse, M	22 50	Flooring and Step, ₱ M	30 00
Rustic, ₱ M	30 00	Flooring, narrow, ₱ M	32 50
Rustic, refuse, ₱ M	24 00	Flooring, 2d quality, M	25 00
Surfaced, ₱ M	26 00	Laths, ₱ M	3 25
Surfaced refnse, ₱ M	16 00	Furring, ₱ lineal ft	¾
Flooring, ₱ M	30 00		
Flooring, refuse, ₱ M	20 00	Rongh, ₱ M	20 00
Beadsd flooring, ₱ M	32 50	Rough refuse, ₱ M	16 00
Beeded floor, refnse, M	22 50	Rough Pickets, ₱ M	18 00
Half-inch Siding, M	22 50	Rough Pickets, p'd, M	20 00
Half-inch siding, rsf, M	16 00	Fancy Pickets, ₱ M	30 00
Half-inch, Surfaced, M	25 00	Siding, ₱ M	25 00
Half-inch Surf. ref., M	18 00	Tongued and Grooved,	
Half-inch Bettens, M	22 50	surfaced, ₱ M	32 50
Pickets, rongh, ₱ M	13 00	Do do refuse, ₱ M	22 50
Pickets, rough, p'ntd	16 00	Helf-inch surfaced, M	40 00
Piokets, fancy, p'ntd	25 00	Rustic, ₱ M	35 00
Shinglea, ₱ M	2 25	Battens, ₱ lineal foot	¾
		Shingles ₱ M	2 75

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Dec. 2, 1874.

POULTRY, GAME.			
Spring Ohickens	50 @	75	
Hens	75 @	1 00	
Eggs Cal	— @	65	
do Eastern	30 @	40	
do Duks'	50 @	60	
do Farallones	— @	—	
Turkeys, ₱ lb	— @	—	
Ducks, large, pr	— @	—	
do small, pr	37½ @	50	
Tame, do	1 50 @	2 00	
Teal, ea	25 @		
Geese, wild, pelr	50 @	75	
Tame, ₱ pair	3 50 @	4 00	
Snipe, ₱ doz	1 50 @	2 00	
do English	2 50 @	3 00	
Quail, per dozen	2 25 @	2 50	
Prairie Ch'k's, ea	— @	—	
Pigeons, per pr	50 @	75	
Wild, doz	@2	00	
Squabs, doz	4 00 @4	50	
Hares, each	37½ @	50	
Rabbits, tame, ea	50 @	75	
Wild, do, ₱ dz	2 00 @	—	
Squirrels sa	15 @	20	
Beef, tend, ₱ lb	— @	15	
Corned, ₱ lb	8 @	—	
Smoked, ₱ lb	10 @	15	
Porter Houses St'k	— @	22½	
Sirloin do	15 @	20	
Round do	8 @	10	
Pork, rib, etc., lb	— @	15	
Chops, do, ₱ lb	15 @	—	
Veal, ₱ lb	12½ @	15	
Outlet, do	15 @	20	
Mutton-ohops, lb	15 @	—	
Leg Mutton, ₱ lb	12½ @	18¾	
Lamb, ₱ lb	10 @	20	
Venison	10 @	15	
Tongues, bsf	60 @	75	
do, do, smoked	75 @1	00	
Tongues, pig, lb	12½ @	—	
Bacon, Cal., ₱ lb	18 @	20	
Hams, Cal, ₱ lb	16 @	18	
Hams, Cross' s o	12½ @	15	
Choice D'field	18 @	22	
FISH, MEATS, ETC.			
Flounder, ₱ lb		—@	25
Salmon, ₱ lb	— @	30	
Smoked	— @	12	
Pickled, ₱ lb	5 @	6	
do Spr'g p'k'd	— @	—	
Salmon bellies	15 @	—	
Rock Cod, ₱ lb	12½ @	15½	
Cod Fish, dry, lb	— @	10½	
do fresh	— @	12½	
Peron, s water, lb	10 @	12½	
Fresh water, lb	10 @	15	
Lake Big. Trout	25 @	30	

Nurseries and Seedsmen.

1874. GUIDE AND CATALOGUE 1875. FREE.

To persons contemplating purchasing I will send my ILLUSTRATED, DESCRIPTIVE CATALOGUE and GUIDE to the VEGETABLE and FLOWER GARDEN WITHOUT CHARGE. It contains the most extensive and valuable list of



Flowering Bulbs, Roots and Plants, Semi-Tropical Trees, Ornamental Shrubs, Fruit and Shade Trees, etc., ever offered in this market. It tells how to successfully grow the Australian Blue Gum, the Monterey Cypress, Pine, etc., and the proper method of Cultivating Tobacco on this Coast.

☞ My stock of Seeds is in part my own raising and in part direct importations from the best European and Eastern growers, and is unsurpassed in all respects by that offered by any other establishment.

100,000 Australian Blue Gums and Monterey Cypress in boxes at from $30 to $50 per 1,000, raised at my own Nursery at San Rafael.

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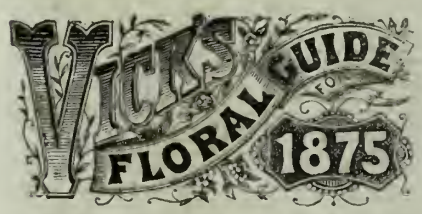
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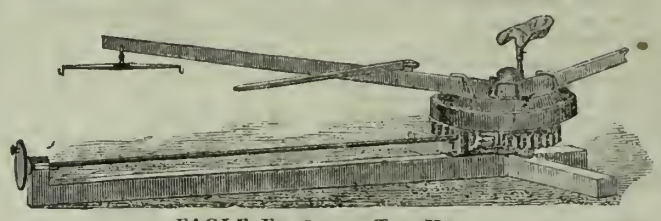
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We offer for sale at lowest market ratee a general assortment of Fruit and Shade trees, small Fruits, Vines, etc. Evergreen trees and Shrubs in great variety. Green House, Conservatory and Bedding Plants, Roses, etc.

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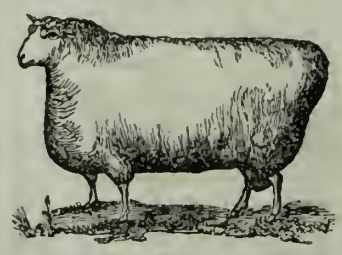
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Angora or Cashmere Goats of pure blood and all gradee for sale in lots to suit purchasers. Location, four miles from Railroad Station, connecting with all parts of the State. For particulars, address N. Gilmore, El Dorado, El Dorado County, Cal.



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

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We have for sale Pure-Bred and High Grade (np to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

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I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

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Geo. W. Chapin, Real Estate Agent, 434 Montgomery St., San Francisco, buys and sells Ranches in all parts of the State. City Real Estate exchanged for Country Property. MONEY LOANED. Post Office Box 1120.

Low Freights and Their Meaning.

The application of steampower to ships and to land vehicles has up to the present failed to realize entirely the expectations that have been formed of it. Even in Europe railroads are only now becoming common, and the ocean steamships are, as compared with sailing vessels, few and far between, and the increase in speed, both of vessels and vehicles, has not at all been followed by a corresponding decrease in cost of transportation. In numerous instances quite the contrary has been the fact. It is this which still fills the clipper ships of the world with cargoes, which makes the commercial marine of Great Britain and the United States still composed of the same kind of craft that have floated on the ocean since the beginning. Through this the merchant in San Francisco has to wait from four to six months for goods from New York that he ought to have had in a fortnight, and the California Wheat shipper has to send his produce in clipper ships that take from two to three months longer than would steamers.

There may be reasons for high steamer and rail freights, but we confess we cannot appreciate them. If the use of steam fails to reduce the cost as well as the length of time in transportation, then it fails in a great measure to fulfill the expectations formed of it. But we cannot see why double the charge should be made by steam for one-half the time by sail, or as sometimes three and four times the charge. No—cheap freights ought to be secured by the use of steam, the general public feel it even if they cannot tell the reason why, consequently one of the great popular demands of the day is that for cheap transportation.

The commercial world, the American portion of it particularly, and that of San Francisco especially, needs cheap transportation. Want of it hurts every interest of the State, financial, commercial, and industrial. This is a subject that we have often alluded to before, and we mean to discuss it frequently in future, at least till the evil complained of is removed. The financial interests of the State suffer by it, in that it lessens the amount of capital by just so much as is paid away over what ought to be a fair rate. The average rate paid for freight on Wheat to England since California first began to export Wheat may be given at £4 or $19.46 3-5 per ton; Wheat can be carried at £2.10 or $12.16 3-5 per ton with profit. It is what is paid now. The difference between them, $7.30 on 60,000,000 centals, the whole amount exported since California first became a Wheat exporting State, amounts to (counting short ton) $21,900,000. Not only would the State be so much richer by this amount, but it would have helped to reduce the rates of interest, and thus would have given an impetus to its industrial interests of the State which nothing else could do. It would have made the producer so much richer, and thereby would have rendered trade brisker, and the State more prosperous. This is just what cheap Wheat freights in the future would also do.

It is not alone, however, cheap Wheat freights that we want; we want cheap Lumber freights, cheap Wool freights, cheap Wine freights etc., cheap freights by land and sea, by clipper, rail and steamship. Cheap freights mean cheap money cheap, Foreign goods and the best possible price for home products.

Cheap transportation for California looks forward to the building up of a great State, with great cities, a great people and great commerce; a State of which its inhabitants will, in the future, be as proud as the Frenchman is of France or the German is of Deutchland. It means that the San Francisco of the future shall be—not a second Venice, Athens, Paris, London, Rome or New York—but far mightier than they, and as much ahead of them as the civilization and enlightenment of the present is ahead of that of the past. Dear transportation means to go back to the era when the red Indian roamed, wild and undisputed, the lord of the continent.

And to all efforts towards breaking down the monopoly in the carrying trade, we say, Amen, whether it be that of the merchant or farmer; whether it be in the direction of the railroad or of the steamship or clipper ship; whether it be on Wheat to England or on Case Goods, Merchandise or manufactures to New York or Colorado. —*Journal of Commerce.*

SOLDERING BROKEN FILES.—A writer in the *English Mechanic*, who had broken the only half-round file he had by him, says: "After trying to use the broken end (it was broken about the middle) I was about to give up in despair, when I thought I would try soldering; and, to my surprise, it not only stood while I completed the small job I was then doing, but is in use still, and will stand all the force such a file needs to have applied to it in ordinary use. I used ordinary solder, Baker's soldering fluid, and a Bunsen burner. The temper at the joining is not in the slightest altered. Of course I was careful not to heat it more than requisite to melt the solder."

ELASTIC GLASS.—Patents have been taken out in several European countries, by M. Bastie, a Frenchman, for elastic glass, which we are told is to supersede much of the crockery and metal used for kitchen utensils and table-ware. A tumbler made of it is not broken by falling ten feet on a hard floor. The introduction of a new material that has come into general use for most articles of table-ware has been a rare event in history, and we shall follow with interest the fortunes of Bastie's discovery. A change in such matter implies economy and convenience.

The New Power.

One of the most noticeable features of the times is the uprising of the professors. The men who are at the head of colleges and universities are no longer content with their pupils and their class-rooms. They are emerging in many places from their studies and laboratories, and are enlightening the world upon things which it ought to know. Max. Miller is a world teacher rather than a professor at Oxford. When Tyndall speaks it is from an intellectual Olympus. Not only Belfast but civilization is his audience. Huxley's speculations radiate from his lecture room to the uttermost ends of the earth. Professor Sumner, of Yale, in a single small publication, has thrown more light upon American finance than can be found in the multitudinous volumes of Congressional debates. Professor Seelve, of Amherst, has just been elected to Congress from the Tenth District of Massachusetts, without the slightest effort on his part. He owes his popularity and elevation to an address on finance, delivered some time ago, which led his constituents to believe that in the retiring and scarcely known professor they had the law giver of whom they were in search. Professor Bonamy Price, of Oxford, is now on a visit to this country. Wherever he goes large crowds of the most intellectual people flock to hear him on currency and political economy. His last appearance was before the Board of Trade of Chicago. More attention is now generally paid to what Goldwin Smith or J. E. Carnes has to say on a certain class of subjects than to the most eloquent politicians. John Stuart Mill exercises a wider influence on humanity than any contemporary statesman, not even excepting Bismarck.

The reason of all this is plain enough. The professor of to-day has always something to say that will be of benefit to the world. His labors are no longer directed to the study and contemplation of the antique. He knows more than the history of Greece and Rome. He is skilled in other matters beside the dead languages. He has risen above syntax and prosody, and considers there is more in the world needing study than a logic, which, by its subtlety, supersedes the very thing which it was intended to illustrate. If we were to seek any figure that should at once exhibit the change which has taken place in him, we should say that he no longer turns his back upon life, peering into the dead past, but devotes all his energies to the phenomena that are transpiring around him. There are professors who can tell the world more about banking and currency than all the bankers in Christendom. There is no merchant—no matter how long he may have been engaged in commerce—who cannot learn something about prices and exchange from them. We do not know but that the lawyer, who, because of his training as a public speaker, has been monopolizing a good deal of the statemanship of all countries, could hear from them, even in his own special walk, something that it would be well for him to lay to heart.

The characteristic of the thougbt of the times is that there is nothing too small or insignificant for examination. We have large treatises on the respiration of plants. Great men are not above devoting a large part of their lives to the study of bees and ants. Among the investigations of modern scientists even the beefsteak and the best method of cooking it has a place. The age is one of inquiry into the familiar things which surround us. An explanation of what a man does when he walks, and the machinery which he brings into play, is considered to be of more importance than the geography of the Anabasis of Xenophon. What happens when a grain of wheat is put in the ground—a mystery yet not entirely solved—is a more attractive study than the strategy of Hannibal or the absurdities of Commodns. If there be any branch of the past that is being deeply considered it is the remote past. The explorations of modern times run rather to Assyrian inscriptions and buried Troys than to the period of Horace and Virgil. We know more about the Rig-Veda than we do of the Berkeleyan philosophy. But the two fields of study—the twilight of things and the present are really closely connected, in consequence of the similarity of the means employed. Schliemann recognizes the pick as the precursor of the pen. The old method would have been to critically examine Herodotus—to compare texts and force meanings. The modern method commences with a trench.

Hence it is that the professor is no longer a mere book-worm, who glides through dark corridors, and differs from the musty tomes of the library only in power of locomotion. He is, on the contrary, the most accomplished man of the times. In his retreat he has discovered the meaning of things familiar to everybody, but for that reason imperfectly understood. When he lectures, as a consequence crowds flock to hear him. When he speaks, it is in accents that are carried around the world. He is hound, from his accomplishments, to force his way into the active concerns of life. There will be more heard of the professors in the future than in the past. They are of no profession, though skilled in all.—*Bulletin.*

During October 8,000 tons of coal were unloaded on the Truckee division of the California Pacific Railroad. The company is probably bringing in a winter supply.

San Bernardino county, California, comprises an area of over 23,000 square miles, and is the largest county in the Union.

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The Sewing Machine

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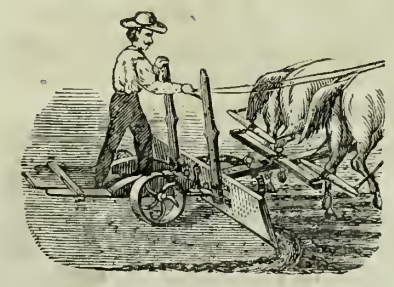
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The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

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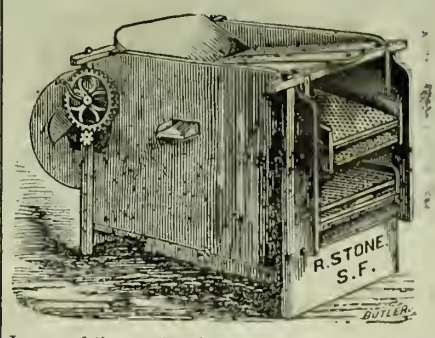
Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50; old style, $25. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

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Is one of the greatest improvements of the age for cleaniug and separating grain, while it combines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

For further information, apply to

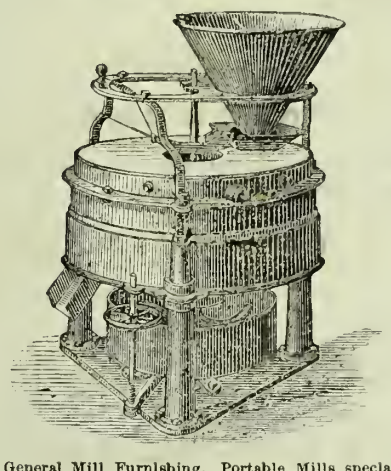
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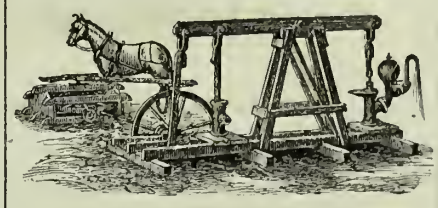
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

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MATTESON & WILLIAMSON'S

AMERICAN CHIEF



GANG PLOW.

Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,
Stockton, Cal.

Notice—To Tule Land Owners.

I am manufacturing a Gang Plow specially adapted to ploughing Tule Lands. Address

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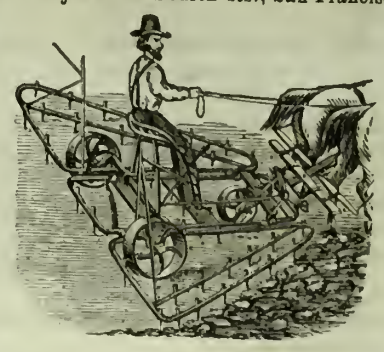
18v29-3m VALLEJO, CAL

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

First—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

Second—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

Third—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

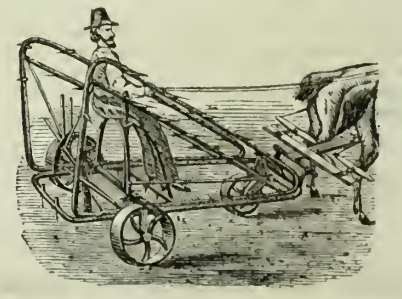
Fourth—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

Fifth—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



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The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

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CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Railway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

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THE SPLENDID IRON SHIP,

CITY OF YORK,

1255 Tons. A 1.

AULD.....Master

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

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Every Legitimate Branch of Patent Agency Business promptly and thoroughly conducted.
SEND FOR CIRCULAR.

The Aughinbaugh Blackberry



This new and excellent variety of Blackberries, which begin to ripen from the first to the fifteenth of May, and continue to produce berries until the middle of July, about the time other varieties begin to ripen.

Plants are now ready for transplanting and for sale at my residence on Washington Avenue, west of Euclid Street, Alameda, and at Geo. F. Silvester's, 317 Washington Street, San Francisco. Price, $25 per hundred plants.

G. AUGHINBAUGH.

23v8-tf

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San Jose, California.

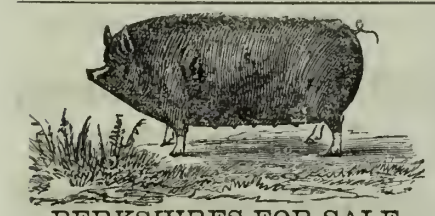
We offer this season a Complete Stock of

FRUIT AND ORNAMENTAL TREES,

SMALL FRUITS AND PLANTS.

The attention of Dealers, Nurserymen and Planters is invited to our Large Stock of Fruit Trees.
All Leading Market Varieties are grown in large quantities To all those purchasing largely we will make a Liberal Discount.
Catalogues FREE on application.

v8-23-tf JOHN ROCK, San Jose, Cal.



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6 Boars, 14 to 18 months old. and 5 Breeding Sows will be sold very low if applied for soon.

23v8.2t R. S. THOMPSON, Napa, Cal.

D. E. HOUGH,

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Nut, Shade, Ornamental and Fruit Trees, and Small Fruits, true to name, for sale at fair prices. v8-23-3m

Farmers and Threshers

WISHING TO HAVE

STRAW BURNING ENGINES

For next season must engage them soon, as most of those now building are already sold. Threshing Engines for Repairs should be sent in now. A number of second-hand Engines—taken in exchange for "Straw Burners"—for sale cheap. For particulars and prices, address:

H. W. RICE,
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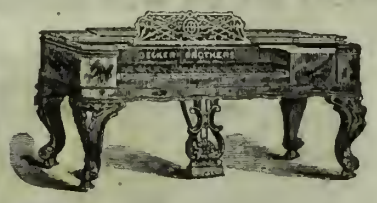
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THE KING OF PIANOS.



THE DECKER BROS.,

RECEIVED

FIRST PREMIUM

AT THE

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Over all competitors and against powerful combinations as proved by the following:

[OFFICIAL.]

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I hereby certify that Messrs. Kohler, Chase & Co., of San Francisco, exhibited at the State Fair of 1874, and received First Premium for DECKER GRAND PIANO and DECKER PARLOR PIANO.

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THE SUPERIORITY OF THE

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Is universally acknowledged among musicians. None openly speak ill of them.

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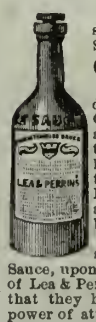
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—CELEBRATED—

Worcestershire Sauce.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

To be obtained of Messrs. CROSS & CO.,
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GEO F. SILVESTER,

SEEDSMAN,

IMPORTER AND DEALER IN ALL KINDS OF

VEGETABLE, FLOWER, FIELD, FRUIT

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GARDEN TOOLS, TREES, PLANTS, Etc.

No. 317 Washington Street, San Francisco,

Between Battery and Front.

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M. EYRE, Napa, Cal.

Bronze Turkeys, Emden Geese,



Brahmas, Houdans,

LEGHORNS, and GAMES.

Black Cayuga and Aylesbury Ducks,

Bantams, etc.

Eggs, fresh, pure, true to name; well-packed so as to hatch after arrival.

ILLUSTRATED CIRCULAR AND PRICE-LIST FREE.

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OF EVERY VARIETY.

Fresh and reliable, such as experience and care only can select.

GRASS AND CLOVER SEEDS, KENTUCKY BLUE GRASS, HUNGARIAN, ORCHARD, ITALIAN RYE, RED TOP, TIMOTHY, MESQUIT, SWEET VERNAL, CHOICE CALIFORNIA ALFALFA, WHITE CLOVER, RED OLOVER, Etc.

Also, RAMIE, JUTE AND TOBACCO SEEDS; together with a fine and complete collection of TREE SEEDS, AUSTRALIAN BLUE GUM, SEQUOIA GIGANTEA, PINUS INSIGNIS, Etc.

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Cor. 16th & Castro Streets, Oakland, Cal.

A choice selection of Brahmas, Cochins, Houdans, Games, Leghorns, Bantams, Bronze Turkeys, and Ducks constantly on hand and for sale at reasonable rates. Eggs guaranteed to be fresh, true to name and to reach customers safely. Also two Imported Bronze Gobblers for sale; weight 38lbs; price $75 each. Send for Illustrated Circular containing a full description of all the best known and most profitable fowls in the world, to

GEO. B. BAYLEY,
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Plows

☞Black Hawk, Collins, "Jones," Peoria,

Of all kinds and sizes. The largest stock ever offered in California; all NEW and just received, at low prices. Also, Cultivators, Harrows, Seed-Sowers, etc. Sold by

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Semi-Tropical Nurseries.

Forty varieties of the Citrus family of semi-tropical trees, including many rare and beautiful, as well as useful and profitable kinds.

Grafted and Budded Orange Trees a specialty. Trees packed to arrive in good order. Priced Catalogue sent free. Address me P. O. Box, 528, Los Angeles city, Cal.

23v8.6m THOS. A. GAREY.

CALIFORNIA PORTRAYED.

The columns of the PACIFIC RURAL PRESS from January 1, 1870, contain the most complete and reliable information concerning the soil, climate, products and capabilities of the different sections of California, of any publication yet made. Neither new comers or old settlers in the rural districts can well afford to do without this enterprising and leading agricultural weekly It is a good helper at home and a welcome guest abroad.

For the very best Photographs go to BRADLEY & RULOFSON'S GALLERY, with an "Elevator" 429 Montgomery street, San Francisco. 2v7-6m

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of two lines or less will be inserted in this directory at the rate of 50 cents a line per month. A line will average about eight words. Payable quarterly.

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R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

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CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

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CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Gait Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

WM. QUINN, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

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PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

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STANTON & POWERS, Sacramento, Cal. Choice Jersey Heifers at reasonable rates, Address L. C. Powers, Sacramento, Cal.

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N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

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A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

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M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

Mrs. L. J. WATKINS, Santa Clara. Prsminm Fowls. White Leghorn, S. S. Hamhnrg, Game Bantams, and Aylesbury Ducks. Also, Eggs. 21v8-3t

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DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, DECEMBER 12, 1874. [Number 24.

Juvenile Criminals.

Those who have read the recent criminal records of San Francisco must have been shocked at the accounts published in the city papers a few days since, of fourteen juvenile criminals being under arrest at the city prison on one night; their ages ranging from eight to fourteen years. One of the youngest of these had secreted about his person stolen jewelry amounting to over $150 in value. Among these youthful criminals were juvenile burglars and pickpockets; other departments of crime were also well represented. The "resources of California" in criminal matters are now being developed to that exteut that our city prisons are crowded beyond their lodging capacity, aud age having precedence here--not out of respect but as a matter of safety—these youngsters were denied ordinary cell accommodations, and were compelled to lie upon the benches outside.

A gentleman counected with one of the morning papers, and who was on duty as night police reporter, in his conversation with us on the subject, characterized the scenes as "sickening ing in the extreme." It is indeed a sad and sickeniug sight, and would be appalling did we not know that the capacity for good in human nature is equal to its success in crime; and if people would be satisfied iu any case iu thanking God that they and their children are not as other people and *their* children, this would furnish as justifiable an instance as could be found. But social Pharaseism is getting to be at about as great a discount as that which formerly went about dressed in a religious garb.

We protest against the scene described above being accepted as a representative picture of juvenile life in San Francisco. Our large and numerous schools are as crowded with bright, pure and diligent searchers after knowledge, as are our city prisons with the graduates of criminal education, and scores of boys of the ages of these youthful criminals, are working regularly at various occupations iu large and small establishments, earning money that is judiciously used by worthy families. But this, like much other true merit that is blooming in our midst, is allowed to go without any newspaper record. Suppose, just for a change, that one of our enterprising dailies were to have a school reporter and a workshop repoiter, who were required to search for merit in our excellent schools and thriving shops and manufactories,, as indefatigably as their brother reporters ferret out vice in its "dives" aud other hiding places. Should we not obtain a more accurate picture of the times and the city in which we live than is given us at present? The popnlar press is just about as faithful a "mirror of the times" as is the stage; and we all know how the latter has failed in obeying the injunction of the great master to "show virtue in its true image," and has only shown "vice its own deformity."

Great injustice is also done to the girls of San Francisco. There are hundreds of fresh, blooming, promising girls, going and coming to and from their work every morning and evening, receiving fair wages and respectful treatment from their employers, there being nothing in their conduct that would warrant us in classing them below the girls of any city or rural district. But the Simon pure in our midst can see nothing good in them, and the residents of the rural districts and people of the East, seem to possess an insatiable appetite for anything derogatory to "the girls of San Francisco;" and as the press is bound to tell the public what it wants to hear, whether it is strictly true or not, disparaging false impressions continue to prevail.

The broad level of middle life is never traversed by the newspaper reporter. The Stanley's of the press are sent to Africa, and expeditions are fitted out to explore the Polar region, but the vast, prosperous, progressive country lying between these two extremes, is scarcely looked into except to furnish means to sustain these gigantic exploring enterprises. One class of reporters go about like Chinese rag-pickers, hooking filthy scraps from the gutters and dirt piles of society, emptying their huge baskets morning and evening at the doors of a disgusted community. The higher grade of the reportorial corps is commissioned to devote unlimited space to chronicling the move-



COMMON MAGPIE.

ments and describing the trappings of "upstart fortune;" while the only uewspaper employees who visit the decent, non-sensational, every-day homes of middle life, where the only reliable representation of the social condition of the country is to be obtained, are the carrier and the bill collector.

Probably this seeming neglect will find an excuse in the very fact that there is nothing sensational in the latter place to write about; but is this expansive mirror only expected to reflect the sensational points of the times? Should it not show us the graceful courses aud sweet dimples of society, as well as the unsightly warts and tumors with which it is afflicted, or the untasteful frills with which it bedecks itself? Possibly, too, it is better for the broad land of social life that it thus remains unvisited; but this will hardly be accepted as the reason why it has remained unvisited.

Still there is no denying that these striking points in this sad picture are, in the main, correctly given, though the background is not there; and we could furnish additional facts from our own observation which would make the above sketch of youthful crime still more striking, and we believe that if the subject were carefully studied—divested of its sensationalism--it would result in a conviction that these youthful criminals—and many also of a larger growth—are impelled in their wild doings more by the romance of brigandage than by the desire of pecuniary gain. We believe further that a very large portion of the crimes, as well as the follies that are chronicled so conspicuously in the press of the day, are committed with a view to be so chronicled; and that the American mania for getting its name into print is crowding the criminal departments of American journalism, as uncomfortably as it does the poet's corner, and the columns appropriated to prose fiction and to science. Thus sensational journalism, like jealousy, may be credited with making the meat it feeds upon.

Common Magpie.

Nuttall, Bonaparte, and Swainson regard the magpie of America and Europe as identical, and Audubon approves their judgment. Its range is general throughout Europe, but in this country it is restricted to the northern and western regions. It is stated by Dr. Richardsen that it has not been seen nearer to the Atlantic on this continent than the head of Red river, in Louisiana. It dwells in the fur countries of the North in winter as well as in summer, and is a common resident of the interior of Texas, Western Louisiana, Arkansas, and Missouri. It suffers from the want of food, but not from cold, in high northern latitudes, where travelers have been almost unable to protect their galled horses from its assaults. Unlike the magpie of Europe, it then has little fear of man, the young especially coming to his encampments or habitations, and greedily devouring whatever food they can obtain, even from his hands. The raven is often its companion, but the crow is not found with it.

In the central table-land of the Rocky mountains, the nests of the magpie may be seen, usually in low, thick bushes, barricaded over and floored with interlaced twigs; and it is common in many parts of this State. Its common call is *pay pay*. When approaching each other, they practice a low chatter, but utter a monotonous and gluttonous croak while eating.

The account of the habits of the European magpie, given by Macgillivray, is recited by Audubon in treating of the American bird. He states that its food cousists of testaceens molusca, slugs, larvæ, worms, young birds, eggs, small quadrupeds, carriou, and sometimes grain and fruits of different kinds, in search of which it frequents the fields, hedges, thickets, and orchards; it occasionally visits the farmyard, prowls among the stacks, and perches on the house-tops, whence it sallies to examine any attractive spot. It is probably unjustly accused of picking out the eyes of lambs and sickly sheep; but it eats eggs, or the young of chickens or ducks, when the old are not present to repel it. Its more wary character, in Europe, is the result of the persecutiou it experiences because of its depredations.

The magpie walks like the crow, but often leaps iu a sidelong manner. It is prompt to apprize its companions of the approach of danger, which it does by a chatter indicating its own fears.

The eggs of this species are from three to six in number, aud vary in form and color. In general, they are regularly ovate, or a little pointed, more than one and a half inches in length, and nearly or quite an inch across. They are frequently pale-green, freckled all over with umber-brown and light-purple, and sometimes pale-blue or bluish-white, or greenish-white, with smaller spots and dots of the same dark colors, so as very nearly to resemble the eggs of the jay, which, however, are smaller.

Rye Grass.—We give the following extract of a letter from New Zealand from a bank director well known there and here. "A friend of mine is making a shipment to San Francisco of the celebrated perennial rye grass seed—a wonderful article! I have tried it myself; every farmer in New Zealand uses it exclusively when they are able to obtain it. Knowing its great value and that it is superior to any other variety of rye grass seed, I have thought well to let you know my opinion of it, so that, in case enquiry be made, you can recommend it to your farmers with every confidence of its being approved of by them. Besides the uses I have mentioned, it is rendering New Zealand famous for growing the best long wools. I predict a very great demand for this seed in California."

American Sweet Chestnut Trees. — We would call attention to an advertisement in another column for the sale of a large lot of American sweet chestnut trees, which have recently been received from Ohio. They will be sold in lots to suit, and on most reasonable terms.

A Beautiful Homestead for Sale.—Mr. Ball advertises in the Rural to sell, on favorable terms, one of the most desirable places in Napa valley.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

From Stanislaus County.

EDITORS PRESS:—I have seen but little from this quarter in your valuable journal, of late, and that little mostly culled from our local papers. Well, your correspondent has been traveling around during the last two weeks, and can tell your numerous readers that Stanislans county is still on the maps of California; and I also can tell you that the farmers of said county are alive snd kicking, notwithstanding the failure of E. Morgan's SONS. Even here the Grangers have their enemies, and that failnre is qnite a "mare's neat" for them; but the Granger only smiles, walks on, and let's them enjoy their pleasant fancy; but I did not intend to touch on that subject. I took up my pen to give some account of my wanderings in search of a lost colt. My route on this day was along the south side of the Stanislaus river; and I found the farmers everywhere jubilant over the fine weather we are favored with, and every quadruped that will pull in harness is brought into requisition and hitched to the plow. Farming goes on with a vim never before seen in this county; I never saw vegetstion so forward at this season of the year; but I am not the oldest resident, this being only my 28th year in California. I visited qnite a number of the readers of the PRESS during my peregrinations, and among the nnmber, Mr. Long, who cultivates a fine garden and orchard on the river bottom. I found that gentleman somewhere between snnlight and the infernal regions, denominated by him a cellsr; and there he was decked in a long apron, shirt sleeves rolled up, turning the crank of a savage looking machine with one hand, while he was cramming its mouth with grapes from a large box with the other. But he soon quit the operation and made a bee line for a cask at the other sido of the vault, from which he drew some excellent cider, which we guzzled with satisfaction, and which brought vividly to memory those long winter evenings your correspondent passed with his friends at the old Bay State, when they sat around the glowing fire roasting chestnnts, driuking cider and cracking jokes. Bnt as

> Time speeds on with relentless wing,
> He is bringi g a change to all;
> The daisies peep from the lap of spring,
> And oak leaves fade and fall, etc.

But those times have long since past away, and as the poet beautifully expresses it, only "fond recollection presents them to view." But away with recollections; let ns make use of the present.

My next visit was to the farm of Mr. Csrver, a short distance from that of Mr. Long. Mr. Carver is farming extensively, if my memory is not at fault. I saw four six-horse teams of his, all in the same field, dragging Matteson's gang plows after them. Stanislaus county will have a greater area sown to wheat this year than ever before. W. T. EVANS.

Dry Creek, Stanislaus Co., Nov. 24th, 1874.

Potatoes in Los Angeles County.

EDITORS RURAL PRESS:—In a recent number of the PRESS a correspondent inquires "if potatoes can be sucecssfully raised in Los Angeles county?"

In reply I will stato that I measured nine squaro yards of a piece of land planted in Pink eye potatoes, and made full allowauce for the spaces betwoen the rows, and when the potatoes were dug they weighed 177 pounds. The piece messnred and dug was a fair aversge of the rest. An acre is 538 times 9 square yards, and at the same rate the product of sn acro would be 588 times 177 pounds, or 95,266 pounds, or 47½ tons per aore. This will sound like a pretty big story, but it is a simple statement of facts, and what is more, one easily proved; for although that crop has been dug and sold, there are other crops on the samo place, now mature, that sre yielding even better. I sold the land on which they were raised to a live German, John Gordell, in January last, and as he was undecided what would pay him best, he planted a little of everything as a test, and in every case the results were most astonishing, as many who have seen the place can testify. Besides these exporimental crops he has raised enough of coin, castor and other beans, potatoes, peanuts, vegetables, tobaeco, alfalfa and hay, to pay for the first cost of his land at $20 per acre, although but little more than half of his 40-acre tract was under cultivation. He has a flowing artesian well, and can regulate tho moisture of his land to a fraction. His farming is a mathematical certainty; he takes no chanoes, and believes that Providence helps those who help themselves. There are lots of men here who have just as good, and many of them better land than his, hut when you compare the results of their idleness and his intelligent industry the resnlt is not flattering to the great American "Barley Scratcher." WM. R. OLDEN.

Farming at Rio Vista.

EDITORS PRESS.—We live on a great tract of adobo land. For years past the farmers have been giving their whole attention to the staple production of California—wheat. Last spring a neighbor sowed a small area in flaxseed. He is so well pleased with the success of his experiment that he means to sow forty acres this season. Others think of trying it also. The land is becoming very much exhausted by this continued wheat growing, and anything that will grow here besides the valuable cereal will prove a great blessing. If, as Mr. Armstrong of Salinas, tells the RURAL PRESS, strong adobe will raise good crops of flax, it ought to do well here.

The great fault of the farmors of Montezuma Hill is that they fear to experiment. We believe that any one farmer in this locality would with the aid of a windmill, flood a tract of land sufficient to supply himself with a good pasture of alfalfa. They contend that any system of irrigation would cause the earth to bake completely, and will declare this all the while, that they cannot avoid seeing that their wives keep their flowers thriving in the adobe, by simply pouring water on them occasionally. Only a few have set out orchards and vineyards, and fewer still have any ornamental trees. The most of them might have very good vegetable gardens, hut they seem to prefer sowing all their land in wheat, and buying their vegetables, utterly regardless of the old axiom that "one dollar saved is two dollars earned." BELTA.

Rio Vista, Solano county, Nov. 29, 1874.

From Kalamazoo, Michigan.

EDITORS PRESS:—I will write a little about the crops of this season, Early sown wheat is looking well, and many of the farmers have turned their stock on it to save their other feed. Wheat is now selling at from $1 03 to $1 07 per bushel, most of the time. Corn was a poor crop this year, the early cultivated being the best, there is fodder enough for a good crop of corn if it had eared good. New corn now brings 75 cents per bushel. Potatoes were a small crop mostly on account of dry weather, and not from the Colorado bng's distruction, as heretofore. They are bringing now 75 to 80 cents per bushel. Apples have been a very good crop for the season. There are many hundreds of bushels pnt np this fall to send off. I think there is no regular price for them in market now. We have had a very open fall so far with little snow; about nine inches fell the last of October, which went off soon and there is now only about three inches left. Many of the nurserymen were peddling their trees only two days ago, as if it were spring time.

HEBY H. MAPLES.

Kalamazoo, Michigan, Nov. 21, 1874.

Returning to California.

EDITORS PRESS:—Please send me a copy of your RURAL PRESS. Two years ago when I lived in California I was a subscriber for it snd read it with a great deal of interest; since then I have not seen it. I am now thinking of returning to California again early in the spring, and when I do will take your paper again.

W. EDGAR STRUNCK.

McMinnville, Oregon, Nov. 16, 1874.

[As to the tempersnce colony at Lompoc we refer Mr. S., to O. S. Abbott, Santa Barbara or to Wm. H. Martin, California street, S. F.—EDS. PRESS.]

THE DAIRY.

Breeds for the Dairy.

The fairs of the seasou, we are pleased to observe, have a larger number of entries in tho dairy class than for several years past. Indeed, we do not remember to have seen so many in any previous year. They embrace Ayrshires, Jerseys, Holsteins and Short-horns, and have been very generally of rare excellence, showing that increased attention is being attracted to this important department of breeding. We do not know what race is most popular. Tho large black and white Holsteins are certainly showing well, though, as yet, in much smaller numbers than the other two milk herds. We are not posted as to the *records* that have been made where the associationa have required tests of quantity of milk and butter.

At tho Ohio State Fair tho prizes for best dairy cows, with statement of quantity of milk and butter, have been taken mostly by the Short-horns. The first prize at the late fair was taken by a thoroughbred sold by us as a calf in 1869. The score, as reported to us by the owner of this Short-horn, was 406 lbs. of milk, and 14 lbs. 13 oz. of butter in seven days, on grass only.

We have the promise of a full report from this gentleman as to the yield of his cows for several years past. We hope that the owners of dairy stock in different parts of the country will favor us with reports of facts illustrative of the values of the different breeds.

An intelligent gentleman, a recent graduate of Harvard College, whom we met at the New York State Fair, and who is engaged in the manufacture of butter for the Boston market, observed that butter made from the Jersey cow, while very excellent and fine looking for present use, did not keep well. We should be greatly obliged to our subscribers for statements of any facts in relation to this interesting question. If there is any difference in the particular stated between the milk of the Jerseys and the Ayrshires or Short-horns, a chemical test ought to reveal to us what it is. We should be greatly obliged for any information in regard to the feeding qualities and excellencies of the beef of the Ayrshires, the Jerseys, and the Holsteins, as these are matters that cannot be entirely overlooked in determining the value of even a dairy cow.—*T. C. J., in Live Stock Journal.*

Oil-Cake or Bran?

X. A. Willard gives the following comparison between oil cake and bran:

Their relative merits will be seen by the subjoined comparison of the exact weight of each sort of ingredient contained in 2,240 pounds of bran and oil-cake severally:

	OIL CAKE.	BRAN.
	lbs.	lbs.
Nitrogenous or muscle-forming food (albumen, gluten and casein)	490	448
Heat-giving and fatty substances (Starch	897	1,232
Heat-giving and fatty substances (Fat	252	112
Mineral and bone-forming substances (phosphates of lime, etc., alkaline salts)	154	168
Water, husk, waste	434	280

The quantity of ash in both is almost the same. In both, too, we find the same sort of organic compounds, gluten, starch, fat, etc. According to Prof. Johnson, phosphoric acid in bran is equal to that in oil-cake. There is a table giving the aversge quantities of water, organic matter, ash, albnminoids, carbohydrates, etc., crude fiber-fat, etc., in various agricultural plants and products, according to the analysis of Professors Wolf and Knop.

In this table the proximate composition of wheaten bran and oil-cake are given as followa:

	Water.	Organic matter.	Ash.	Albnminoids.	Carbohydrates.	Crude fiber.	Fat, etc
Wheat bran	13.1	81.8	5.1	14.0	50.0	17.8	3.8
Linseed cake	11.5	80.6	7.9	28.3	41.3	11.0	10.0

From this it will be seen that the albuminoids and oil in the oil-cake, as compared with the same in bran, are considerably higher than in the first table presented.

Bran makes an excellent feed for dairy stock, and considering the less cost at which it may be obtained, it will probably give better results for the money expended.

It must be observed, however, that no chemical analysis will show the exact nutritive value of any kind of food. Nutritive value is found by putting the substance into the stomach of a living animal and noting the results. It is time we have some knowledge of the nutritive value of sugar, starch, oil, albumen, gluten and other constituents of food; and from the relative proportion of these in a given substance we can guess as to its general nutritive effect. Still there are some kinds of food that produce better results than the percentage of their nutritive constituents would seem to show.

We advise our correspondent to make an experiment—feeding for a time with bran and then with oil-meal, and noting the result in each case. In this way he will be able to satisfy himself as to which is the most economical food.

Cooling and Airing Milk.

A correspondent of the Syracuse, N. Y. *Standard*, replying to an article on handling and cooling milk, says:

You are quite right in my estimation in attributing great importance to the handling of milk before it reaches the factory. Though manufacturers have grown very expert in working milk in all the varying conditions in which it is received, it is difficult to wipe out by any after treatment the impressions which milk many times receives before it falls into their hands.

I am satisfied that the method of transporting determines that question. The most objectionable thing there is in new milk is the odor it contains. Last winter, in experimenting with this odor, I found it to consist of an animal oil whose volatility increased with the temperature, and by previous experiments I had demonstrated that the odor forms in milk after it has left the udder as well as before, if it is kept at a suitable temperature. After the odor has all been driven off or allowed to escape, if the milk is kept warm and close covered, it will soon be filled with a new supply of odor. When milk stands open and exposed to the air, the odor escapes as fast as it is formed. As with the action of all ferments, the formation of the odor is retarded as the temperature is reduced. These facts have an important significance in the treatment of milk, and especially in its transportation.

If milk is carried in an open vessel fully exposed to the air and agitated, as in a common carrying can with the cover off, it will be more completely cleansed of odor without cooling than with. If farmers could only be induced to give their milk a full exposure to the air while on the way to the factory, it would not only need no cooling, but would actually be improved for the purpose of cheese-making by the act of carrying, the distance being within certain limits, say five miles. Facilities at the factory can take care of it when it arrives thus aired.

BEES.

Bee-Keepers' Talk.

At a late farmers' meeting at Utica, N. Y., Mr. Quinby read an essay on bee-keeping from which we may make extracts hereafter. At the close of the reading the members talked as follows:

Mr. Sisson, of Otsego.—I believe one great hindrance to bee-keeping is the fear of being stung. This fear is general. Until this fear is removed, there can be little progress. Bees are easily handled, if you can frighten them. Smoke is one of the best agencies to frighten them. Tobacco I find is injurious to bees. It matters not how you frighten them. They are easily handled when they are frightened and when they are filled with honey. A puff or two of smoke into the entrance of the hive will accomplish it unless they are some of the hybrids. Any one can soon learn how to handle their bees. I smoke with anything except tobacco. I take old cotton rags in a roll and set it on fire and blow across the opening of the hive. I have seen patent arrangements to keep worms from the hive. I believe all that is necessary to keep off worms is to have strong stocks. I have come to the conclusion that dysentery is caused by cold, or at least by sudden change of temperature. I have had an instance of this this season, by taking ont a comb of a cold day. The bees had a well defined dysentery before the comb was replaced.

L. C. Roat, of Mohawk.—I believe that bees are essily handled when filled with honey. At first they sre excited and the first thing they do is to resist. The smoke reaches them and they are convinced that resistance is useless, and go to fill themseves. In cool weather when the bees are not working it takes more smoke, because the bees are quite empty. In the working season when the bees are well filled, I have handled numbers of swarms without any smoke at all.

R. Bacon, Verona.—I believe that tobacco is injurious for smoking bees. I use rotton wood. I find a maple stump and split off some and keep it ready for use. I sometimes have tubes, bnt if in a hurry just take a little burning piece. I find bees as soon as smoked begin to fill themselves. It is sll nonsense that people cannot handle bees. A little piece of wood in a tube or in Mr. Quinby's "smoker," will be all that is necessary. Bees must be taken care of. If taken care of properly they will pay. If I were a young man with a little capital, I would go for bees and I could make more money than at anything else. As to caring for my bees. In the spring as soon as weather permits, I pnt my hives on the ranges. After the bees have had a fly I go through the hives and clean out everything which does not belong there. If a hive seems to be doing well, all right. If not take out the frames. If there is a worm remove it; if there is no queen get one and put it in. The hives must be watched and cared for.

L. C. Root—There are two bee magazines which claim that bee-keeping is good business for old women and children, because it is so easy. This is a mistake. The work is very difficult when the bees are kept in large nnmbers. It is necessary, to do well in bee-keeping, to have good stocks. Some swarms are cheaper at $25 than others are at $1. A large force will do a large amount of work. You can tell when a hive is strong by lifting it np, and when a layer of bees appears on the bottom board, it is a good swarm. Go aronnd in the spring and see that every hive has a queen. Then, to increase brood, move the frames away from the center, and pnt in new comb, and the queen will fill the center. This must not be done too fast, for the cluster must be large enough to warm the hive. While this is going on, bees may have to be fed. Great care must be taken to secure enough available food. The great point in securing surplns is preventing swarming. I watch every hive. The queens' wings are all clipped. When the swarms come out, we go and pick up the queen and cage her; then open the hive and cut out all queen cells and remove one or two brood combs, and put in empty frames. We must take out just enough to counteract the desire to swarm. I think there is a class of bees in a hive not old enough to get honey, and are idle. These may be employed by letting them make comb. To reach greatest profit, I believe every apiarian should make both box and extracted honey. These young bees will make comb, if empty frames are supplied, which may be used as guide combs in boxes.

Mr Sisson—This question of getting comb is very important. In my hives I prevent swarming and get comb. I set the hive with the bees above an empty hive with a single sheet of dry comb, and the bees build comb. The comb is worker comb, and drone comb would be better to use as guide comb in honey boxes, but the comb is made. The hive must be taken off before the bees deposit bee bread.

Mr. Quinby—I keep my bees in a cellar under a barn. I want to put in bees enough to keep the temperature at 45 degs.

Mr. Root—I have my bees now at home. Some are too heavy, some too light. I weigh each hive and mark it. Then I weigh an empty hive containing empty combs. I allow five pounds for the weight of bees, and add to this 25 pounds for winter stores. I bring all hives to this weight by feeding. I am sure feeding during the winter is not right. I would be sure that all hives are supplied before placing in winter quarters.

Sheep and Wool.

Proper Care of Sheep.

Some of our contemporaries treat this problem as a very simple one. We are to do as the sheep breeders do in Canada and in England—get the best mutton breeds, among which are mentioned the Lincolns, Leicesters and Cotswolds. But the reason why these should be selected is not given. Is it because the mutton is better? In most of our markets we do not understand that these breeds, or even the Downs, which in England sell from two to four cents per pound higher than ordinary long wools, will fetch higher prices than large, fat Merinos. This is the discouraging feature of our markets for mutton—quality goes for nothing. We have inquired of butchers in different parts of the United States, and the general reply has been that well fatted mutton of all breeds was on a par as to price, and frequently it has been added that large and over-fatted long-wools are difficult to sell.

Then we are told that sheep require green food, and will not do well if kept on dry food for six months in the year; but to remedy this all we have to do is to grow roots—turnips, beets and carrots—and keep our sheep growing in winter as in summer. How simple these things seem when we are left free to follow mere theory, and do not trouble ourselves about facts and actual experience. The practical man knows that in any part of the United States where corn can be grown roots cannot be produced profitably—they require too much labor, and in ordinary seasons are a very uncertain and poor yield.

Our own experience in sheep-breeding has been exclusively with the long wools and Downs, and we are much interested in the success of the breeds. But, in justice to our readers we are bound to confess that in our judgment they are not more profitable than good Merinos. Indeed, unless the fleece of the long wool varieties commands a higher price in the market than the Merino wools, the growing of the latter must be the most profitable. We have before argued that Merinos will bear confinement in winter on dry feed better than the long wools, and for this reason, as our winter feed must be corn and hay, in most of the stock growing States where flocks of any considerable size are kept, we must expect in the future as in the past, that the Merino will be the prevailing breed.

Where smaller flocks are kept, and especially where sheep are bred for the farmer's own mutton—the cheapest and best meat he can provide—it ought to be the best breed for this special purpose. Here it will pay as we have heretofore shown, to keep the Downs, though their fleece is less profitable than those of other varieties.

It is also true that for early lambs for city markets, any of the English breeds and their crosses are more profitable than the Merinos. The difficulty here is to get suitable ewes to breed the lambs. The pure Downs, or long wools will cost too much, while most of what we call common sheep are largely of the Merino blood, and do not furnish milk enough for our purpose. But ewes, half Southdown or half Cotswold, would answer admirably if bred to full blooded rams of these breeds, for the production of early lambs, which would sell in New York at seven or ten cents per pound.—*N. Y. Live Stock Journal.*

Trueness or Evenness of Fleeces.

It is not only important that wools should be free from defects, but it is desirable that the whole of the various parts of the fleece should have, as nearly as possible, a uniformity of character; that is, as regards fineness, length of staple, density and softness. The method of determining this quality of evenness is thus described in the *Bulletin* of the National Association of Wool Manufacturers:

Always assuming that the wool to be inspected is really a fine wool, we first examine the shoulder, at the part where the finest and best wool is usually found. This we take as the standard, and compare it with, in turn, the wool from the ribs, the thigh, the rump and the hinder parts; and the nearer the wool from these various portions of the animal approaches the standard, the better. First, we scrutinize the fineness, and if the result be satisfactory, we pronounce the fleece, in respect to fineness, very "even." Next, we inquire into the length of the staple, and if we find that the wool on the ribs, thigh and back approximates reasonably in length to that of our standard, we again declare the sheep, as regards length of staple, true and even.

We next desire to satisfy ourselves of the density of the fleece, and this we do by closing the hand upon a portion of the rump and of the loin wool, the fleece at these points being usually the thinnest, and faulty; and if this again give satisfaction, we signify the fact by designating the wool even, as respects density. Now to summarize these separate examinations. If you find the fleece of nearly equal fineness from the shoulder to the thigh; of nearly equal length at the shoulder, rib, thigh and back; and of equal density at the shoulder and across the loins, you may conclude that you have a nearly perfect sheep.—*Buckeye Farmer.*

Abandonment of Sheep Raising in the South.—At various points in the South our correspondents speak of the destruction of sheep by that chronic nuisance, worthless dogs, as increasing to such an extent that sheep raising has been measursbly abandoned. Our correspondent in Elizabeth City, Virginia, especially deplores this destruction, as that section of the country can hardly be excelled either in the weight of fleece or quality of mutton produced.—*Agricultural Report.*

The Swine Yard.

The Pork Prospect.

We have numerous inquiries as to the probable demand and prices for pork the coming year. The elements in the problem are few and easily read. More effort than usual has been made to ascertain the real supply of hogs as compared with last year; and from all the information yet obtained, both from the number in the hands of the farmer and the number sent to market, it is quite evident that the supply of hogs is considerably less than last year. But it is also evident that those held are not in as good condition as usual, and that they require more feeding to finish them for market. The corn crop is also deficient, and thus the means of fattening them considerably less than last year, and they are liable to come forward lighter in weight than heretofore, especially early in the season, and thus the supply will be both less in number and weight. But there are other considerations which will tend to modify this to some extent. The wheat crop is undoubtedly in excess, and its price will be comparatively less than corn. This will cause much of it to be used to fatten pork, and also cause it to take the place of corn for export. Spring wheat, being about as cheap as corn, will be much preferred for foreign market, even for feeding purposes, and will therefore take the place of corn to a considerable extent, thus making corn more plentiful for home consumption, and tend to lower its price. This will, no doubt, cause the hogs to be finished better for late market than is now supposed. Farmers are anticipating very high prices for pork, and this will cause those who have feed to keep them for a rise.

We should advise those who have not the grain for full feeding, to sell early, rather than to buy grain for further feeding; as the price is quite likely to be as high for light hogs, early, as for heavy, well-fed hogs late in winter. The old stock of meats seems to be sold unusually close, and the market is quite likely to start off in the early part of the season, on very favorable terms to the seller. And, on a view of all the circumstances likely to affect the price, we would not advise those who have hogs ready for market, to hold for better times, but to sell at once, when ready. Those who have corn, and hogs to eat it, will do well to work their corn in the concentrated form of pork, for it will, no doubt, bring them as much money, and it is always best to strive for a good article, for a few pounds laid upon a pig, in ripening it, increases the value of every pound in its carcass; so that fifty pounds thus put on might increase the value of the pig 100 pounds. But we do not think farmers will make anything this year by holding their hogs after they are ready for market. In fact, we think it probable that both corn and hogs will be cheaper in April than December.—*Live Stock Journal.*

"Perplexities of the Packers."

In an article under this head the St. Louis *Democrat* of the 11th of November, remarks:

"No one expects any better price in product and all admit the probability of a decline. It does not take much of a drop in meat to saddle a loss of $3 per hog on the packer, and clean him out of $50,000 to $200,000 of his capital. But what is to be done? Prices cannot be forced down. There are packers in Chicago and elsewhere who will take all the hogs they can get at present prices. They will not hold the product, however. They will borrow largely of the banks. Many of them will burst into smithereens, and the banks will have to shoulder the loss. St. Louis packers have this kind of competition to contend with and they must face the music. A couple or more of them went into the hog market yesterday and commenced buying. One packer bought 167 hogs averaging 260 pounds, at $6 62½. Another packer took a round lot, averaging 260 pounds, at $6 60. So the ball opens, but how is it to end? St. Louis must have what hogs she needs, so it is fair to presume that owners of hogs will get good prices once in their lives, unless Chicago bankers get frightened and refuse to loan packers on so steep a basis of price."

Our packers have been paying during the present week $6 75 to $7 25 for fair to good qualities of hogs for packing, and the Chicago banks have not "become frightended" as yet. The only bad thing we can see in the matter at present is that we cannot expect to see brother Levi Ashbrook in our market this season buying whole trains of hogs and shipping them to St. Louis to help swell the count there as in former seasons.—*Drovers' Journal.*

Paralysis in Hogs.—I have a lot of hogs which are in all respects well, except they are weakly in the hinder extremities. It appears to be about a week in developing itself. What is the disease, and its cure, if any?—N. N. Palmer. Above all things keep the hogs perfectly clean. Allow plenty of pure air. Don't allow too many in one place, unless the room and other conveniences are ample. Give the animals an opportunity of getting into sunlight if so disposed, but by no means compel them to remain exposed to the sun's rays, against their own desire. The ailment is unquestionably partial paralysis. Mix one pound anthracite coal screenings, one-half pound of sublimed sulphur, one-quarter pound of common salt. Give one ounce of this daily to each full growu hog, and a lesser portion to smaller ones, according to circumstances. Give, besides, apart from above, one drachm of pulverized nux vomica. Rub the loins, along the spine, with tincture opium, four ounces; sulphuric ether, four ounces; cod liver oil, six ounces. Mix and keep well corked in a dark place. Rub twice a day with much hand friction. Feed no swill for a time. Let the food be clean and nutritious, and not too much of it for awhile.—*Western Farmer.*

Blue Gum and Its Culture.

The Eucalyptii family is rather numerous—there being not less than thirty species, of which the "Blue Gum," or Eucalyptus Globulus, ranks highest in the estimation of Californians. Of all trees, whether of this family or any other, "Blue Gum" is the most rapid grower—besides possessing medicinal qualities which add much to its value. For a sparsely wooded region, where the temperature does not descend below 25 degrees Fahrenheit, no variety of tree can be grown to the same size in the same period of time. Its wood is valuable for fuel as well as for manufacturing. There are, however, other species of the family, but little known here generally at present, that will at no distant day become quite if not more popular than the "Blue Gum," whose wood is harder, closer grained, and better adapted to the thousand uses to which timber is applied When it becomes known that this family has among its members species whose wood, when converted into shingles, studding and weather-boarding, and that buildings constructed of such will be not only remarkable for their durability, but nearly as "fire-proof" as are iron buildings, and on which underwriters will willingly issue policies at half the rates common on other buildings, then the value of such species will be better appreciated by tree growers.

Culture.—Make boxes about two feet long by sixteen inches wide, and from three to four inches deep, allowing small holes in the bottom for drainage. Fill up till within half an inch of the top with fine alluvial soil, moderately rich. Smooth the surface; sprinkle the seed evenly over it, and cover with an eighth of an inch of soil composed of half sand. To attain the best results the boxes should be placed in a "cold frame," described elsewhere. If sown in summer, the glass should be shaded by a covering of whitewash or light muslin. In the absence of glass, make a frame of boards with a movable cover made of laths nailed from one-fourth to one-half inch apart, under which place the boxes. Water will be needed daily if the weather is warm and little moisture in the atmosphere, and should be applied with a fine sprinkler. Seed will germinate in from eight to fourteen days. When plants are two inches high, begin to "harden" them by allowing more air, increasing from time to time until they have become hardy enough to withstand the hot sun of the day and the cool air of the night. When six inches or more high they may be transplanted to a temporary or permanent place, care being taken to remove the plants with some earth attached to the roots, at least not to allow the roots to be exposed to the atmosphere. For forest culture, the young trees should be planted from eight to twelve feet apart each way, and between the rows should be cultivated for two years, when they will be strong enough in trunk and root to care for themselves.—*Cotton Culture.*

Combustion of Coal.—Combustion is a chemical process, consisting usually in a combination of one of the elements of our atmosphere (the oxygen) with the fuel. The main substance of fuel, especially when it is coal, is carbon, and the chemical equivalent of this, 12, combines with two chemical equivalents, 2x16, or 32 parts by weight of oxygen, which is equal to two and two-thirds parts of oxygen for every part of carbon. A pound of coal requires thus two and two-third pounds of oxygen for its perfect combustion; as now one pound of this gas under ordinary atmospheric pressure occupies a space of some 12 or 13 cubic feet, or two and two-third pounds of oxygen a space of 34 cubic feet, which in the air is diluted with four times this amount of nitrogen, it requires five times this quantity, or not less than some 170 cubic feet of fresh common air to furnish the oxygen required; it is therefore necessary to pass 170 cubic feet of air through the furnace grate in order to secure the perfect combustion of every pound of coal. If less air is passed, the combustion is retarded, while an excess of air cools the furnace.

Coloring Matter in Chili Saltpeter.—The yellow color in native Chili saltpeter is caused by potassic chromate, and the violet shade by manganic nitrate. The stones which are found with the Chili saltpeter are often covered with calcic chromate and magnesic chromate. In ordinary Chili saltpeter Iodine exists as potassii and sodic iodide; but if the saltpeter is free from potassiums, in the form of sodic percodate.

Useful Information.

Mud Spots on Varnish.—On this subject the *Carriage Monthly* remarks: High grade finishing varnishes, whether of English or American make, possess their wearing qualities from the simple fact that they retain their elasticity or oily principle to a great length of time. The surface hardens sufficiently to resist dust and to admit of being washed, but the body of the varnish remains soft and sensitive, and mud allowed to dry on the surface of the varnish both stains it and extracts by capillary attraction the oil contained in the varnish. Each spot of mud, according to its size and shape, acts on the varnish immediately under it, but no further, from the fact that a suction is created by the evaporation of the moisture contained in the mud. Different kinds of soil act with more or less injurious effects. Sandy soil would have but a slight effect on a varnish which would be badly soiled by a more adhesive clayey soil, and the filth of a large city would be still more fatal to the gloss of a varnish.

Nickel-Plated Screws.—In car building nickel-plated screws are rapidly coming into general use. This grows out of the fact that though their original cost may be a trifle more than silver-plated screws, yet as nickel does not oxidize by exposure to air, the excess of cost is more than made up in the durability of the plating. Hence, in nearly all of the large car manufactories, nickel-plated screws are superseding silver-plated for use in joinery work. Just why house-builders have been slow to practically recognize their superiority, we are at a loss to conceive, unless, indeed, they cling to the "penny wise and pound foolish policy" of making a trifling saving in original cost at the expense of an ultimately greater loss in durability. We are glad to notice, however, a gradual but steady increase in the use of nickel-plated screws in house joinery, which argues well for their final adoption for all such work, in which silver plated screws are now employed.—*Builder.*

Varnishing Paper Diagrams and Maps.—The first and most essential operation is the proper sizing of the paper, as, if this be improperly done, almost any kind of varnish will penetrate the paper so as to make oil spots. Glue-water of the proper consistency is the best protective against the absorption of the varnish. It should be of the right strength, however. If, after being dried, it cracks in bending a corner of the paper, it was not diluted enough. When dry, the map is varnished with a solution of mastic, sandarac, or some other colorless resin in turpentine or alcohol, or a mixture of both; experience shows the best consistency in order to lay it on evenly with a brush. In cold weather it requires more of the solvent.

Why Paints Crack and Peel.—A writer in the *Hub* thinks that the cause of paint cracking and peeling is to be found in the water which is contained in linseed oil, as it comes from the hands of the manufacturer. He made the experiment of boiling linseed oil by steam, until all the moisture was expelled from it. On using this oil, without any dryer, it was found to dry in one-half the usual time. He then mixed with it some siccobast, using only half the usual quantity employed to dry oil not boiled, and obtained similar results. 'The introduction,' says he, 'of steam into the linseed before grinding aids in the expulsion of the oil; but it must stand a long time to precipitate the water completely.'

Improved Red Fire.—Ordinary red Bengal fire is usually a mixture of strontium nitrate, potassium chlorate, and sulphur. This mixture takes fire very easily, especially if damp nitrate has been used in making it, or if flowers of sulphur have been used instead of roll sulphur. M. Bottger recommends the following as a mixture which keeps well and does not take fire spontaneously: One part of shellac and four parts of very dry nitrate of strontium. The best way of making the mixture is to reduce the lac to coarse powder, and then half fuse it with the strontium salt. When cool, a mass is obtained which can easily be reduced to very fine powder.

New Engraving Process.—M. de la Grye reports a new process in engraving on copper. It consists, says the *Scientific American*, in first covering the plate with a thin coating of adherent silver, which is in turn covered with colored varnish. The lines are then drawn with a sharp point, after the fashion of using a diamond for stone engraving, and subsequently sunk into the plate by means of the action of perchloride of iron.

Ammonia Soda Process.—This process is attracting much attention. Prof. Reed Gunsberg finds from his experiments that the most advantageous yield of soda by this process depends on regulating the respective proportions of common salt, ammonia and water, so that at the end of the transformation there may remain a saturated solution of sal-ammoniac. The whole process hinges upon degrees of solubility.

A Few drops of sulphuric acid will prevent any decay in solutions of gum-arabic. Herschberg says that by this acid the lime is precipitated as a sulphate.

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms; Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, 415 California street, S. F.

Grange Clubs for the Rural.

The Secretary (or some other Patron) is invited to act as club agent for the Pacific Rural Press in every Grange. Circular and sample copies sent free. Five or more names will constitute a club, at the rate of $3 a year. No new subscriptions will be taken without payment in advance. We will pay the postage after Jan. 1st, 1875. All club subscriptions in Granges should end on the last day of the month. Old subscribers may join the club by paying the Secretary up to club dates. Every Patron farmer should read a reliable agricultural paper. We need the support of all on this coast. Help the Secretary (or club agent) to make up a large list in your neighborhood. Don't delay.

NOTICE.

From and after this date, all moneys due to the State Grange by Subordinate Granges should be forwarded to the Grangers' Bank of California, No. 415 California street, San Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. CARRINGTON,
Treasurer State Grange.

November 4th, 1874. 19-v8-tf

Extra Copies of the Pacific Rural Press

Containing Grange addresses, resolutions, obituaries, etc., will be furnished post-paid at ten cents per copy. Grangers wishing numerous copies should send the order for them with the MS.

Secretaries will be supplied with a printed list of subscribers for this paper upon sending a list of post offices within the range of their Grange. Also with blank reports, etc., for clubs.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

Ware-Houses at Tide Water.

A meeting of Grangers was held on the 2d inst. at Vallejo, to examine into the practicability of constructing grain ware-houses at some point or points on tide water, to which grain from the interior may be most readily and cheaply taken for shipment abroad. A long official account of the proceedings will be found in another column, from which it will appear that the meeting aforesaid, without coming to any definite action, beyond the appointment of a committee which is to receive propositions and report them to the Grangers' Business Association at San Francisco, when fully organized and incorporated. It appears that no inconsiderable rivalry has sprung up between Antioch, Benicia, Vallejo and other places, in bidding for this business, under the impression that whatever point is selected will be rapidly built up to a place of considerable commercial importance. There should and undoubtedly will eventually be one or more points selected for this purpose on each side of the bay. The advantages of having such points, where grain may be stored convenient for expeditious and cheap shipment, is apparent to all, and is one of the legitimate objects in connection with the present co-operative efforts of farmers to secure a cheaper mode of handling and shipping grain than any which has been heretofore presented.

A Grange steamboat is now plying on the Tennessee river, and the Patrons in that region are reaping a large profit in the reduced rate of freight and fare. That is the true way to put down monopoly—build your own railroads, steamboats, storehouses and ships, too, if necessary, whenever outsiders are forcing you to pay exorbitant prices. Those things can all be done by the farmer, if he only takes time. The farmer produces nearly all the values which are employed to found such enterprises, and if he chooses, can keep them in close subjection to his will, and that too without resort to special legislation. The farmers can better afford to bide their time than any other class of people.

Correction.—The Press of Nov. 21st contained a brief note from the secretary of Deep Creek Grange at Farmersville, Tulare Co., and the address being Farmersville—the name of Grange not given—the note was put in as coming from "Farmersville Grange" when it should have been Deep Creek Grange.

The Grange as a Manufacturer.—This year the Iowa State Grange has manufactured 250 Werner harvesters; 40 were ordered for Nebraska and 75 for Minnesota. Over 1,000 orders were unfilled this year, and 3,000 orders are expected this season.

Grange Co-operation.—The Wisconsin Granges already have established 41 co-operative associations for selling goods and manufacturing, and 29 insurance companies; all flourishing, representing capital to the amount of $4,000,000.

A Good Idea.—When the members of the Grange at Vineland, N. J., discover fraud among the commission men the fact is communicated to every Grange in the State.

A Visit to Alhambra Grange, Martinez.

On the 4th inst. we had the pleasure of meeting with the brothers and sisters of Alhambra Grange, Martinez, at their first harvest feast. This is the youngest Grange in Contra Costa, but is already a vigorous and growing branch of the Granger tree. Its Worthy Master and all the other officers were re-elected at this meeting, and a promising new class was admitted, after which an attack was made in force upon a redoubtable display of roast turkeys, pigs, chickens, mince pies, and other good things too numerous to mention, and far too numerous to be eaten.

In the hall, which is convenient and commodious, we saw evidences of the taste and skill of some of our Grangers, in the shape of appropriate symbolic decorations. Several superb photographs of Faith, Hope and Charity embellish the walls, the gift of Worthy Master Dr. John Strentzel, and we also saw, growing in the hall, three fine banana trees, from which we secured trophies. The Alhambra Grange is worthy of its master, and we know not how to give it higher praise. The reader who has lingered in the Alhambra gardens, in their time of bloom or fruitage, who has gathered in the winter months the treasures of so many lands and climates, knows whereof we are speaking when we say there is not in all California a more interesting monument of the courage and character of her pioneers. We gathered oranges and lemons, and brought away the last of the vintage in some noble clusters of the White Malaga grape.

The Alhambra gardens, three miles from Martinez, are some 20 years old. They comprise nearly every variety of valuable temperate and semi-tropical fruits, and a vineyard in which the finest table grapes which reach our market are grown. The fruits of the Alhambra reach San Francisco with the dew on them. We know of no place where we would expect a young person to acquire a taste for the business of farming and fruit growing, equal to this rural home, set in beautiful surroundings and embellished with every requirement of cultivated and refined taste. Jennie C. Carr.

December 7, 1874.

New Granges in San Diego County.

Editors Press:—Please report the following new Granges organized by me in San Diego county:

National Ranch Grange—Organized Nov. 24th, with 24 charter members. Frank A. Kimball, M; E. I. Blackmer, Sec'y; W. C. Kimball, T.

Poway Grange.—Organized November 25th, with 30 charter members. J. F. Chapin, M.; E. D. French, Sec'y; S. G. Hand, T.

Ballena Grange.—Organized November 26th, with 23 charter members. W. C. Billingsly, M.; J. J. Sanderman, Sec'y; M. D. Putnam, T.

Bernardo Grange.—Organized November 28th, 1 P. M., with 24 charter members. Z. Sinos, M.; T. Duncan, Sec'y; B. E. Barker, T.

Bear Valley Grange.—Organized November 28th, 8 P. M., with 29 charter members. W. H. H. Dinwiddie, M.; H. C. Moseley, Sec'y; Samuel Striplin, T.

San Luis Rey Grange.—Organized November 30th, with 24 charter members. M. E. Ormsby, M.; L. J. Crombie, Sec'y; A. J. Van Matre, T.

Could I have remained a few days longer in San Diego county, at least two more Granges could have been organized, but it was necessary to take the steamer "Senator" on the 30th, for Santa Barbara, to be certain to take part in the celebration of our anniversary on the 4th, at San Buenaventura. But J. F. Chapin, Master of Poway Grange, will be appointed Deputy and can organize any other Granges needed. J. W. A. Wright.

Steamer "Senator," Dec. 2.

The Rural Press in Tulare County.—A subscriber in Tulare county, in sending us the renewal of his subscription, adds the following: "Don't stop the Press, I'd just as soon you would stop a portion of my bread. It is a welcome friend to our fireside. Wife is just as deeply interested in it as I am, and would sooner sacrifice her tea than forego the pleasure of reading the Press. The young Grangers in our family, with sparkling eyes and swift coming feet, gather around to look at the ever new and unfolding wonders to be found in the Press. I repeat, *don't stop the* Press!

We have had fine rains. Farmers are encouraged. Everything looks promising."

Notice of Meeting.—The next regular meeting of the Santa Clara County Council, P. of H., will be held at Santa Clara on Monday, December 15, at 10 A. M.

It is expected that important matters will be presented for the consideration of the Council, and a general attendance is requested.

I. A. Wilcox, Sec.

Grange Packing House.—The Grangers of Kentucky are resolved to do their own pork packing. They are building an immense packing house in the furtherance of that purpose, at Covington, Kentucky.

From the Granges.

Rio Visla Grange.

Editors Press:—The Rio Vista Grange is still flourishing, although the muddy roads render it somewhat difficult to get to our place of meeting. During the summer many of the brethren were very irregular in their attendance, as they were busy in the harvest field. Some few are very negligent of their duty in this respect, even when they were not "rushing" their work. Now many excuse their absence on the account of their plowing. This is wrong, because you cannot keep the Grange in running order without a fair attendance and a lively interest. We are glad to state that so far as the sisters are able they set a good example in this respect. But what woman can go anywhere when the men think *they* need all the horses, or when they are so careful of the animals that they imagine the exercise would be hurtful. Farmers are generally too careless of their wives, sisters or daughters, as the case may be. Home, in their view, is little better than a prison for women. Men are able to leave the farm frequently, and by constantly mingling with other throngs of men, they cannot realize how much women need a change from the dull, unceasing routine of farm-house labors. They, the men, go home to rest, and most of them cannot see how it is that the women are not resting too. Grangers, see that your women go whether you do or not.

Yesterday a class of four took the initiatory degree. It was also voted to move the Grange into town. This decision, gives considerable dissatisfaction, and many of the sisters are especially "put out." From present indications we have an idea that this removal will have much to do toward breaking up the Grange. Many of the sisters say they *cannot* attend regularly, and the unmarried portion of the sisterhood declare that they *will* not take any interest. This is rather a bad state of affairs.

The next harvest feast takes place in January. These gatherings are always well attended, and the supply of good things has always been ample. The well-spread tables are, of course, the most conspicuous features, but the "good time" enjoyed by each individual is also of considerable benefit to him or her. While doing full justice to the merits of the edibles, the Grangers have literally a "feast of reason and flow of soul," and we think each one goes home well satisfied with himself and all around him.

Bella.

Rio Vista, Solano Co., Nov. 27, 1874.

[We have taken the liberty of transfering the balance of Bella's letter—which is strictly agricultural, and first-class at that—to our regular correspondence department. The writer promises to write occasionally to the Press from Humboldt county, when she returns thither.—Eds. Press.]

Buckeye.

Editors Press:—It is some time since I have seen anything in your valuable paper from Buckeye Grange, so it may not be out of place to say a few words about it. One year ago on Thanksgiving day we had a harvest feast, after advancing a large class to the highest degree in a subordinate Grange. Our feast was public, and we thought we had a great gathering. We have had several of the same kind of feasts since, but none to compare with the one we had on the occasion referred to.

We had announced some time previous that we would have a dinner on Thanksgiving day, but we felt a little "shaky," fearing that we would not have so large an attendance as we usually had on such occasions, owing to so much having been said by our enemies against the Grange movement—and you know there are many of our members all over the country who do not keep themselves well posted in regard to the workings of the Order. But our fears were soon dispelled, for although it had rained heavily and the roads were quite muddy, at an early hour the carriages commenced coming in from all points. Our hall was filled to its utmost capacity, and many were unable to get in. We conferred the fourth degree on a worthy brother and sister, rendered the unwritten work to the best of our ability for the benefit of our visiting brothers and sisters, and were highly entertained for an hour by remarks from Bro. Hulburt, Master of Cache Creek Grange, on shipping, the general good of the Order, etc., with appropriate remarks from Brothers Russell and Marshall, of Dixon Grange. We closed the Grange and repaired to the hall below, where the sisters had set five long tables, each one being filled with all kinds of eatables that you could imagine, too numerous to mention. The hall was filled with Patrons and their friends, and many could not even get inside the hall doors until some retired; all enjoyed themselves well. Nothing happened throughout the entire day to mar the pleasure of any one, and you may rest assured that when I started for home I did not feel that all the interests of the Grangers were lost with the unfortunate failure of the house of E. E. Morgan's Sons.

J. R. Briggs.

Buckeye, Yolo Co., Dec. 3, 1874.

San Jacinto Grangs.

Editors Press.—I herewith send you a list of our Grange officers elected for 1875. Bro. Wright was with us on the 21st instant, and delivered a lecture in his inimitable style. The universal opinion was that he is the right man in the right place, possessing as he does the power of producing harmony in so eminent a degree. San Jacinto Grange was organized in the latter part of August, since which time we have been battling alone, being the only Grange in San Diego county. Brother Wright assured us it would be the case no longer. He went from here to San Luis Rey.

Instead of the dry and lifeless appearance usually presented by our valley at this season of the year, the ground is being rapidly recarpeted in its welcome color. The three days' rain which fell, commencing on the 17th inst., has started the grass in good earnest. Should the bright warm sunshine continue a few days longer the winter grazing will be abundant. There has been about 15,000 head of sheep brought into the valley this season, making a total now here of between 30,000 and 40,000. Eight out of fourteen of our Grange members are sheep men, and three out of the remaining six are stock men. There is very little farming done in the valley this season, being generally so dry that all kinds of grain has to be irrigated. The high altitudes and dry air render the valley peculiarly healthy. Our nearest physician is 30 miles distant—not close enough to do much harm

Expect to send you a club of subscribers shortly. H.

San Jacinto Valley, Nov. 24, 1874.

Grange Convention at Vallejo.

Editors Press.—I enclose herewith a copy of the proceedings of the Grangers' Convention held in this city yesterday:

The Convention met at the Masonic hall yesterday, and was called to order at 11 A. M., by appointing Mr. Hamilton, State Master, Chairman, and J. F. Deming, Secretary.

Reports from the Investigating Committee were recived and adopted.

A committee of three, consisting of J. B. Carrington, A. C. Wristen, and W. J. Clark, were appointed to receive propositions. and the Convention then adjourned to 2 P. M.

It met at the hour appointed, and propositions were received from parties in Collinsville, Antioch, Martinez, Benicia and South Vallejo, which report was received and placed on file.

The following preamble and resolutions were received and adopted:

Whereas, A Committee was appointed at the meeting of the State Grange at Stockton to examine into the practicability of building grain ware-houses on tide water, and examine points (some of which were indicated) which would be suitable places for such buildings. And,

Whereas, The said Committee have reported to this Convention several suitable localities for this purpose; and, whereas, another committe was appointed by this Convention to receive propositions for parties owning these locations; and, whereas, many propositions have been received and placed on file; therefore,

Resolved, That the Chairman of this Convention appoint a committe of five to take charge of the propositions and receive additions thereto, so as to perfect and make them specific, and also to receive other and further propositions of land and other facilities for the purpose of this Convention, and to report the same to the Grangers' Business Association when incorporated.

The Chair appointed the following as that committee: J. B. Carrington and T. P. Hooper, of Solano; Dr. Strentzel and A. C. Wristen, of Contra Costa; W. J. Clark, of Yolo.

The following resolution, offered by the original committee, was unanimously adopted:

Resolved, That we, the Committee appointed by the State Grange at Stockton, to examine the water front along the Straits of Carquinez and Suisun Bay, with the view of establishing wharves and warehouses for the shipment of wheat, do hereby tender our thanks to the Board of Trade of Vallejo, and the Vallejo Grange, for their generous hospitality and many favors received at their hands.

John F. Deming, Sec. of Convention.

Vallejo, Dec. 3, 1874.

Deep Creek Grange.—A member of Deep Creek Grange, Tulare Co., writes as follows under date of Nov. 3rd. "Our Grange Hall at Farmersville will be completed in about 30 days. Our Grange is prospering in numbers and in interest. We have "a live Grange;" especially in our harvest feasts. Our Master elect, F. G. Jefferds, is a man whom the people delight to honor, and our Past Master Wm. G. Pennebaker. Our county is filling up as never before, with new comers. We cheerfully welcome all those who will add to the prosperity of our county by their industry and good morals. Let them come!

Meeting of State Secretaries.—An informal meeting of secretaries of State Granges was to have been held at the office of National Secretary Kelley, in Washington City, on Thursday last, Dec. 9th, for the purpose of comparing books and blanks, exchanging opinions and sentiments, and consulting together, with a view to bring about a uniformity and simplicity of their official work. It was expected that nearly all of the State secretaries would be present, and much good to the Order throughout the Union result from their deliberations.

The Grangers' Guide to California, issued by the Immigration Committee of the State Grange, under the direction of Bro. Earl, is a most valuable publication, and contains much information important to persons desirous of locating in this State. Typographically the work will compare favorably with the best printed literary publication in the country.

The Grange in Amador County.

The Amador *Ledger*, in noticing the organization of Plymouth Grange, (the first, we believe, organized in that county), says: "We learn steps are being taken to establish other Granges in the county, and we trust they will continue to be established until our farmers and tillers of the soil throughout the county shall all become members. We believe if a number of Granges shall be established, that it would do more to advance the material interest of the county, than any other movement likely to be made. The agricultural interests of the county would be advanced, our advantages brought prominently to the notice of the Immigrant Bureau, the value of our lands made known, and established by reliable authority, and such information in relation to our climate, soil, products and health, as would lead immigrants to seek the foothills as their permanent homes. All this will be done as soon as our farmers shall form themselves into Granges, and shall gather up such statistics as will be of general interest to those seeking homes in California.

We have said on other occasions that the time is not far distant when the foothills will be the most densely populated portion of the State outside of the cities, and we still adhere to this opinion. But persons who are not familiar with the productive capacity of mountain soil, will not seek the foothills for homes until they have reliable assurance, of the real value of these lands. Grangers in the county can furnish the facts, from actual experience, and to an extent that could not well be obtained otherwise. We want more population, men and women, our hills and valleys should be covered with vines and fruit trees, and comfortable homes should be found on every quarter, section as far east as the snows on the higher altitudes would permit. We have vacant land enough for thousands of homes, and these lands should be tilled and made to yield to the general wealth and prosperity of the county. Our farmers can do much toward bringing immigration to the country, and as we have seen the wonderful results of the combined wisdom and energy of the farmers of the State in their combined capacity of Grangers, it seems to us the farmers of Amador county should not be slow in availing themselves of the benefits resulting from the organization."

RELIEVING SUFFERERS.—The National Grange has within the year spent about $12,000 in relieving sufferers from fire, drought, floods and grasshoppers. The Grange has the sum of $71,000 invested in United States bonds, which is held as a reserve fund to meet special calls for the relief of distress among members of the Ordor. There was drawn from this fund last spring about $4,000 for the relief of overflowed districts of Louisiana; about the same amount for the relief of the farmers of the West, where crops were destroyed by grasshoppers, and the balance of the amount of $12,000, above named, for other special purposes of relief. The past season has been rather a severe one in the amount of wide spread and severe sufferiug from fire, droughts, floods and grasshoppers, hence the fund has been more largely drawn upon than it will probably average in the run of years. The Patrons of Husbandry hold it to be their most sacred duty to relieve brothers in distress.

GRANGE LECTURES.—The Grangers of New Jersey have organized what they call a "Labor Lecture Bureau." The object of which is to arrange for a series of lectures which may be delivered before the various subordinate Granges throughout the State. The first series will consist of five in number, upon the following topic: one, organization; two, production, distribution and consumption; three, labor and the social palace; four, the actual cost of railroad transportation; five, the logic of the labor movement. The first four lectures will be given by members of the Grange, and the fifth by a member of the sovereigns of industry. The lectnres will be open to the public.

THE MISSOURI GRANGES AND DIRECT TRADE.—The Executive Committee of the Missouri State Grange held a session at St. Louis last week, at which much important business was transacted. The Committee adopted a resolution favoring open trade between the Mississippi and Brazil by steamship line, and asking the farmers of the valley to aid in supporting the enterprise. They say it is the duty and policy of the farmers to indnce shipments by river southward, instead of by rail eastward. The Grangers of Missouri are wide awake, and come nearer to the spirit of activity and progressiveness manifested by the Order in California than do the members of the Order in any other State of the Union.

STATE GRANGE MEETINGS.—The Indiana State Grange met at Indianapolis on the 26th. Michigan State Grange will hold its next meeting at Grand Rapids. The Iowa State Grange meets at Des Moines on the second Tuesday in December. The State Grange of Lousiana met at Baton Rouge, on Thursday, the 3d instant.

A SOP.—The managers of the Des Moines narrow guage railroad have named one of their locomotives "The Granger." Who can now say the railroad men don't like the name?

Election of Officers.

SAN JACINTO GRANGE, SAN DIEGO COUNTY.—T. D. Henry, M.; G. A. Collins, O.; J. M. Benson, L.; John Wakefield, S.; James Carroll, A. S.; Mrs. Mary Kennedy, C.; Mrs. Martha Collins, Sec'y; John Flanagan, T.; Allen Barr, G. K.; Miss J. Marine, Ceres; Miss Mary Worthington, Pomona; Mrs. J. E. Benson, Flora; Miss Sarah Kennedy, L. A. S.

FRUITLAND GRANGE, No. 72.—N. O. Stafford, M.; R. B. Guthrie, O.; A. W. Birch, L.; D. H. Collins, S.; J. P. Johnson, A.S.; A.S. J. Hickey, C.; H. H. Wakeman, T.; G. L. Russell, Sec'y; T. W. Robertson, G. K.; Mrs. N. O. Stafford, Ceres; Mrs. S. B. McTaruahan, Pomona; Mrs. G. W. Vance, Flora; Miss M. D. Holtel, L A.S.

COMPTON GRANGE.—J. J. Morton, M.; C. W. Coltriu, O.; J. E. McComas, L.; Rev. James Bonsell, C.; A. A. Proctor, L.; Amos Eddy, A. S.; T. H. Rogers, G. K; T. V. Kimble, Sec'y; W. H. Mortou, T.; Mrs. E. Hazen, L. A. S.; Mrs. Mary Eddy, Ceres; Mrs. Eda Kimble, Pomona; Mrs. S. E. Morton, Flora.

[A notice of the election of officers of Compton Grange appeared in the PRESS of November 28th, but as some inaccnracies have been discovered in regard to names, we have republished it.—ENS. PRESS.]

BUCKEYE GRANGE, YOLO CO.—Wm. Sims, M.; F. G. Russell, O.; H. A. Hill, L.; H. L. Moody, S.; M. E. Dexter, A. S.; V. Morris C.; J. R. Briggs, T.; L. Moody, Sec'y; A. H. Wilgus, G. K.; Miss Ida L. Dexter, Ceres; Mrs. A. M. Dexter, Pomona; Mrs. L. A. Sims, Flora; Mrs. E. A. Moody, L. A. S.

SANAL GRANGE, P. OF H., No. 163.—E. M.; Carr, M.; B. F. Cooper, O.; G. I. Vandervoort, L.; Joseph Gregory, S.; D. W. Baker, A. S.; Charles Hadsell, C.; Charles Duerr, T.; S. W. Millard, Sec'y; James Frimingham, G. K.; Mrs. Baker, Ceres; Mrs. Millard, Pomona Mrs. Cooper, Flora; Miss. Alexander, L. A. S.

COLLEGEVILLE GRANGE, SAN JOAQUIN CO.—P. P. Ward, M.; W. H. Snow, O.; G. W. Brown, L.; George A. Beach, S.; D. C. McIntosh, A. S.; A. S. Woodbridge, C.; T. A. Mayberry, T.; Dr. L. R. Chalmers, Sec'y; Thomas Minahan, G. K.; Mrs. Josie M. Merwin, Ceres; Mrs. S. A. Snow, Pomona; Miss Berdie Chalmers, Flora; Miss Kittie Crawford, L. A. S.

ATLANTIC GRANGE, SAN JOAQUIN CO.—Samuel Myers, M.; J. W. Moore, O.; Mrs. Georgie Meyers, L.; Wm. Massey, S.; John Lisey, Jr., A. S.; W. J. Campbell, C.; Milton Miller, T.; Mrs. J. W. Moore, Sec'y; David Lombard, G. K.; Miss Zorado Hunsucker, Ceres; Miss Emma Liesy, Pomona; Miss Louisa Liesy, Flora; Mrs. Jennie Lombard, L. A. S.

WATERFORD GRANGE, STANISLAUS CO.—S. M. Gallop, M.; John Fagan, O.; R. R. Warder, L.; James Kinkhead, S.; James Sheldon, A. S.; R. H. Bentley, C.; M. R. Hobert, T.; June Booth, Sec'y; W. P. Crow, G. K.; Mrs. W. P. Crow, Ceres; Miss Ella Booth, Pomona; Miss Mary Fagan, Flora; Miss Nancy Browder, L. A. S. Trustees—H. B. Davis, James Warner and W. W. Baxter.

TEMASCAL GRANGE, OAKLAND—Bro. Hamilton, W. M. of the State Grange, honored the meeting with his presence last Saturday. Also, Bros. Blanchard, Pres't. of the Cal. Farmers' M. & F. Ins. Co., and Ed. Hallet, W. M. of Chico Grange. Bro. Hamilton conferred the 3d degree on eight gleaners and harvesters, and gave the members generally pleasing and valuable iuformation. By a vote Bro. Hamilton was requested to invite the attendance of the officers of the State Grange at the next harvest feast, which is to take place at 12 M. on Saturday, Dec. 19th. Dr. Carr, who had been absent from his seat for several meetings, gave the Grange some interesting facts, observed during his visit to the southern counties, Martinez and Vacaville.

CANADA ADVERSE TO THE PATRONS.—An exchange says: "Apart from the stupid prejudices of the Tories, who consider the Patrons to be oath-bound conspirators against the freedom and independence of Canada in the United States, the slow progress of the Order in the Dominion is to be accounted for by the timidity of the press. The newspapers fear to encourage an Order whose members propose to diminish the profits of the merchants, middlemen and manufacturers who are their advertisers."

DIRECT TRADE.—The Georgia Grangers have succeeded in establishing an extensive Direct Trade Union. They will ship direct from Savannah to Liverpool this fall. A similar arrangement has been perfected by the Grangers of South Carolina. The bulk of the Grangers' cotton crop for this year will be shipped direct by the Order. A reliable agent has been sent to Liverpool to attend to the cotton on its arrival there. So much for organization.

SOME of the Grangers of Rile County, Minnesota, combined and bought 500 barrels of apples, which were distributed to the members at wholesale prices.

Why don't the "Grangers of Rice county, Minnesota," raise their own apples?

GRANGE PACKET LINE.—The Patrons of Missouri have a tri-weekly Grange packet line, composed of the "Savanna" and "Collossus," plying between St. Louis and Galena, in the interests of the farmers, in opposition to an old wealthy line.

GRANGE FAIRS.—The Patrons at Sangamon county, Ill., have adopted the practice of holding monthly sales of stock and produce. Already two fairs have been held, at each of which more than $30,000 worth of cattle, horses, swine, mules, sheep and poultry were disposed of. Some cattle were sent expressly from Iowa, Kansas and Missouri for sale, and a Cincinnati firm even sent a car load of buggies, and reaped a handsome profit from the experimeut.

THE Grange elevator at Indianola, Iowa, is the largest building of the kind in the country. The size of the main building is 38x80 feet, with a wheel house 20x22 feet high, and the hight to the top of the elevators is 36 feet. It is divided into eight bins, each having a capacity of 4,000 bushels, giving a total capacity of 32,000 bushels. The plan is different from that of any elevator in the State.

HELPING ONE ANOTHER.—It has been ascertained as one of the results of the Grange movement, in Iowa, that by a more strict economy and confining purchasiug to needs, the Patrons have resorted less to banks and other sources to meet their harvest expenses. So say the mouey lenders of Iowa.

MUSSEL ROCKS.—These hitherto impassable barriers which have stood between this city and the coast to the southward, and forbidden all travel coast-wise beyond five or six miles from the city home, at last succumbed to the rock drill and giant powder. There are five rocks which have been tunneled through, and now the people of San Francisco can enjoy a pleasant drive along the sea shore to San Pedro Rancho and beyond. We presume this improvement will be the forerunner of a coast railroad from Santa Cruz and all the regions south to San Francisco via Half Moon bay and the Mussel Rocks.

HORSE RACING.—The following advice given to an unsophisticated youth in the Eastern States is peculiarly applicable to this longitude about this time: "Never bet on a horse race, my sou. It is wroug to bet, and, besides, the horse that ought to win is likely, in nine out of ten cases, to be jockeyed to the rear. Do not bet at all, my son; but, if you bet on horses, get acquainted with the riders in advance of the contest, and see how the thing is coming out."

COAL IN SANTA CRUZ.—The Santa Cruz *Sentinel*, of Dec. 5th, in speaking of the late coal discoveries near Monterey, says: "They have opened out the drift some 40 by 80 feet and will push the work vigorously until they have as good a quality of coal in market as any other company. Mr. Sargent says they will have a depot in our town soon, where all who desire can obtain it for use.

CURING RAISINS.—F. A. Howig, of Santa Clara, claims to have discovered a process of curing raisins, superior to the evaporatiug process. It consists in dipping the grapes into a chemical solution at boilng heat, which has the effect of preparing the fruit for drying so that the skin will not break, and the stems are rendered so strong that the bunches remain perfect. He has settled in Los Angeles and intends going into the business extensively.

BEETS SPROUTING.—The Santa Cruz Beet Sugar Factory has found it necessary to stop its works for a few days and send all hands into the field to remove the beets from the gronnd, which have begun to renew their growth in consequence of the recent fine weather. Such growth quickly injures their saccharine qualities.

TURKISH TOBACCO.—An experiment is to be made in Napa county to see whether Turkish tobacco will flourish there. Mr. E. D. Sawyer will plant several acres of the weed on his farm near Napa City.

CHICOORY.—The Standard Chiccory Company, of Sacramento, raised 1280 tons of root this season, which they cultivated on the bottom lands of the American river.

THE agricultural students at the State University are to write a description of the Agricultural Department, plants, grass, and improvements.

BARLEY TO CHICAGO.—Barley is still going to Chicago. Nine cars left Oakland on Wednesday last, consigned to a firm of brewers.

THE grass is already six inches high in the upper Sacramento valley. In the central and southern portions of the State it is, of course, much more advanced.

The Gilroy flour mill sent 1,000 barrels of flour to this city last week—its surplus over home supplies.

BEES WASHED AWAY.—T. J. McCormick, of Marysville, lost 20 hives of bees by the late high water.

SOWED TO WHEAT.—John O'Tool, of Milpitas, has sown 2,500 acres of the Gonzales ranch to wheat.

COAL.—Santa Clara will soon be supplied with Monterey coal.

EXTRA trains are being run to remove the grain from the Salinas valley.

General News Items.

GONE FROM OUR GAZE.—King Kalakna left for the East on Saturday last, and will spend the coming week hob-nobing with the dignitaries at Washington. The universal verdict seems to be that notwithstanding the comparative insiguificance of his power and little island kingdom he nevertheless bore himself, while here, with true dignity—neither putting on undue importance or letting himself down at all from his proper position. In all the manifestations of respect which were shown him, a propriety and decorum was observed on both sides, which was both agreeable and impressive. It is hoped and believed that he will meet with a similar degree of respect in such Eastern cities as he may think proper to visit, after paying his respects to the head of the nation at Washington.

—"But not Julius Caysar,
Nor Nebuchadnayzar,
Nor no man o' their day, sir, could iver compare,
Wid the Royal attendance
That did just begin hence
To follow the King wid such anxious care."

SPAIN AND THE CENTENNIAL.—The great Spanish patriot and republican, Castellar, will represent Spain at the coming centennial. It is also rumored that the Prince of Walos will represent England at the same time. Many eminent men, whose views and public services make them citizens of the world will visit Philadelphia in 1876.

WHEREFORE.—It is said that experts sent by Mr. Hayward to examine the Crown Point mine, in which he is a large owner, were refused admission under ground. It will soon be in order to legislate that owners in mines may have the privilege of receiving their own property under, at least, reasonable restrictions.

LOCOMOTIVE engine explosions, which were almost unknown until within the last three or four years, are becoming quite unpleasantly common. A locomotive exploded near Columbus, Ohio, on Saturday last, seriously injuring the engineer and killing his son, who was acting as fireman.

NEVADA NARROW GAUGE.—It is now said that the Nevada narrow gauge railroad is a certainty—the contract is let for its construction and equipment. It runs from Nevada to Colfax. A road from Nevada to Marysville will soon be found a uccessity.

WHIPPING.—They still tie up and whip in public in little Delaware. Eight men and boys lately suffered that disgraceful punishment there in the presence of several hundred persons, among whom were several women.

FROGS.—Frederick Dickman, of Virginia City, has discovered a live frog in the center of a tree four feet in diameter. Frogs seem to have a singular disposition to seclusion—to hiding themselves away in trees, turnips and stones. Why is it?

VARIETIES OF BEER.—Four hundred different kinds of Berlin beer were exhibited recently at an international exhibition of beer and brewing interests, held at Hygenian, Alsace.

LUXURIOUS LIVING.—There are probably 150 families in this city whose expenses are all the way from $20,000 to $40,000 a year. There are several whose expenses reach or exceed fifty thousand.

GREAT LOSS OF LIFE.—Twenty-one lives were lost on the coast of Scotland by a gale which prevailed there during Saturday and Sunday Nov. 28 and 29—nearly simultaneous with the heavy rains on this coast.

LAND IN NEW YORK CITY.—Peter Cooper, of New York, says that he was once offered a tract of land in New York city for $11,000, which would, to-day, command fifteen millions.

THE TRADE DOLLAR.—Mexican dollars are now quoted at a discount and trade dollars at a premium—a fact which indicates that San Francisco is soon to control the trade in silver with China.

THIRTY LIVES LOST NEAR CUBA.—A Spanish coasting steamer ran ashore near Havana (Cuba) on Friday of last week, and immediately sank, with a loss of thirty persons.

COULDN'T STAND DEFEAT.—A young lady at Burlington, Iowa, was so chagrined because she failed to spell the school down that she went and drowned herself.

A FORTUNE.—It is reported that D. E. Gilbert, of Hollister, has just received information that a fortune of three millions awaits him and five others at Norwich, England. Lucky men.

ABSCONDED.—William Blake, a member of the S. F. stock-board, has left the city for parts unknown with $10,000 of other people's money.

THE "FISK JR." ESTATE.—The settlement of this estate shows the amount of $1,122,240 to be divided among heirs and devisees after paying all debts.

SEVERAL suicides and casualties have been reported the past week in various portions of the State. Suicides seem to be alarmingly on the increase.

FOOLING AWAY TIME.—It took a Detroit man five weary months to whittle a broom-handle into a chain.

WOODEN CUPS are taking the place of glasses for sherry, such being the fashion now-a-days.



Our Ship.

I stood at the harbor awhile to-day,
Watching the ships that came and went
In and out on the fickle waves,
Each on some couscious errand bent.

And I thought, as I watched, that the sea of Life
Is filled with vessels that come and go;
Ships that forever at wayside ports
Take up their cargoes of joy and woe.

All of us have our ships at sea—
Coming and going from East to West;
Every day sends some forth to sail
Every day brings some in to rest.

Every day there are launched abroad,
Ships of Life on the Future's tide;
Frail as a fairy's bark their strength,
And the hearts of their pilots all untried.

Away they sail on the billows dark,
From home and from harbor drifting far,
Their rudders lost, and to guide their course
Not even the light of a friendly star.

And we—we wait till our eyes grow dim;
Watch and wait on the harbor strand,
Till we scarcely note how the years roll by,
Praying our barks may come back to land.

Thou, Lord, who knowest all things below,
Who lookest afar o'er the dreary sea,
Do as Thou wilt—if they come not back,
Thou seo'st them yet, we have trust in Thee.

John Bacon, Cook!

[Written for the PRESS by JENNIE E. JAMESON.]

Betsey Jane Bacon had been away for nearly a week. She had left a goodly supply of provisions, but her beloved husband found on Wednesday morning, that there was only enough left for hia dinner; and he expected Betsey Jane, tired and hungry that afterooon. So the good soul reaolved to get up a delicious supper, which should both surprise and delight his dear wife.

Now John Bacon never cooked anything in his life; but he was not to be dannted by this consideration; for waa he not one of the "lords of creation?" And if a woman could deliver a lecture, he guessed he could *cook*, and then he knew where his wife's recipe-books were, so after carefully locking the front door, he procured the booka, and sat down to look them over. The first recipe he concluded to try was for a tea-cake. "Just the thing," said he, "Betsey will he anre to come home with a headache, and she's amazin' fond of tea. Let—me—aee: One egg, one cup sugsr; I can't make out the next word, but it must be the tea, a little aalt, one teaspoon allspice. Well, I can make that well enough. Wonder how ahe fixes the tea, guess she must bile it in water. I wonder how much tea she puts in. As it's a tea-cake, it must be pretty strong of tea. I'll venter a good handful." While the tea was steeping, John took off his coat, rolled up his sleeves, and put on his wife's apron. Then he broke an egg into a dish, put in a spoonful of salt, which seemed little enough to him as he was used only to giving salt to cattle, then he came to the allspice. "Now," said he, "I have got to put in a teaspoonful of all kinds of spice. How handy these recipes are, they tell a fellow just what to do! Here goes a teaapoonful of ciunamon, and now one of cloves, and here goes one of ginger, and one of nutmeg, and here's the mace—that'a all I can find. There's the tea boiling over! I'll put it in a bigger dish. Wonder if Betsey puts it in grounds and all, I disremember ever aceing any grounds in her cake. Guess I'll strain it, but what is a body going to atrain it thrcugh? Here'a a towel, but dear me, it don't atrain good a bit, I reckon the towel's too thick. Oh, oh! that tea's *tremendous* hot. How it burns! What does she atrain it through. There'a that little thin handkerchief, with lace or something round it. It is on the bureau, and I'll take that, if it gets hurt I can buy another. There! it goes first-rate through this, now for the flour." After considerable stirring, John poured the latter into a tin diah, and put it in the oven.

"Now for some blanc mange. I'ta awful lucky I found these books," said he, chuckling in high glee. "It saya blanc mange is very nutritious, and good for sick folks; and Betsey will be sure to be about sick. Then it's so easy, nothing but mosa and milk, aud lemon. Never knew moss was good to cook before. I 'member now, I see Betsey Jane out diggin' aome off the old garden fence the other day. She do say she wants a new garden fence, but I believe I'll let the old thing be; seein' it's raisin' stuff for us to eat. Then she went to the woods for some nice green moss, and here it is, right on the buttery ahelf. How handy! How I can cook. I'd like to see the man that could beat me! I'll jnst ahow 'em how to get up nice suppers. I think I'll take a pint of moas, some of both kinds. Now I'll fill up the dish with milk. And here's aome lemons, I'll cut one up and put it right in, lemon always was my favorite seasonin'." Having got this delicious dish upon the stove, John bethought himself of his tea-cake. He took it from the oven, looked at it and smelled of it, then gave a prolonged whistle, for certain it was, that it did not look right, or smell right. He was afraid Betsey would not enjoy it. In fact it slowly dawned upon his honest mind that his tea-cake was not a success. He cheered himself with the thonght that the blanc mange could not help being nice, and resolved to try another cake. Just at this moment a small boy dodged in the back door saying, "I say, Mister, has Mrs. Bacon got homo? My ma wants to borry her new pollynsy pattern." Mr. Bacon gazed upon the child as though he were a being from another world; for he had been working so earnestly, that he had almost forgotten the world. "No, no," said he at last, "wife's gone, come again to-morrow. And here, sonny dear, here's a nice cake for you." And poor John pried vigorously at his tea-cake, but as it did not chooso to leave the tin, he generously gave the boy tin and all, and pnshed him out of the back door, with a sweet smile, thus clearing the deck for further action, and getting rid of the dubions looking cake, at one stroke.

He looked at the clock, and found that only an hour remained before the train was due. What he did must be done quickly. He looked at the recipe book. "Here," quoth he, "is a rule for making drop-cakes. I wonder how they'll go. I declare cooking is *awful* hard work. No wonder the old negro told about cookinary bodcrations. Let's see, drop-cakes, drop-cakes—one cup sugar, one cup of milk, one-hslf cup butter, a little soda—but it don't say a word about the drop part. Never mind, it'll drop down our throats fast enough, if Betsey's as hungry as I be. A little soda; guess that's about three teaspoonfuls; that'll make it rise good.

He soon had the cake on the oven, and turned his attention to the blanc mange. Mrs. Bacon had of course, made blanc mange, bnt he did not recognize the name, and thought he had made something new. He set it away to cool with real pride. It had a beantiful greeu color, which the pieces of yellow lemon rind set off to perfection.

The cake was soon done; but as he took it from the oven, using his wife's apron for a holder, he burned his fingers severely. This caused him to drop the cake into tho coalhod, which sat by the oven door. "There," said he, "that must be where the *drop* comes in. But somehow, the cske looks as if it had the jaundice, don't believe we can eat it! What shall we have for supper? But there's the do or bell, I declare! it's been dingin' away there five minutes, at least. I wasn't going to let anybody in, but that must be a telegram; perhaps poor Betsey Jane has had a railroad smash-up, aud gone where she won't want any more suppers."

John was mistaken, for when he opened the front door, he found Betsey Jane, over whose smiling countenance there came a look of dismay when she saw her husband with smirchy face, powdered hair, burned and blackened hands and soiled clothing. With a woman'a instinct she rushed to the kitchen, she found the drop-cake in the coalhod, and everythiug in confusion.

"Why, John, what has happened?" I—I—I—" said John, "I thought I'd get you a nice supper, but somehow, thinga don't seem to turn out good. I don't know what aila 'em. But," he added, with a deaperate attempt at cheerfulnesa. "I've got some splendid blanc mange; it's real nutritious—just aee it!" "What in the name of common-sense did you make it of?" gasped Mrs. Bacon.

"O, some of that nice mosa yon got the other day."

"Mercy on ua! you have taken the moss I got to make mosa crossea and wreatha of. Why, man-a-live, we never use *that* to cook with. And for pity's aake, what are those yellow ernnchs?" "O, them?" said John, who by this time had his hand upon the outside door knob, "that'a lemon!"

Mrs. Bacon looked at the blanc mange, at the drop-cake and the disordered state of the room, then dropping into a chair, she laughed until she cried, in which exercises John joined, much to hia relief.

Mr. and Mra. Bacon made a supper of crackers and milk, and as the shadea of uight drew around their dwelling, John Bacon was a wiser, if not a better man.

GIVE YOUR CHILD A PAPER.—A child beginning to read becomes delighted with a newspaper, because he reads of names and thinga which are familiar, and he will progress accordingly. A newspaper in one year is worth a quarter's schooling to a child. Every father must consider that information is connected with advancement. The mother of a family, being one of its heads, and having a more immediate charge of children, should herself be instructed. A mind occupied becomes fortified against the ills of life, and is braced for emergency. Children amused by reading or study are, of course, more considerate aud easily governed.

It it is a high, solemn, almoat awful thought for every individual, that his earthly influence, which haa had a commencemeut here, will never, through all agea, were he the very meanest of us all, have an end.—*Carlyle.*

BE wise; prefer the person before money, virtue before beauty, the mind before the body; then hast thou in a wife a friend, a companion, who will hear an equal share in all thy toils and afflictions.—*Ex.*

A Troublesome Boy.

A despairing father writes us: "I am at a loss as to what to do with my son, a boy of fifteen, who has so far been well brought up—that is so to say, he has been kept in school from his sixth year to the present—and he now plays truant, tells lies, swears, smokes on the sly, and is rnining his health by a had personal habit learned from other boys. We (his mother and I) have often corrected him most severely, but without avail. He has run away twice, and threatens to go again. He has a desire to become a sailor, though ho knows nothing of it save what he learns by reading sea-stories. We are more distressed about his untruthfulnesa and his secret bad habits than anything else, fearing if these be not overcome that he will surely go to destruction, and bring disgrace on his name and kindred. What should be done with him? Truly yours. * * *

We omit name and address, but print both the letter and our answer, believing it will hit other and similar cases. First, we must inquire what have been the lad's associations; what and who his playmates; what were the relations between father and son; were they those of intimacy, good fellowship and affection, or were they those of severe authority, on one side, and of skulking fesr on the other; was there love, trust, freedom, or was there dread, coercion, hatred? Or, is he a praying man? "Like father like son" is an old sayiug, and is more frequently true than otherwise. What part has the mother played in the traiuing of her son? Were they not at least confidential friends? Did she not teach him the sinfulness of sin and the beauty of truthfulness, integrity, temperance, chastity, and the nobleness of a pure and true manhood? Or did they quarrel, scold, fight, to "see which could whip?" Such scenes do occur between ignorant, ill-tempered mother and unwelcome, ill-formed, and unfortunate aona.

Bnt the boy is here. His follies and his crimes will not yet justify imprisonment nor death. He can not be lawfully put out of the way. He must be endured. His parents are largely responsible for his waywardness. Their unwise whippings did no good. Instead of governing by love, they doubtless attempted to do it by severity and by fear, and failed.

One thing, which may be done, is placing the boy in a military achool, or on board of a schoolship, or in a reformatory—or let him choose a pursuit for himself, and then follow it. If trained in a military school, or in a naval school, he will be disciplined, and subdued, and taught. If in a reformatory wisely conducted, it will be the same. But to the one or the other he ahould go. If placed on shipboard he will not "run away," and he may make a navigator. If in a military achool, he will be taught engineering and other useful subjects, besides the art of war, which can be turned to good account in civil pursuits.

But why not take him into partnerahip at home? If the father be a farmer, a mechanic, manufacturer, merchant, take the lad in and teach him the business. The boy is here, in this world, not of his own choice, but for a purpose, and it devolves on agents of his existence to put him in the way of education, development, improvement, usefulness happiness. He is not to be kicked and cuffed about like a dog, and then expected to exhibit angelic qualities. Would it not be as well for men and women first to qualify themselves for the high and sacred duties of parentage before entering into the relations of wedlock? Should they not first learn how to govern themselves? Should they not anticipate the wants and necessities of offspring, and provide therefor? We hold parents largely responsible for the success or the failure of their children'—*Phrenological Journal.*

BABY-TALK.—Never indulge in what is commonly known as baby-talk, nor let any one else address your child in that manner. Every word or syllable that is spoken to a child, however young, should be distinctly articulated and correctly pronounced, nor should the intonations be any different from those which are proper when speaking to an adult. Children are imitative creatnres. They readily imitate your manner of mumbling, gibbering, and distorting language, and, perhaps, as they grow up, will "better the instruction." You should no more pervert or sophisticate the language you address to an infant a year old or less, than you ahould poison or adultorate the food for its stomach. Language and music are the clothing of our thoughts and feelings, and our speech and song would correctly represent them.

A child that is always addressed in proper tone and langnage, other things being equal, may speak with more propriety and grammatical accuracy at three or four years of age, than another child can at eight or ten, "whose teachers of elocution" have been baby-talkers. There is no shadow of reason for this silly custom. "Oh, reform it altogether."

EXAMPLE.—Whatever you wish your child to be, be it yourself. If you wish it to be happy, healthy, sober, truthful, affectionate, honest, and godly, be yourself all these. If you wish it to be lazy, and sulky, and a liar, and a thief, and a drunkard and a swearer, be yourself all these. As the old cock crows, the young one learns. You will remember who said, "Train up a child in the way he should go, and when he is old he will not depart from it." And you may, as a general rule, as soon expect to gather grapes from thorns or figs from thistles, as get good, healthy, happy children from diseased, and lazy, and wicked parents.

Business Degeneration.

A great lamentation of how men have fallen in morals is an every-day occurrence, I consider man is now as good and a little better then he ever was before in intellect and moral conditions. That all men have plenty of animal brains we will admit, but not near as much nor are they as active as they used to be in our forefathers. That intellect and morals are gaining and ascending all must admit. It is no criterion because some of our men in high station have shown a breach of trust. We know how they get into office most of them by sharpness in trade, and when they got this wealth it was easy to buy up votes of the dishonest, and gull the fools. When a man gets wealth and puts on a good appearance, we are foolish enough to think he is a respectable man. Property covers a multitude of sins, but where, on the other hand, is a man every way worthy for the highest public trust, but, forsooth, has not grabbed a very big share of this world's goods; you do not shower fat offices on him; no, he is not thought respectable enough. Verily we are a curious race. Men that we know to be dishonest all their lifetime, that have been directly and indirectly stealing from their fellow-men we put into places where they can carry it on a grander scale; and when it turns out that they have been practicing in their old line, we make a great to-do and lament on the fall of man. * * * Such men luxuriate and give full play to their animal faculties, supposing that wealth is going to do everything for them; but in the latter part of their lives they find out a great mistake. They find out that property, if it is not used for a good purpose, is nothing more than a bubble; pick it, and it bursts, and carries them as victims into general destruction.

AMUSEMENTS.—These of every kind should be as much out of doors as the weather will permit. The difference between open air and house air is much in favor of a child as of an adult. Indeed, it is much more important, for the dust, gases, and other impurities of indoor apartments, which would not be noticed by an adult, might seriously damage the more susceptible child. As soon as the little thing is able to toddle, its proper carpet in fair weather is the green grass, or a blanket spread on the *clean dirt*—nothing is purer than the uncontaminated earth. There is no objection to the baby-carriage as a means of exercise and amusement but in cities careless servant girls are very ap to jounce the infant over the gutters and rough places in a rough and injurious manner, which may damage it for life. Every nurse should be thoroughly cautioned in this matter. Besides riding in its carriage or in the nurse's arms, and the use of playthings already mentioned, no special amusements are called for until the period of infancy ends with the completion of the first set of teeth.

COSTLY FUNERALS.—"We shall hail the day with pleasure when the mode of sepulchre shall be simple, and the laying of the dead in the earth will not heavily burden the living. When "dust to dust" is so expensive, is it any wonder that the cremationists have received countenance, when they offer at a trifling outlay, and in the old classic fashion, to turn "ashes to ashes?" Whoever will inangurate a "movement" against expensive funerals will be a benefactor. It will be a Chistian charity for the churches to begin a crusade against the cost of coffins. When Baron Anselm de Rothschild, the possessor of $200,000,000 recently deceased, was buried, the utmost simplicity pervaded the ceremonies. There was no display of expense. The hearse was drawn by two horses—four plumed and stately steeds are quite common in this country on the occasion of an interment of some pretentious body—and a few servants walked in quiet order behind him. There is as much ostentation displayed and vanity in a modern fashionable funeral as in anything else; but it is in bad taste, and ought to be frowned down. It it is for the living, rather than for the dead, our means, our energies, and our best services should be given. If simplicity and economy are anywhere in good taste, it is in disposing of the dead whom we can no more benefit however much may be expended on their remains. A decent, inexpensive burial is most consistent with moral respect and honor.—*Phrenological Journal.*

GENIUS OF ENERGY.—There is no genius of energy and activity. You will learn that all the traditions so current among young men—that certain great characters have wrought their greatness by an inspiration, as it were—grow out of a great mistake. And you will further find, when you come to measure yourself with men, that there are no rivals as formidable as those earnest, determined minds which reckon on the value of every hour, and which achieve eminence by persistent applicaton. Literary ambition may inflame you at certain periods, and the thought of some great name will flash like a spark into the midst of your purposes; you dream until midnight over your books; your set up shadows and chase them down—other shadows and they fly. Dreaming will never catch them. Nothing makes the "scent lie well" in the hunt after distinction, but labor.

"TAKE A WING?" said a presumptuous fop to a sensible young lady, extending his bent arm toward her. "'Not of a gander," she quietly replied, and walked home with her mother.

I DO not believe that I am descended from a monkey; God is my Father.—*Louis Agissiz.*

What a Real Lady Never Does.

The woman who is more or less green or snobbish horrows clothes, ribbons, jewelry and bonnets with which to dress. The genuine lady is never guilty of such a degradation. The high-toned woman is above having articles of dress or jewelry in common with another; she never will run to borrow new gloves, new ribbons, new cloaks, shawls and other artieles of appsrel with which to cut a dash. To dress a mud lark in yellow feathers does not make a canary, nor will dressing a woman in borrowed plumage transform her into a lady.

Men seldom display such weakness. The real gentleman never will appear in borrowed articles of dress or jewelry. Nor will the woman who has resl pride of character so cheapen herself as to appear in goods not her own.

A gentleman friend of ours, who loves his wife dearly, was constantly buying for her costly and beautiful articles. He filled her lap with such little things as he saw from time to time which he thought would please her. She lived in a boarding-house. One day her husband noticed thst she was without certain artieles he had hought for her only a short time before. He began to inquire and learned thst her landlady had horrowed her furs to wear to market; that her sister hsd borrowed of her jewelry and other articles to wear to a party; that a lady friend had borrowed her new honnet to wear on the street, and that scarcely one of the beautiful articles he had hought for his wife, because he loved her and wished her to have them, was in her possession. Whoever should see her in company even with her own articles on her person would think they were borrowed of those to whom she had loaned them rather than lose their friendship.

As the articles were returned to their owner, some of them torn, hroken, soiled and damaged, like a sensihle man he threw them into the fire and told his wife that if she did not love him enough to keep for her own use such ornaments as he bought for her alone, she might buy for herself hereafter. There is no difference between a borrower and a beggar, except the borrower is the most selfish of the two and the least entitled to respect.

The Dangers of Ear-Rings.

An inquest held at Liverpool the other day on the body of a little girl, aged eight years, the daughter of a sailor, conveys a lesson with regard to ear-rings, which is, at all events, worth the attention of woman, if she can divert her thonghts for a moment from the pursuit of her rights. The unfortunate child, whose death formed the subject of inquiry, ahout three weeks ago underwent the operation of having her ears pierced with a stocking-needle. After the ears were pierced, two ear-rings belonging to her mother were put in them. A few days later a blister came behind one ear; then the jaw began to swell; worse symptoms ensued, and on Ssturday last the child died. The medical evidence was to the effect that death had resulted from exhaustion consequent upon the intense inflammation caused by the piercing of the ears, and the jury returned a verdict accordingly. Of course, if women choose to have their ears pierced, it would be impertinence on the part of man to remonstrate against the self-inflicted torture; but there can be no harm in suggesting that children might be allowed to reach years of discretion before they are called upon to follow the example of their elders and betters in this respect. It is, however, only fair on woman to admit that she did not invent the practice of ear-piercing. According to the Mohammedans, Abraham began it. In one of Sarah's jealous fits respecting Hagar she declared that she would not rest until she had dipped her hands in Hagar's blood. In order to quiet Sarah and enable her to redeem her promise without further upsetting her household, Abraham pierced Hargar's ears and drew rings through them. From that time ear-rings became fashionable.

Fun at Home.—Don't be afraid of a little fun at home, good people! Don't shut up your house, lest the sun should fade your carpets; and your hearts, lest a hearty laugh shonld shake down some of the musty old cobwebs there! If you want to ruin your sons, let them think that all mirth and social enjoyment must be left on the threshold when they come home at night. When one's home is regarded as a place to est, drink and sleep in, the work is begun that ends in gambling houses and reckless degradation. Young people must have fun somewhere. If they do not find it at their own hearthstones, it will be sought in other, and, perhaps, less profitable places. Therefore, let the fire burn brightly at night, and the home-nest made delightful with all the little things that parents so perfectly understand. Don't repress the buoyant spirits of your children; half an hour of merriment round the lamp and firelight of home, blots out the remembrance of many a care and annoyance during the day, and the best safeguards they can take with them into the world is the unseen influence of a bright little domestic sanctum.

John O'Groat's House is the most northern house in Scotland, and Land's End is the most southern point of England; from one to the other is from end to end of the island.

There are two periods in the life of man, at which he is too wise to tell woman the exact truth; when he is in love, and when he isn't.

Young Folks' Column.

A Mother's Boy.

"Is there a vacant place in this bank which I could fill?" was the inquiry of a hoy as, with a glowing cheek, he stood before the manager.

"There is none" was the reply. "Were you told you could obtain s situation here? Who recommended you?"

"No one recommended me, sir," calmly answered the hoy. "I only thought I would see."

There was a straightforwardness in the manner and an honest determination in the countensnce of the lad which pleased the man of business, and induced him to continue the conversation. He said: "You must have friends who could aid you in obtaining a situation; have you told them?"

The qnick flash of the deep blue eyes was quenched in the overtaking wave of sadness as he said, though half musingly:

"My mother *said* it would he useless to try without friends;" then recollecting himself, he apologized for the interruption, was ahout to withdraw when the gentleman detained him by asking why he did not stay at school for a year or two and then enter the business world.

"I have no time," was the reply. "I study at home and keep up with the other boys."

"Then you have a place already," said his interrogator. Why did you leave it."

"I have not left it," answerd the boy quietly.

"But you wish to leave. What is the matter?" For an instant the child hesitated; then he replied, with half reluctant frankness:

"I must do more for my mother!"

Brave words! talisman of success anywhere, everywhere. They went into the heart of the listener—recalling the radiant past. Grasping the hand of the astonished child he said, with a quivering voice:

"My boy, what is your name? you should find the first vacancy for an apprentice that occurs, in a hank. If, in the meantime, you need a friend come to me. But now give me your confidence. Why do you wish to do more for your mother? Have yon no father?"

Tears filled his eyes as he replied:

"My father is dead, my brothers and sisters are dead, and mother and I are left alone to help each other. But she is not strong, and I wish to take care of her. It will please her, sir, that you have heen so kind, and I am much obliged to you."

So saying the boy left, little dreaming that his own nobleness of character had been as a bright glance of sunshine into that busy world he had so tremblingly entered. A boy animsted by a desire to help his mother will always find friends.

Bad Boys.

We often hear parents lamenting over the evil ways of their sons, and attributing their bad behavior to the pernicious influence of the yellow covered literature of this day, or the bad example of the Jack Sheppards of the stage. It is doubtless true, that the vile trash with which our book-stores abound, has had a most deleterious effect on the morals of the young, but the chief cause of their demoralization, we think, lies in the fact that parents do not take their boys to church. It used to be the fashion for the father to go up every Sabbath to the house of worship and take his children with him, but now the times are changed, and the majority of the boys are running the streets on Sunday; and having nothing to do, the devil finds employment for them.

"Train up a child in the way he should go, and when he is old he will not depart from it," is the injunction of Scripture. How many children there are now a days in this christian land who are not taught the way in which they should go. How then can it be expected that they should he kind, obedient and good. They stray in hye and forbidden paths, and the end thereof is death. If parents would have good children, let them take them by the hand and lead them amid the green pastures, and by the still waters where religion loves to dwell.

A Word to Boys.—Did you ever think, boys, that this great world, with all its wealth and woe, with all its mines and mountains set with brilliants, its oceans, seas and rivers laid with pearl and gold, its steamboats and ships, railroads and steam printing presses, magnetic telegraphs, etc., will soon be given over to the hands of the boys of the present age? This is what really awaits you, and you should look abrosd upon your inheritance earnestly and hopefully, and prepare to enter, with stout and cultivated hearts, upon your duties. In after time, let it not be said that you disgraced the place of the great men and heroes whose mantle is to descend upon you.

Copper Toed Teeth.—A great many people, while laughing or talking, have a habit of showing their teeth, and where a number of the teeth have been filled, the gold used in filling shines and glistens with its brightness. Little Chloe was visiting at her Aunt Katie's, in this city the other day, and was sitting on her aunt's lap, enjoying a high old romp. Suddenly she stopped, and looking her auntie in the face with all the seriousness imaginable, said, "Aunt Katie, I wish I had copper toed teeth like yours."

All that I am or hope to be, I owe to my mother.—*Abraham Lincoln.*

Good Health.

The Philosophy of Pain.

Sir Humphrey Davy, when a boy, with the defisnt constancy of youth which had as yet suffered nothing, held the opinion that pain was no evil. He was refuted by a crab who bit his toe when he was bathing, and msde him roar loud enough to be heard half a mile off. If he hsd maintained, instesd, that pain was a good, his doctrine would have been unimpeachable. Unless the whole constitution of the world were altered, our very existence depends upon our sensibility to suffering. An anecdote, which is quoted by Dr. Carpenter in his 'Principles of Human Physiology,' from the 'Journal of a Naturalist,' shows the fatal effects of a temporary suspension of this law of our nature.

A drover went to sleep on a winter's evening upon the platform of a lime kiln with one leg resting upon the stones which had been piled up to burn through the night. That which was gentle warmth when he lay down, became a consuming fire before he rose up. His foot was burnt off above the ankle, and when, roused in the morning by the man who superintended the lime kiln, he put his stump, unconscious of his misfortune, to the ground, the extremity crumbled into fragments. Whether he had been lulled into torpor by the carbonic acid driven off from the limestone, or whstever else may have heen the cause of his insensibility, he felt no pain, and through his very exemption from this lot of humanity, expired a fortnight afterwards in Bristol hospital.

Without the warning voice of pain, life would be a series of similar disasters. The crab, to the lasting detriment of chemistry, might have eaten off the future Sir Humphrey's foot while he was swimming, without his entertaining the slightest suspicion of the ravages which were going on. Had he survived the injuries from the crab, he would yet have been cut off in the morning of his famous career, if, when experimenting upon the gases, the terrible oppression at his chest had not warned him to cease inhsling the carburetted hydrogen, nor, after a long struggle for life, would he have recovered to say to his alarmed assistant, 'I do not think I shall die.'

Without physical pain infancy would be maimed or perish before experience could inform it of its danger. Lord Kaimes advised parents to cut the fingers of their children 'cunningly' with a knife, that the little innocents might associate suffering with the glittering blade before they could do themselves a worse injury; but if no smart accompanied the wound they would cut up their own fingers with the same glee that they cut up a stick, and hurn them in a candle with the same delight that they burn a piece of paper in the fire. Without pain we could not proportion our actions to the strength of our frames, or our exertions to its powers of endurance.

In the impetuosity of youth we should strike blows that would crush our hands and break our arms; we should take leaps that would dislocate our limbs, and, no longer taught by fatigue that the muscles needed repose, we should continue our sports and our walking tours till we had worn out the living tissue with the same unconsciousness that we now wear out our coats and shoes. The very nutriment which is the support of life would frequently prove our death. Mirabeau said of a man who was as idle as he was corpulent, that his only use was to show how far the skin would stretch without bursting. Without pain this limit would be constantly exceeded, and epicures, experiencing no uneasy sensations, would continue their festivities until they met with the fate of the frog in the fable, who was ambitious of emulating the size of the ox.

Sir Charles Bell mentions the case of a patient who had lost the sense of heat in his right hand, and who, unconscious that the cover of a pan which had fallen into the fire was hurning hot, took it out and deliberately returned it to its proper place, to the destruction of the skin of the palm and fingers. This of itself would be an accident of incessant occurrence if the monitor were wanting which makes us drop snch things quicker than we pick them up. Pain is the grand preserver of existence, the sleepless sentinel that watches over our safety, and makes us both start away from the injnry that is present and guard against it carefully in the time to come.—*London Quarterly Review.*

Lead Poisoning.—A few months ago, on an estate in the department of *Semi El Marile*, 26 people were taken seriously ill, of whom two died. The physicians who attended them were convinced it wss a case of lead poisoning. It turned out that the lead was contained in the brine used for preserving butter. This brine, besides sugar and salt, held in solution saltpeter, acetate of soda and chloride of lead; the latter is plainly the result of a reaction between sugar of lead and salt. In six experiments, from 2 3 to 7.5 grains of sugar of lead were found in one liter of brine.

The butter, even when well pressed, contains a considerable amount of lead; and besides, the butter when not pressed, was used in cooking. A post-mortem examination showed lead in the intestines, liver and brain of those who died.

Domestic Economy.

Zinc in Cooking Utensils.

Much care and caution should be exercised by cooks and house-wives in using cooking utensils lined with zinc: The *Iron Age* says: Zinc is not a metal which can safely be used for lining cooking utensils. In its pure metallic state, zinc is not poisonous, but several of its compounds are prejudicial to health or fatal to life, according to the quantity taken into the system. The zinc of commerce, which is seldom pure, and often contains both lead and arsenic, forms various unwholesome compounds when subjected to the action of acid and heat. Many of the vegetable acids are very powerful in their action on metals, and zinc, even when pure, is but little calculated to resist their corroding action. In any acid, when iron is present, zinc becomes the sacrificial metal and is dissolved, thus setting up galvanic action, by the aid of which any acid, and even a solution of common salt in water, will attack it and eat it away with greater or less rapidity, according to circumstances. There are so many vegetable acids which are so complex in themselves and in their reactions, that we cannot here enter upon a consideration of the compounds which zinc would form under the circumstances indicated by our correspondent. Tin, though not entirely free from these objections, is altogether a safer metal than zinc as an inside coating for cooking utensils, and in some respects better even than vitreous enamel. While the enamel lasts, it is probably the best substance which can be employed for this purpose, but it cracks with the contraction and expansion of the metal to which it adheres, and these cracks become filled with matter which cannot fail, in time, to render unwholesome whatever is brought into contact with it during the operation of cooking. With recent progress in the manufacture of enamels, we seem to be approaching a degree of perfection in the art which will give us a substance both elastic and insoluble, and which will answer this purpose admirably.

How to Make Oatmeal Cracknels.—Oatmeal cracknels, or bannocks, as the Scotch call them, are excellent indeed, and are usually made as follows: Take the best quality of oatmeal and stir in barley with enough water to wet it through; add a pinch of salt; let it stand for ten minutes to swell; then roll out the mixture a quarter of an inch in thickness, first flouring the board and rolling pin with wheat flour; cut it with a biscuit cutter, and bake in a moderate oven, as these cakes will burn quickly, and only require to be of the lightest brown. They will snap easily between the fingers, and are delicious for lunch, requiring no butter to make them palatable. If put into a close jar, they will keep for several months. In the Highlands of Scotland they preserve their hannocks in the harrel of oat-meal, and can keep them a long time.—*Phrenological Journal.*

Apples in Imitation of Ginger.—To three ponnds of very hard apples take two pounds of loaf sugar, and a quarter of a pound of best white ginger. Put these in layers (having first sliced the apples in eight pieces and cored them) alternately in a wide-mouthed jar. Next day infuse an ounce of white ginger, well bruised, in ahout a pint of boiling water; let it stand till next day. Then put in the apples that have been two dsys in the ginger. Simmer slowly until the apples look clear. Take great care not to break the pieces.

Coffee.—The browned coffee of the shops should always be browned over, thus throwing off the grocery taint which it has acquired by exposure to the fowl air, being a powerful absorbent or disinfectant. The heating, which should make it a shade darker (the coffee of commerce will hear it), will also develop strength. By all means brown over your coffee, and keep it in a well corked hottle or jar, or what is better, brown as you want to use, thus having it fresh and strong, and better flavored.

Why are Fish Poisonous?—This question was recently discussed before the Medical Society of Konigsberg, Prussia, by Dr. Schiefferdecker. It is well known that prawn, rock-fish, oysters, etc., are, at certain seasons, unwholesome articles of food, and even poisonous. This does not arise from decomposition, nor from any observable change, as Dr. S. proves. He concludes that it depends upon a change in the blood, connected with the process of spawning.

Coooanut Cake.—One-half cup of butter, two cnps of sugar, three eggs, or the yolks of eight, keeping the whites for frosting, one cup of sweet milk, five cups of flour, half a teaspoonful soda, and one teaspoonful cream tartar. Bake in layers, as for jelly cake. Spread icing on each layer, and cover thickly with cocoanut.

Canned Fruits.—Make syrup with sugar and water, averaging a quarter of a pound of sugar to each pint of juice; boil the fruit until done, fill the jars boiling hot, seal up immediately. Keep the jars warm before filling with the fruit.

To Preserve Cranberries.—Boil a pound of the frnit very soft in a little water, not allowing it to burn. Then add a pound of sugar and boil five minutes, closely covered.

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WENTWORTH'S RESOURCES. — The December number of this valuable periodical has made its appearance replete as usual, with most valuable information in regard to California and the advantages she possesses for homes and honest labor. The care exercised by Mr. Wentworth in collecting reliable information in this direction is worthy of all praise.

ON FILE.—"Letter from Auburn," R. G.; "In Southern California," S. C. H; "Seasonable Hints—No. 3," J. C. C.; "Review of the Department Report on Education," E. S. C.; "Mr. Bancroft's Library,' J. M. H.

Melon Culture.

A subscriber asks for some information through the Press on the subject of melon culture; favorable location, suitable manures, enemies to be feared, etc.

The Sacramento valley furnishes the best localities in the State for melon-growing, and supplies a large portion of those sold in this market. The islands along the river are especially adapted to melon culture; no irrigation being required on account of the natural moisture of the soil. The vines here grow very rapidly—an excellent thing in melons—and the fruit attains a large size. There is scarcely any of our products that have become more of a specialty than the melon. Farmers, professional and amateur gardeners grow melons to a limited extent for their own use and for their immediate neighborhoods, but our markets are mostly supplied by those who make the business a specialty.

Manuring in the hill with stable manure is advisable but it should be well rotted; otherwise it will heat the seed and heating causes decay. It would be well in planting to put a little sulphur in the hill, to prevent the ravages of worms. We hear that during the past season a new parasite of the melon and cucumber vines has made its appearance in some parts of the State. It is a small white worm—a sort of double header, crawling both ways—harboring in the hill, apparently, and coming forth to attack the plant when quite young. It works upward on the plant, which soon droops and dies; and if the stalk is examined it will be found to be fluted by the course of the parasite. It is secret and sudden in its destructive work. The melon and cucumber plants—as all know who are acquainted with their habits—make their exit from the earth with a sort of bound. The surface of the hill at sunset may show no indications of the starting of the seed; but if you visit the grounds the next morning, you will perhaps see the plants all up, with stalks from one to two inches high, and leaves as large as a two bit piece. Or, since the appearance of this new parasite, you may visit your melon patches and discover that during the night the plants have come up, and been thoroughly fluted by this double headed worm; and by the next morning there will be no vestige of them left. A little sulphur placed in the hill with the seed, would probably obviate this difficulty. It is at least a cheap and harmless experiment.

The melon-grower must, of course, suit his time of planting to his locality, Do not plant in any locality until there is no further probability of frosts. Rapid growth being particularly desirable with these vines, planting should be deferred until the "growing season" is fairly inaugurated. Deferred or slow growth is injurious to them; and vines that have been subjected to such a trial will not recover from the set back. The seed had better remain in the drawer until the time has arrived when the plants can grow "right along."

There is a very common mistake made by those who become impressed with the peculiarities of the climate and soil of California. They seem to fancy that the members of the vegetable kingdom change their character even on being brought here, and require different treatment. Their wants and their habits are the same in all places, and all that is required of the grower of them is to see that they obtain what they need, as far as circumstances will allow, and that they receive proper protection from their natural enemies. The two principal wants of the melon family are plenty of sun and warm mellow soil; the greatest damages are from frost and parasitic bugs and worms. But besides these main points we must see that they are irrigated if the soil is lacking in natural moisture; seed should be carefully selected; there should be enough of it planted so that weak and defective plants can be removed, and they should be looked after and cultivated during the growth of the vine, but left undisturbed while the fruit is forming. Care and discretion should also be used in harvesting. A large portion of the melons that come to this market are rendered almost worthless by too early picking; they are large and shapely and perhaps keep longer than if they were allowed to ripen on the vines, but they do not possess the rich melon flavor, and many of them though possessing no external signs of decay, are sour and offensive to the taste. There is nothing that a Californian puts to his lips more doubtingly than a California melon. We are disposed to laugh at the predicament of the fruit eaters of the East who do not dare to put their teeth into an apple in the dark, but our risk is almost as great in eating a melon, even in broad day light, and all because they are picked too soon. If we could have our melons ripened on the vine there would be vastly more eaten. It would also be a vast advantage to the product if more attention were given to varieties grown. Like some others of our fruits, flavor has been lost sight of and only size considered.

FOR TULARE.—Mr. W. A. Sanders, our valued correspondent, accompanied by Mr. Bancroft, left on Monday, to examine a large tract of railroad and other lands in the King's river valley, beyond Visalia. Our readers may expect to hear from his travels.

San Joaquin Valley.

(Written for the RURAL PRESS by W. A. Sanders.)

This valley begins about 50 miles east of San Francisco, and extends thence in a south easterly direction, including the valleys of Kings' and Kern rivers about 250 miles, and is from 40 to 90 miles wide. Its surface is entirely level. It reaches away around you like an immense ocean, or like a vast map with a bordering frame-work of lofty mountains. It is mostly destitute of timber. There are places where you can travel a hundred miles without the shadow of a tree ever being thrown across your path, where you will not even see a tree, except distant scattering lines of oak, cottonwood or willows that mark the course of the different rivers across the plain. It is moreover a region of great dryness, there seldom being rain sufficient to insure even grain or hay crops without irrigation. With perhaps a half dozen exceptions, its rivers and creeks all dry up in summer, their beds during the dry seasons being but lines of hot glittering sand. Add to this a clear blue sky, crystal atmosphere, hot burning sun, vegetation dry as from a kiln, and the earth baked like a brick, and you have an idea of this greatest and richest valley of California as it appears during summer.

Land Titles.

Much of this land was surveyed by the Government and opened to private entry 16 years ago. Many people went there to engage in farming, but not having means to perfect a system of irrigation, they soon starved out, and the country was again left a wilderness to be used only for pasturage. Then Messrs. Lux & Miller, Chapman, Friedlander, Moore, and other capitalists bought up large tracts of the land. These men are now perfecting systems of canals whereby this land can be irrigated. W. S. Chapman and the capitalists associated with him own about a half million acres. On this they have expended for irrigating canals and other improvements, about $500,000. I have just been spending a few days at their place, known as the Chowchilla Rancho, a dozen miles south of Merced city. Here are 15

Artesian Wells

Within a distance of 20 miles. One of them, known as the Kentucky well, is the most famous in the State. It is 240 feet deep, has a diameter of nine inches, and throws out a volume of water that forms a creek which runs across the plains 10 miles to the San Joaquin river, and in summer affords water to 5,000 head of cattle, and nearly an equal number of sheep. It is the most perfect and useful well in our State, and cost less than $1,000.

Soil and Productions.

This region, like all the river valleys of our State, varies very much in soil. Here in their

Big Pasture,

Which is 20 miles in its greatest length, is a rich sandy loam which only requires irrigating water to produce everything from the cereals of our northern homes to the more tender tropical fruits. Here, and also at their place near Borden, are now, and in mid winter, fig trees and tomato vines laden with fruit, and also orange, lemon and lime trees growing in the most perfect luxuriance. But as I have located.

My Future Home

In this region of country—and have done so after extensive travel in all parts of the State, after 14 years' residence in California, and shall make this valley, its capabilities, and its productions the subject of future letters, I will close with a sketch of what will be the leading city in this valley.

Modesto

Is 102 miles from San Francisco by railroad. 'Tis the county seat of Stanislaus county, built on a treeless plain of grain fields, between Stanislaus and Tuolumne rivers. Both of these rivers are permanent. They do not dry up in summer, and during a great portion of the year they are navigable for steamboats for many miles up from their mouths. When, in the near future, their waters shall be brought by canals from the foothills so as to irrigate the plains on either side, these grain fields will be transformed into a succession of almond, Madeira, orange, lemon, lime, fig and cocoa groves, interspersed with broad expanse of raisin vineyards across the rich bottom lands, and palatial residences, surrounded by lofty encalypti and stately conifers, which shall combine the taste and industry of the temperate zones with the fruitful luxuriance of the tropics.

We stopped at the

Ross House.

Its proprietor "can keep a hotel." Perfect order in everything, nice airy rooms, well cooked food in great variety, courteous attention to guests and moderate charges. We recommend it to our friends "looking land" in this desirable locality.

Our first day here was spent with Bro. Spencer of the

"Stanislaus County News."

He took us in his carriage over the valley between the railroad and the San Joaquin river, over the cites of what were once Paradise and Tuolumne cities, now deserted—moved up to Modesto. With his retentive memory and long residence—he has lived here from boyhood—he can give the history of every locality and individual in the country. We have heard many encominms on his terse editorials—his live paper. We do do not now wonder at it. He and his paper are a part of the country, suited to its growth and its peculiarities. We wish there were more such.

The next day a friend took us in charge, and behind a span of dashing sorrels we were soon a dozen miles away to the eastward, to the town of Oakdale, the terminus of the south branch of the C. R. R. From here we went up the Stanislaus river to the

Pentland Bros.' Fruit Farm.

They have a fine vineyard from which they are making some wine, and would have made a great quantity of raisins but for the early rains. They ship a large amount of excellent fruit every year to San Francisco. These men are geniuses. They have, with their own hands, made everything around them—houses, barns, wagons, wine vats and presses—and have done it all well. We went from here over to the town of Knight's Ferry, and spent a most pleasant evening with Mr. Schell and his family. The next morning Mr. Schell took us out to see a piece of property of which he and the State may well be proud. I refer to the

Red Mountain Vineyard,

Which is situated a couple of miles north of the town on Littlejohn creek. It consists of about 60 acres of wine grape vines, mostly of the choicest varieties. The vines are pruned, cultivated, irrigated and cared for in a better manner than most vineyards in our State. But the great point of superiority of this over other vineyards I have seen in the State is its

Wine Cellar.

This is cut in the solid rock in a point of a hill that extends into the vineyard. The grapes are unloaded at the house on the top of the hill. Here is the wine press. From here, for different operations, everything is passed down through succeeding rooms till the perfect wine is stored up in the vault underneath. The excellence of it all is the extreme cleanliness. Here is none of the slop, the filth, the disagreeable odor characteristic of most vineyards. He makes a very excellent hock, a sour wine; also three varieties of sweet wine, most of which is shipped to the East. He gave me a bottle of the sweet Muscatelle; but whether this is a standard by which the editorial taste is to be judged, or the editorial taste is the standard by which the wine is to be judged. I do not know. I will give my evidence, however, that it is the finest flavored, richest and best wine I ever tasted.

We returned with Mr. Schell to his residence, where we had the pleasure of examining some very fine three-year old Sicily lemon trees. They were loaded with fruit, the largest and best flavored of all the lemon tribe. A specimen of these, together with apples from his storehouse of winter fruit and the wine above mentioned, are submitted for your examination,

[We received the wine, etc., above mentioned. We are informed that the wine is made in part, from grapes partially dried for raisins, but having been wet by the rain they were converted into wine. From this, or some other cause the wine possesses a richness and bouquet found only in the highest price imported sweet wines. The apples were of the Black Detroit and Spitzenburg varieties, with one other, which we failed to name, unless it be the Fall Queen, all of fine flavor and of the largest size.

The lemons were of the largest size and finest flavor, surpassing anything found in our market. They fully demonstrate that our State can produce a world's supply of the best quality of this excellent fruit.—EDS. PRESS.]

WILD BLACK CHERRY SEED.—Mr. Henry H. Mapes writes us from Kalamazoo, Mich., that he has on hand a few seed of the wild black cherry which he would like to have planted in California. This fruit is of some value for medicinal and flavoring purposes; the tree is vigorous, long-lived, and attractive in appearance, and the wood is much sought after by cabinet makers. If any of our numerous friends who are striving to extend the list of valuable woods grown in California would like to plant some of these seeds, we will endeavor to procure them upon their making their wants known to us. Who speaks first?

In a postscript to the note containing the offer of cherry seed, Mr. Mapes says: "I have as many as ever call on me for the reading of your RURAL PRESS" We would a little rather they would call on us for the reading of the PRESS; still, we know how this thing works, and we can bide our time. Mr. M. is doing just what we would like to have all our subscribers do; that is, to show the RURAL PRESS to their friends, and let them judge for themselves.

HORTICULTURE.

Our Bay Nurseries—No. 2.

Pacific Nursery

Is situsted near the Presidio, Ssn Francisco' Special attention is here given to evergreens, flowering shrubs and ornamentsl foliage plants. The greenhouse fscilities are extensive. Lenderman & Co., proprietors, are determined in making the nursery first-class. The grounds are regularly laid out, and the plants protected from the rough winds by the slope of the lsnd and rows of the eucalyptus. The evergreen shrubbery shows a vigorous growth. The list is full with many varieties of each species. There are 16 varieties of acasia, 16 of gum, 5 of pine, 10 of cypress, 8 of juniper, 7 of palm, 6 of pitospurum, 8 of abutelon, besides others rare and beautiful.

Among the flowering plants are new varieties of the japonica, begonia, clerodendron and camelia; also 40 varieties of hibiscus; 50 of roses; 60 of pinks and 150 of fuschiss. These are a specialty in this nursery.

Of climbers we may mention 12 varieties of clematis, 6 of ivy, 6 of honeysuckle, and 8 of climbing roses.

The greenhouse plants embrace rare and expensive ones, some single plants being worth $50. We note among fine plants the sago and cocoa, palms, banana, sanchesia nobilis, cyperus, altemifolias, caladium and peristrophia.

This nursery slso contsins the Egyptian paper plant, Australian flsx, the ficus macrophylla and an almost numberless variety of other plants and shrubs. Lovers of flowers and shrubbery will be well repaid for a visit to this interesting collection.

Bay Nursery, Oakland.

Crossing the bay we soon find ourselves in the beautiful grounds of James Hutchinson, corner of Telegraph Avenue and Bay Plsce, Oaklsnd. Bay nursery contains 4½ acres, has extensive green house and shade house facilities, and is well arranged throughout. It is one of the nestest and prettiest nurseries it has been our pleasure to visit. It is devoted principslly to ornamental shade trees, evergreens, flowering plants and bulbs. Mr. H. makes a specialty of carnations, fuschias, roses, magnolias, cameliss, cape jasmines and a general variety of new and rare plants. Imports largely from Europe, Australia, Japan, Brazil, Chili, Sandwich Islands and Africa. One of the large green houses is devoted to winter blooming plsnts, two to Chinese primroses, cyclamen, cineraries and basket plants, one is used as a propagating house and for tropical plants. Among the rare tropical plants are the variegated psndanas, six varieties of variegated aloes the cypressns variegata alternifolia. A fine collection of the dracena, the variegated wax plant, and tropical ferns, some of them very rare and beautiful. One honse 100 feet long is devoted to oranges, camelias, the Norfolk Island pine, one of the finest evergreens yet introduced, snd magnolias. Of the latter the stock is perhaps the largest on the coast. Mr. H. planted magnolias at Alameda 20 years ago which are now 20 feet high and bloom six months in the year. He has a fine lot of orange trees, and some splendid specimens of the graceful India rubber tree. One of the most exquisite flowers we have seen is the Bonvardia Davidsonia. In the grounds we noticed a fine lot of the variegated centnry plant, a large supply of pines, and in one lot 8,000 Monterey cypress, fine and thrifty.

The office and seed store is now on the corner of Broadway and 13th street, but Mr. Hutchinson has the foundation laid for a store and depot on the corner of his nursery, which will bring his business all together and greatly facilitate the filling of orders, and enable customers to get a supply of seeds and plsnts st the same time. The seeds are carefully selected and warrsnted as labeled. The proprietor of this nnrsery is a worker and has gained the success which is attending his efforts to further the cause of floriculture.

Good Things from Nevada County.

EDITORS PRESS.—In a former letter I promised to send you samples of my pesrs. I hsve therefore to-day the pleasure of sending you a first invoice—that is, a box of Beurre Clairgeau. The tree from which I picked these pears is one of my imported French trees. This is its fourth year of plantation, and so productive is the glorious Beurre Clairgeau the tree bore 132 pears this season, weighing from eight to sixteen ounces. Of conrse I send you some of the nicest, and hope that in all respects they will compare favorably with their sisters of the valleys. Here Beurre Clairgeau ripens from the 20th of November to the middle of January. December, however, may be set as the average month for its ripening. As for Doyenne d'hiver, Bergamotte, Royale d'hiver, and other pear varieties, from trees imported likewise by me from France, you will have to wait for samples of them till March and April, the ripening time.

As I had a little room left in the box I thought I would send you a good little mess of my genuine Languedoc soft shell almonds You will notice how full they are, though the shell is rather small. This is due in fact to the trees being yet too young, and having too big a crop for their age; then in taking off the green envelope it tears off a part of the shell, so soft is the latter.

You will find, too, a few medlsrs, or fruit of the Mespilus Germanis, and jnst mellow enough to eat. My little tree, which, by the way, is grafted on the white Hawthorn gave me this year a couple hundred of such fruit, many, however, only half as large as those I am sendiug yon.

Altogether I hope those little samples of fruit will help till more coming evidonee, to convince you that our red hills are good for something; and thst fruit from the hills of Nevada county may compsre favorably with that of the rich loam land of the valleys. As for my strawberries, I hope to come out second best, at least. FELIX GILLET.

Nevada City, Dec. 3d, 1874.

P. S.—I have been so busy that I have had no time yet to write you the promised communication on "Silk Culture in 1874." I will do it ere new year. I made a mistake in not sending you said Beurre Clairgeau for Thanksgiving day; but I will try to send you Doyenne d'hiver for Saint Patrick's. F. G.

[The pears, medlars and almonds arrived in good order. We are aware "that beggars must not choose;" but if we were allowed this privilege we would say "Give us the Beurre Clairgeau, in preference to anything we have ever eaten in the pear line." They are really delicions, and are also large and extremely attractive in appearance. The almonds are also first-class, and the medlars prove an interesting addition to the fruit offerings that have in their proper seas n been placed npon the altar of the RURAL PRESS.

Our esteemed friend and correspondent will please accept our hearty thanks.—EDS PRESS.]



THE AUGHINBAUGH BLACKBERRY.

The Aughinbaugh Blackberry.

We give herewith a representation (natural size) of a new seedling blackberry, which has recently been produced by Mr. G. Aughinbaugh, a well known fruit grower, who resides on Washington aveune, near Euclid street, Alameda. Th is berry ripens from four to five weeks earlier than any other variety of the blackberry known in this market, as has been shown by the result of its cultivation for the lsst two or three seasons. It is a most superior berry, begins to ripen from the first to the fifteenth of May, and continues to produce berries until about the middle of July—about the time other vsrieties of this berry begin to spear in this market. By reference to the engraving it will be observed that the frnit is very large, and quite unlike in form to other varieties—its form is more like that of the mulberry thsn the ordinary blackberry. The smaller berries on the twig shown are of course yet unripe, This progress of growth is very well illustrated.

In addition to the advsntsge of lsrge size and early ripening, the fruit is of excellent flavor, and does not contain so large a proportion of seeds and cores as other vsrieties. The plants grow up hardy, thrive well, and produce abundantly. We can attest from occular demonstration and personal knowledge to all we have said above, snd have no hesitation in commending this berry to the attentiou of fruit growers everywhere. The advantages of bringing so desirable a berry so much earlier into market than any other varieties of the same fruit, ought to ensure for it a very general cultivation. Mr. Aughinbaugh is now, for the first time, offering the plants for sale. See advertisement in another colnmn.

Late Peaches, Guavas and Palms.

Among the callers at the office of the PRESS during last week was Daua B. Clark, nurseryman of Santa Barbara. He brought for our inspection peaches grown on his place which were perfectly sound, being, in fact, scarcely ripe enough to eat. Were we the owner of the tree that produced these pesches, and were it properly filled with fruit, we would not hesitate in contracting to furnish fresh peaches at Christmas time. This is bringing the extremes of early and late peaches pretty close together. The sufferers from the long winters of the Northern States symbolize their brief summers as a comfortable leap from snow-bank to snow-bank; and with such thorough fruit culturists and indefatigable experimenters as Mr. Clark, we hope to be able to characterize our brief interval between early and late peaches as a mere leap from the late fruited tree to the early one. The peaches referred to are free-stones, of medium size and good flavor.

Our thanks are also due to Mr Clark for a present of a thrifty guava tree and a promising young palm. In a note accompanying these trees Mr. Clark speaks of them as follows:

"I have the guavas fruiting very finely. Lsst year my oldest plant ripened a fine quantity of fruit at thirty-one months from the seed. They are a very ornamental bush, and furnish material for the best jelly of the world. They are somewhat tender but will stand light frost. I have several thousand of them, all propagated and raised in the open air, and have no hothouses or glass frames on my place, and will not have them there.

I have only about a dozen of this variety of the palm, and there are no others on this coast for sale; at least, I think there are not."

Beet Sugar Making at Soquel.

For the benefit of that large portion of our readers who are unfamiliar with the *modus operandi* of beet sugar making, we give the following from an account of a visit to the Soquel Beet Sugar Manufactory, by the editor of the Santa Cruz *Sentinel*:

Whew! Is that the way they make sugar; dirt and all? Let us go in and see. We go down stairs and find,

1st—The Washer, an iron drum, or cylinder, twelve feet long by two in diameter and pierced with holes, which revolves in a large trough of running water. Into one end of this cylinder the beets are constantly carried by a spout, coming from the opening above, through which we saw them disappear, and at the other end we see them coming out, through two long slots, their faces now all clean and bright. They fall into a spot that drops them right into

2nd—The Grater. Under it we see white pummace running out into a long, narrow box, in which an auger revolves, moving the pummace along into the mouths of ten gutta percha tubes. Each of these has attached to it a cord which runs on a pulley overhead. The ends of the ten tubes hang just over.

3d—Ten centrifugals, or separators. These are flat discs, set on spindles, with a cone rising in the center and a fine brass gauze, or sieve, two feet high, around the circumference, and these revolve very swiftly—each being inside a large, stationary iron tub. The operator grasps the cord and lets down the end of the tube and the pommace instantly flies around the inside of the centrifugal, water at the same time bursting out of the iron tub from a pipe at the bottom. This process is called "pressing" and is completed in about seven minutes. He next turns down a rubber tube that lets clean water in to wash the pummace and take out all the saccharine liquid, which latter runs into an elevator, or force-pump, and is carried to the story next above.

4th—The dessicators. These are large cisterns with lime in them. Here the old-fashioned process of skimming is all done by steam; the foam, froth or scum passing off at the top of the cisterns and the clear liquid near the bottom. Then comes

5th—The separator.

6th—The filterers.

7th—Another elevator (force pump) and we arrive at

8th—The vacuum room. Here let us rest awhile and set down the items that go to make up a large establishment for this business. While we do so our sugar is being made, as you may see by stepping up beside that huge globe, about twelve feet high, made of the thickest boiler iron, in two hemispheres bolted together; and looking like a couple of glass tubes against which the material inside the globe is constantly thrown. You can really see (in these tubes) at any stage of the operation, just how it is progressing. Half way from the center of the immense globe to the bottom, there is a brass handle which the operator takes hold of, and draws out a long, slim rod with a slot in the upper side, the slot being full of syrup or sugar, according to the length of time it has been steamed—for everything is done by steam here.

But our "vacuum pan," as the great hollow, iron globe is called is about to discharge. Let us take a seat in the window between the vacuum and the sugar house. You see we are coming to the sugar now and that is what we are after.

See how carefully he tests it to see if it is sufficiently reduced—how he grasps that brass handle, then drawing it out, takes a little sugar between his thumb and finger and opening them up to the light so he can see through it, he pronounces it done, and looking around we see some 10 or 15 Chinamen in the other room gather up some 50 large square iron cans or tubs, each capable of holding 200 pounds of sugar when full, but as they have to carry them some distance, they do not fill them full—about 180 pounds. They place a tub under an iron spout that extends from under the vacuum pan into the other room, while two stout fellows hold another tub ready just over it. Now he turns a couple of circular valves, then comes round and loosens a long lever when lo, out comes the white, granulated sugar, and the Chinese begin to lug away can after can until—let us see; we will go in and count them—25, at one run, and the pan only half full. Around us sit 250 more all nearly full, and see, over there is another machine—the granulator, a curious machine—below it, in the story below us, is another set of centrifugals, where the syrup is driven off and the sugar comes out 1st, 2d or 3d quality, just according to the time devoted to its preparation. Above, in the 3d story, is the drying room, above this still is a store room. In the 2d story is also the packing room. Look, here comes one of the managers with a nice box of cube sugar—white, smooth and glistening, little ¾ inch cakes, just about enough to sweeten a small cup of tea, and costs only about ¼ a cent more than other grades.

Japanese Paper Fans.—The paper used in the manufacture of the Japanese fans, now so common in this country, is obtained from the root bark of the mulberry tree. The figures upon the flat fans are printed by a lithographic process, while those upon the folding ones are painted by hand.

Illuminating Tiles.

Mr. Wm. Lynch, of this city, is determined to provide proper means for lighting and ventilating dark and unsavory places. A large experience in the manufacture of illuminating tiles has convinced him that to admit a few straggling sunbeams into an underground apartment will not purify the atmosphere or render it a healthy abode, neither will it prevent articles stored in such apartments from being affected by the dampness and closeness of the atmosphere. A short time since we described in the columns of this paper, an improved ventilating blank to be used alternately with the ordinary illuminating blank in the manufacture of illuminating tiles which was patented by Mr. Lynch. We now report the issuance of another patent obtained by Mr. Lynch through the Mining and Scientific Press Patent Agency, for an improvement in connection with those ventilating blanks. His present invention consists in tapping the hole in the ventilating blank with screw threads and adapting thereto a short screw which can be screwed up through the hold from underneath until the upper end of the screw is flush with the top of the blank, thus effectually clongsi the blank in wet or frosty weather in orde tor keep the illuminated apartment dry.

Novel Scientific Classification.—J. H. Stenson, of Jacksonville, Oregon, proposes to set before the world a new system of classification for all natural phenomena. It is applicable to all the natural sciences. It proceeds by inductive methods, which are new, and works complete formula for that purpose. By these it brings out the causes involved in any set of phenomena. The system can be used in the wheat field, in the garden, in the dissecting room, and throughout nature. It is a scheme by which results can be calculated in a manner similar to the plan upon which the surveyor acts, when after getting his data, he proceeds to determine the area of the land. The idea was some months since explained by the author to the Agassiz Scientific Institute at Sacramento, at which Rev. Mr. Bonte expressed the opinion that there were merits in the idea, and explained at some length how it would be useful to the world. Dr. Logan also said the subject and its treatment were entirely new, and worthy of serious consideration and investigation.

A New Street Car.—A citizen of Cincinnati has put upon the streets of that town a vehicle designed to supersede street cars. It is about the size of a commen street car, and will seat sixteen passengers. The wheels are similar to these on carriages, but the axle is carved in such a manner as to allow the floor of the car to be on a level with the pavement. The driver sits in front, and uses an ordinary foot brake in place of those common to street cars. The entrance for the passengers is peculiar. The steps are parallel with the side of the car, but the doorways, one on each side, are placed diagonally across the end. This arrangement is made to allow passengers to step directly into the car from the sidewalk. It is said that these cars cost less than others in use, require no track to be laid down, and, owing to the double action of the wheels, run as lightly and easily as huggies of modern improved patterns and constructions. These cars or vehicles may take the place of omnibuses. No doubt they will, if properly introduced, but they will not supersede passenger railway cars.—*Chicago Inter-Ocean.*

Marsh's Scientific Expedition.—A telegram from Cheyenne, dated Dec. 3rd says: Professor O. C. Marsh and scientific party arrived here last evening from the Bad Lands, south of the Black Hills. The expedition was very successful, notwithstanding the extremely cold weather and continued hostility of the Indians. The latter stopped the party twice when on their way to the Bad Lands, attempted a night attack on their camp, and otherwise molested them. The explorations were made under difficulties, but resulted in important discoveries. About two tons of the remains of extinct animals were collected, among them many new to science. This collection will go to Yale College, and will soon be described by Professor Marsh.

A New Explosive.—A series of highly interesting and successful experiments with a new explosive have taken place at Minerva, near Wrexham, Wales. Nearly 500 civil engineers and others interested in mining operations, were present. The new powder, which has not yet been patented, is the invention of Messrs. Curtis & Harvey, the well known gunpowder manufactnrers, and among the special advantages claimed for it are that its explosive force is exceptionally great; that it throws off very little smoke or injnrious gas; and that it is quite as safe for use as ordinary powder, not being liable to explode by increased temperature, exposure to the sun, percussion or self-ignition.

Something Worth Knowing.—It is said that the furring or coating on the inside of steam boilers may easily be removed, making the surface appear like new iron, by placing a quantity of raw potatoes in the boiler and letting them boil to pieces. After two or three days, open the man-holes and a sandy deposit will be found; brush it out and the boilers will be all right.

American Mechanical Prodigy.—An English ironmaster from Clyde, Scotland, recently visited this country and made a tour through the Western States. At Chicago he saw sixteen car axles made by one steam hammer in one day. He had heard that we could make double as many axles in a day as they could in England, but always thought it was "Yankee blow." Now he "acknowledges the corn," and says eight axles per day is the number usually made in England with one hammer. He further says that all our shafting and forging is done cheaper than in England. He visited several of the Pittsburg works, and at Wm. Miller's he was again surprised to find that fourteen to sixteen per day could be made with one hammer. He was convinced that the main cause of this was the superiority of our machinery, and the fact that we use a blast for our furnaces instead of a draft, as is generally used in England.

New Method for the Commercial Preparation of Oxygen.—Mr. J. A. Wanklyn, of London, observing that copper oxide gave up easily its oxygen to barium oxide to produce barium peroxide, proposes to utilize this property in connection with the fact that metallic copper when highly heated, becomes oxidized to copper oxide, for the economical preparation of oxygen from atmospheric air. The barium oxide is mixed with at least half its weight of copper oxide, placed in an iron retort and heated to redness, a jet of steam being blown in. The barium peroxide at first formed gives up its oxygen, and becomes oxide again. Atmospheric air is then blown into the retort, (the steam being stopped) which again, through the mediation of the copper oxide, oxidizes the baryta to peroxide. This is then decomposed by steam, as before. Instead of baryta, caustic lime or manganic oxide may be used, or a mixture of the latter with lime or baryta.

Novel Engine Attachment.—The Corliss pumping engine, for the Providence water works, is a marvel of automatic self-regulation. The problem of dispensing with a second reservoir or stand-pipe for high service, the Corliss company has solved, by the construction of a unique "table engine," capable of pumping 5,000,000 gallons of water per diem, or more if needed. This is to say that, if every outlet from the supply pipes distributed over the high service of the city were closed so entirely that no water whatever escaped, the pumping apparatus remains perfectly at rest, but the instant any appreciable outflow occurs, the machinery, with no human eye intervening, proceeds to supply the waste. It has been known to be over five and a half minutes in making a single revolution, moving regularly all this time, however, and capable of increasing the rate almost immediately to more than 30 revolutions a minute—and all that of its own accord.

Our Transit of Venus Party.—Information by mail, under date of October 20th, from the transit of Venus station at Nagasaki, Japan, which is under the supervision of Professor Davidson, is as follows: The instruments of the party have been arranged for detailed adjustment. This work necessitated the cutting of a road for a mile up a hill 800 feet above the sea, and two miles south of the fort at Nagasaki. The summit was then leveled, in order that space might be secured for observations. The work was heavy, and the carrying of observatories, piers and instruments was slow and laborious. The Professor contemplated building another observatory near the cable station, to transmit and receive clock signals between Nagasaki and Wladivostok for differences of longitude. Next he would connect his longitude and Venus stations by a small triangulation.

Prizes for Essays.—The Academy of Arts, Science and Belles Lettres, of Cæn, France, offers a prize of eight hundred dollars for an essay on the subject of the functions of leaves in the vegetation of plants. A dissertation on the present state of science on this question, including the results of personal experiment, showing new facts tending to confirm or modify the doubtful points in theories now admitted, is required. The papers must be submitted before January 1, 1876.

Another prize, of one hundred dollars, is offered by the Academy of Sciences of Rouen, for a treatise on the advantages to be obtained by the conservation and improvement of cider by the employment of the processes of heating now applied to wines. The award will be made during the coming year.

Mr. Stanley has been heard from, and in a manner to afford much pleasure and hope to those interested in geographical discoveries. It is understood that he will take up the work left unfinished by Dr. Livingstone, and he gives a very satisfactory account thus far, of his labors. He is satisfied, from actual survey of the Refugi river, that it has two mouths. This is the route taken by slave traders, and Stanley proposes that light-draught boats, carrying steel guns, shall be stationed in the river, as more effective in putting a stop to the traffic than cruisers along the coast. He has established a supply station on the delta, and will proceed vigorously with his work of further explorations.

An ingenious Frenchman in the Baltimore jail has invented an improvement for sewing the heels on shoes, for which he has been offered $5,000.

Where the Cotton Worm Originates.

At the Hartford meeting of the American Association for the advancement of science, held in August last, Mr. Aug. R. Grote read a very interesting paper on the subject of the cotton caterpillar, a few extracts from which we will lay before our readers:

The earliest period at which the young worms were noticed in Marengo and Green counties in Alabama by the writer, was the last week in June, their first appearance varying in the same locality to the middle of July. The appearance of the worm is always heralded by the advent of the moth, the latter being attracted to lights in houses, at least a week before the worm appears in the fields. The next feature observed was that the worm is always heard of first to the south of any given locality, and comes as an army from the South, the broods arriving consecutively as long as the season lasts. This southern army is killed by advancing winter and by the decrease of the food plant.

The moth was first described by Hubner under the name of *Aletia argillacea*, from Bahia, Brazil, where it was very destructive to perennial cotton. It is also very destructive in Mexico, and the West Indies, and Mr. Grete believes that the insect dies out with its food every year in the Southern States and that its appearance the following season is due to fresh immigrations of the moth from those more southern localities.

It is capable of extended flights, as it has been taken alive in the Eastern States, in Buffalo, N. Y., and in Chicago, Ill., probably following the coast line, or the water courses emptying into the Gulf of Mexico. There is no proportion between the few that can survive in warm winters, and the swarms of the first appearance. The department residence of the cotton worm is outside of our cotton belt, and the conclusion is that the *Aletia* is not indigenous with us, but an annual not a denizen, but a visitant, and that the agent of destruction, must be directed against the first brood.

Mr. Glover put forth the same views in regard to the first brood, with the proposed remedy; as long ago as 1867, and we are glad to see that these views are borne out by Mr. Grote, who certainly after five years of careful scientific observation, must be accepted as an authority.—*Visalia Delta.*

Experimental Paper Making.—At the recent Vienna Exhibition there were some specimens of paper made from several materials which have not hitherto been utilized for that purpose. Among these was paper from the mulberry-tree bark, from the stinging-nettle, and from potato stalks. In districts of European countries where mulberry trees are used for feeding silk-worms the remaining twigs have served only for fuel. But now, in Austria and parts of Italy, the bark is peeled off by a simple arrangement, and from it a material prepared from which a good quality of paper is made. In Hungary the nettle is used with rags for making fine sketching and copying paper, and in Bohemia wrapping paper is made from potato stalks.

Action of Ammonia on Sugar.—On employing absolutely dry sugar, and submitting it to the action of a current of ammoniacal gas, dried over a long column of quick-lime, the sugar becomes at first opalescent, and takes the waxy consistence described by Raspail, but in the course of twelve hours, says Laborde, it liquefies, and flows on the surface of the tube in which it is contained; 100 parts of sugar absorb 7.83 of ammonia. On exposure to the air, the sugar loses the ammonia which it had absorbed. At the end of three months the sugar retains only about 0.37 per cent., and has still a very pungent flavor. Glucose similarly treated liquefies very rapidly, becoming colored, and forming a crystalline product.

Raising Sunken Vessels.—The main feature of a new plan for raising sunken ships is closing hermetically the hatches and all openings in the upper parts and then to pump down air through tubes inserted through the bottom. The air thus introduced rises toward the under side of the deck, and, not being able to escape, presses the water down and out through the holes in the ship's bottom. The vessel by this means will be rendered buoyant and rise to the surface.

A Feat of Modern Science.—The broken cable which the "Faraday" picked up and spliced, a fortnight ago, was grappled with at a depth of 11,266 feet—over two and an eighth miles. Such a feat, a few years ago, would have been considered impossible. It is one of the triumphs of modern science, with which, of late years, we have become so familiar that we cease to wonder at them.

To strengthen decaying canvas, and to preserve sound canvas from decay, the back of the picture should have given it two or three coats of white lead; and in this shape the picture may be handed down from generation to generation.

One of the severest penalties to which criminals in Holland were in ancient times condemned was to be deprived of the use of salt.

A wild silkworm, from which a durable thread is made, has lately been discovered in Turkestan.

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Agricultural Notes.

ALAMEDA

San Lorenzo Fruits.—Oakland *Transcript*, Dec. 4: Dr. Worthington, a gentleman of culture and taste has just returned from a visit to the fruit orchards of San Lorenzo in this county. He informs us that he saw on Mr. Llamatin's rancho one variety of apples in bulk contaioing 4,000 boxes. He has also several trees bearing oranges. But the great curiosity is an apple tree in the yard. He had planted four trees in a square, one at each corner. He then grafted the limbs together, and about six feet from the ground formed them into a solid body above. At Mr. Meeks' our informant fonnd an immense orchard of all varieties of fruit, containing some 7,250 acres. He has a splendid field of tobacco, and no less than 100 acres set out with almond trees. His residence is a princely one with magnificent surroundings.

Oranges in Oakland.—*News*, Dec 7: Oakland, with her other many attractions, may also boast of raising oranges. Not in a hot house, but in the open field. In the garden of Mr. Lyons, at the northwest corner of Fourteenth and Harrison streets, may be seen an orange tree, with a number of oranges as large as a child's fist.

Forest Trees.—Qnite a forest, numbering two or three hundred thousand trees, is growing handsomely on what was lately known as the Fitch Tract, between Brooklyn and San Leandro. Gums and Monterey Cypress are the prevailing varieties. The trees are now four years old.

AMADOR.

The Foothills for Potatoes.—Amador *Dispatch*, Dec. 5: The San Jose *Argus* speaks boastingly of the fact that a gentleman in that vicinity has just harvested seven tons of potatoes from one acre of ground. This may be considered a very good yield for the valley counties; but it would not be considered anythiog extra here in the foothills of Amador connty. Only a short time ago Mr. Ledford gathered over eight tons from one acre of ground, on his ranch a few miles above Volcano. The fact is, our foothill lands, when properly cultivated, will produce fully as great an amount of potatoes, fruit and vegetables of all kinds to the acre as any of the valley lands, and the quality of its product is much superior in every respect.

EL DORADO.

Alden Fruit Drying.—El Dorado *Republican*, Dec. 3: We understand that there is a movement on foot by outside capitalists to establish an extensive Alden fruit drying estabment in this conoty, provided sufficient encouragement is given by our frnit raisers, by moderate subscriptions to the atock. We also understand that a gentleman connected with the enterprise will soon pay us a visit to makc known their plans and see whether our people are willing to co-operate.

The weather says the *Mountain Democrat*, of Dec. 5th, has been very warm and dry this week. Farmers say that they can still plow, but that more rain would not be amiss.

HUMBOLDT.

Potatoes.—A letter from Ferndale, Humboldt conuty, says: "The potato crop is a total failure. The yield is universally light, five tons to the acre being considered a good crop, whereas in former times ten tons was considered nothing unnsual. Then again, this year the potatoes are affected with a blight or rot, or whatever it may be.

KERN.

Alfalfa in Kern County.—Kern county *Courier*, Dec. 5: The fact is incontrovertible and has passed beyond diopnte, that this part of the State has a peculiar adaptation to the growth of alfalfa. In no other part where it has been tried does it grow so luxuriantly or produce so many crops in the course of the year, while it is the only part of Southern California where it does not require irrigation after the first year. When its great productiveness is taken into account, its fattening properties, and the fondness all kinds of animals have for it, it is not strange that we are receiving a large immigration of well-to-do persons who come with the special object of engaging in its cultivation. In fact, an excitement is taking place on the subject, very similar to those in regard to ramie, cotton, cattle, hogs, sheep, and gold and silver mining, that have so often raged with such violence—with the difference that, from its nature, it must be more permanent and lasting. Althongh all other productions grow as well here as alfalfa, and the fact will soon become as indisputable, we are satisfied to rest our futuro on that alone, assured that in a few years it will render the Great Valley of Kern county the wealthiest and most important part of the State. In the meantime farmers are congregating here from all parts of the San Joaquin valley—most of whom propose to go largely into the cultivation of grass—the peculiar grass of this region —a crop that is always wealth-producing, and that cannot be grown to exceed the demand. Without having taken special pains to ascertain the exact quantity, we already know of ten thousand acres that will be seeded in this vicinity within the next three months. But this is only a part.

The Cotton Ranch now presents a fine appearance. It is nearly all cleared and ready for the plow. It will be mostly seeded with alfalfa in connection with grain. This will be the first occasion in its history that justice will have been done it. It has been usual to plant about the time the crop should be harvested.

MARIN.

The Weather, Etc.—Marin Co. *Journal*, December 3d: The weather continues in the highest degree favorable to all productive interests in this county. Our dairymen seek to have their cows come in about January 1st, as by that time feed is first rate. This year they would be glad if they came in four or six weeks earlier, as there is abundant grass, and the season would be so much longer. The present splendid feed will not be lost, however, as the cows will be in fine condition when they come in, and this will tell on their milking qualities to good advantage. We have had less than our usual frost thus far, and the copious rains being followed by warm, bright sunshine, and a corresponding high temperature, the fields are clothed with a luxuriant growth of feed, more advanced than was ever seen so early before. Thanksgiving day is past, but our people are still giving thanks for the rare blessings of such a prosperous season.

Notes from Marin Co.—A correspondent writes from Olema: "Mr. McIsaacs is dairying 100 cows; has 50 head of stock and hogs and 1,000 acres of farm and grazing lands. A single potato from his ranch weighed 4 pounds 2 ounces. He has a dapple gray colt, a little over two years old—Hamiltonian stock—a fine stepper and pretty as a picture.

The Tomales railroad company are repairing their road on Paper Mill creek, where it was damaged by the flood two weeks ago.

The road between Petaluma and Olema is still impassable in consequence of landslides which occnrred a few weeks ago.

MERCED.

Feed.—Merced *Tribune*, Dec. 5: Feed is now as far advanced as it was last February. Sheep are doing well, not having lost flesh in the transition from dry to green feed, as is usually the case.

SANTA BARBARA.

Sheep.—Santa Barbara *Index*, Dec. 3: Nearly 6,000 Spanish merino ewes are in camp, near town, for rest. They are from Santa Rosa ranch, J. H. Cooper's, near Lompoc. Three thousand are for General Banning, to be placed on his ranch near Los Angeles. The remainder are for Messrs. Mills & Edwards, of Santa Barbara, and will be driven to their ranch, the Conejo. Altogether, it is the finest flock of sheep that ever passed through this county.

More Sono Birds.—Birds have increased in numbers with our trees and gardens. Where a few years ago we had a few linnets who built their nest beneath the house eaves, we now have a flock in our tree-tops, the old pair seeming to have multiplied themselves in their progeny, and to have brought in their friends from the mountains.

SAN BENITO.

Sheep.—San Benito *Advance*, Dec. 5: Fifty thoroughbred Spanish merino sheep were shipped from the Hollister depot on Wednesday last by Flint Bixby & Co. Their destination is Wilmington, Los Angeles county.

SANTA CLARA.

Small Farming.—The San Jose *Argus*, Dec. 5, says: Mr. C. Andrews, who is cultivating a 20 acre farm near Mayfield, has proved that a man's time can be profitably employed on a few acres of good land, even in California where big ranches are all the rage. Mr. A.'s farm is situated on Mosquito creek. The soil is deep, fine and light alluvial, sloping toward the bay, and bordering on, or near the marshlands. He cultivates vegetables, corn, etc., principally. On two acres of land, this season, he produced 29,300 pounds of potatoes, not counting in small ones, and from two acres more he took 32,000 pounds. His method of cultivating for potatoes is to plow not less than three times, as deep as the plow will run, and harrow finely before planting. After the potatoes are planted he works the surface soil with a cultivator and shovel plow, thoroughly, as long as necessary.

Mr. Andrews diversifies his farming and rotates his crops. On ground that potatoes and corn grew last year, he raised, this year, from 2½ acres 14 tons of wheat hay. The cultivation was plowing once as shallow as the plow would run and harrowing in the seed very thoroughly; after that, the pulling out of all mustard stalks, which Mr. A. thinks paid well for the labor expended.

Whatever he cultivates is done in a thorough manner, and all crops are good. With his method of fine, thorough surface cultivation, irrigation is not necessary, and although he can get water very cheaply he does not choose to use it. What mannre he makes on the place is applied to the surface.

SANTA CRUZ.

The Almond and Walnut—Santa Cruz *Enterprise*, Dec. 4: A most excellent variety of paper shell almonds was given us last week by Mr. Buckels of the McLaughlin ranch np in the mountains. The nuts were grown on Harvey Comstock's place in that vicinity, and upon trees budded less than two years since. That section, as is a great portion of the Bean creek country, is well adapted to growing both the almond and English walnut. Our mountain farmers are just beginning to realize the value of their rich mountain lands. A redwood stump can be rotted out in a very few months by boring in a proper depth and putting sulphuric acid in the fissnre. So say those who pretend to speak from experience.

The choicest land we have, is that grown over with redwood and fir. If the stumps can be thus easily removed, tens of thousands of the very best acres of soil can be speedily utilized, and made a source of immenso profit. These monntain ranches are just beginning to be appreciated, their climate is unsurpassed, soil superior, and water sweet and soft. What more could one ask?

SAN JOAQUIN.

Cultivation of Rice.—The Stockton *Independent* nrges the cultivation of rice in the San Joaquin valley. It says that the general idea that the cultivation of rice is difficult is all a mistake. It is easily produced. There are two kinds—one which must be cultivated on moist land, and another which is pecnliarly adapted to dry land. The latter ia inferior in quality, while the former has the further advantage of being more easily cultivated. The number of bushels to the acre will average as many as can be realized from wheat. The land in this State suitable for the growth of rice is of very large extent. Investment in this comparatively untried pursuit wonld surely prove remunerative Rice is said to be a surer crop than other grain —not being affected by rust or other usual casualties. We import large quantities, and hence have a market at our very doors. We have the land, the climate and market—why not let ns have rice?

Timber.—It ia really a matter of astonishment that so little attention has been paid to the growth of timber in districts where it is scarce and the land is suitable. If there was more attention given valuable timber and less to planting fish, the State would be the gainer.

The Crop of 1875.—*Argus*, Dec. 5: The indications now are in favor of an immense crop of cereals at the harvest next year. There has been a large gain to the force of farmers in the State during the past twelve months by immigration, and the season has been so early and so favorable as to enable all to plant unusually large crops. All the volnnteer and summer-fallow lands have been seeded, and the entire force of farmers throughout the San Joaqnin valley will henceforth be engaged in plowing and planting new lands nntil the time arrives for summer plowing for the crop of 1876. Seed is plenty and cheaper than ever before known, and there is no fear of a scarcity of feed, and all are encouraged to plant to the fullest extent of their means. Unless some great misfortune happens to blight the crop, the products of the State the coming season will be double or treble greater than ever before in the most frnitful seasons. Immigrants are still ponring in, and there has been work for all as fast as they come in. The time of California's greatest prosperity is apparently near at hand, and the country will henceforth rapidly fill up with population.

TULARE.

Visalia and Inyo Road Meeting.—Visalia *Delta* Dec. 4th: We learn that the Directors of the Visalia and Inyo road company will meet in Visalia on next Saturday afternoon. As to whether the company is intending to take any steps to the opening of a wagon road on the line of their present trail, we are unable to say. Without a road those mines will never be developed.

Large Squash.—Tulare *Times* Dec. 5: We were shown at Kraut's restaurant, this week, a large squash that measured five feet six inches in length and of good proportions. It was raised on George Hunsacker'a ranch, on lower Tule river.

The Peoples' School.—We have received a catalogue of this school, located at Vacaville. Any information in regard to this institution may be obtained by addressing Prof. A. M. Merreman, principal at Vacaville, Cal.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Dec. 8th, 1874.

For Week Ending Nov. 24th, 1874.*

Bee-Hive. — Peter Ole Peterson, Oakland, Cal.

Machine for Holding and Shearing Sheep.—Ephraim Chaqnette, Independenco, Cal.

Implement for Shearing Sheep.—E. Chaquette, Independence, Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

Wouldn't Farm Without It.—Dewey & Co.: Enclosed please find $10.00 (Gold Note) together with your receipt for subscription to Rural Press. Please extend my subscription to correspond with amount enclosed from January 1st, 1874. Many thanks for your kind indulgence to me. I would not be deprived of your Rural Press for $50.00; in fact could not farm without it. With every good wish for you and your paper,

I remain, gentlemen, truly, H. A. H.

San Jacinto, San Diego Co., Cal.

AMERICAN SWEET CHESTNUT TREES.

Thirty Thousand American Sweet Chestnut Trees for sale cheap, in lots to suit, at Room 32 Merchants' Exchange, San Francisco, where samples may be seen. ☞ The trees are two years old, and in prime order. Will be delivered either in this city, Oakland or Sacramento. These trees are valuable for nuts, timber, shade trees or lawn trees; and are preferred by many to any of the foreign varieties. ✖

Breeders' Directory.

Parties desiring to purchase Live-Stock will find in this Directory the Names of some of the most reliable Breeders.

Our Rates.—Cards of six lines or less will be inserted in this directory at the rate of 50 cents a line per month. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gahilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Short-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

WM. QUINN, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petaluma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short-Horn Cattle.

A. MAILLARD, San Rafael, Marin Co., Cal., breeder of Jerseys and Alderneys.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

STANTON & POWERS, Sacramento, Cal. Choice Jersey Heifers at reasonable rates, Address L. C. Powers, Sacramento, Cal.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY.

GEO. B. BAYLEY, Cor. 16th and Castro reets, Oakland, Cal. Imported Brahmas and other hoice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

Mrs. L. J. WATKINS, Santa Clara. Premium Fowls. White Leghorn, S. S. Hamburg, Game Bantams, and Aylesbury Ducks. Also, Eggs. 21v8-3t

SWINE.

A. T. HATCH, Suisun City, Cal., breeder of Poland China Swine.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

San Francisco, Wednesday, Dec. 9th, 1874.

The outlook for the great California staple, Wheat, s rather favorable at tho close of this week, though quotations are not higher, and the market is not firm, receipts for the week being large. The Liverpool market remains quite steady from day to day. Wool, which has been quite activo in the East with a marked advance this week except in California Wools, is firmer here in consequonco. The supply of minor vegetables is lighter on this market, and prices are higher; but Potatoes and Onions, being in large supply are lower, and not so active. Poultry of all kinds is also in large supply and cheaper. Fruit, except tropical, is in good supply, particularly apples and pears. No change in Fresh Meat, the supply of which is good. Game is more abundant, good, and cheaper. Hides are lower, with receipts of 4,050 this week. Honey, though the receipts are not large, is weak at our quotations. Beeswax, receipts are good. Hops, unchanged, and no receipts. A small advance is noted in the jobbing rates of beans.

Barley was in small receipt during the first of the week for several days, and offerings were light also. The rates have fluctuated but l ittle during the week. Monday, considerable changed hands on private terms, but it was difficult to place the best bay brewing at $1.50, the general rate offered for choice being $1.45 to $1.47½.

Bran is selling at the mills at $19 per ton.

Butter is getting in large supply and of good quality, the abundant grass from the early rains being favorable to dairymen. The price consequently tends downward, and is now quoted at 45 to 50c. There is till considerable trade in Eastern but ter also, at 25 to 37½c.

Buckwheat is in moderate request at 2¼c per lb.

Corn sold Saturday and Monday at $1.40 per ctl. for yellow and fair Bay; and $1 45 for choice Southern, part white.

Cornmeal—Feed is selling from the mill at $32 per ton, and Table at 2½ to 3c per lb.

Eggs have sold this week 45 to 46c; but the last sales of choice were at 45c. And yet California is not furnishing the full supply, quantities coming from Oregon, aud all the way from Chicago. They close dull at 42@45c.

Flour—A small vessel loaded for Montevido, and a small shipment went by str. McGregor to Honolulu yesterday, while a sale of 2,000 bbls. Starr's Extra was made for China, but on private terms. Receipts from the interior continue liberal, and the city mills are generally busy, with a good local trade, and moderate inxqiry for export to various points. Superfine has been steady at $3.87½@$4.25: Extras, $4.50@$4.75; job hing, at $4.75@$5.12½ per ctl. Receipts yesterday included 15,956 barrels by the River Lune, taken on hoard at Starr's Mills, Vallejo. Extra are johbing today at $4.75 to $5.12½ per bbl.

Freight to Liverpool is unsettled at the advance, heing now quoted at a range of £2.17s to £3.5s, in wood and iron vessels. A number of vessels are in port, and rales of charter are kept very quiet.

Honey is active. A large shipment from San Diego to a commission house was in a lesking condition, causing a loss of at least $100 in the lot of 300 or 400 boxes. White in frames is 18 to 22½c; dark, 8 to 12½c: strained, 7 to 12c per ℔.

Onions are in large receipt, and for a day or two past have glutted the market. The market was well stocked Saturday, and rcceipts from then till Monday aggregated 950 additional sacks, causing a further decline. They close dull at 65c to $1 per ctl.

Oats—Market continucs steady, 1,000 sacks went by the Australian steamer; 200 sacks choice feed sold Monday at $1.62½ and 100 good at $1.55. The range is $1.40@$1.62½. Fancy Feed and Milling lots, $1.65@ $1.70 per ctl.

Potatoes.—Tho market coutinues wcak and de pressed throughout the week. Saturday the rate was $1.40 to $1.62½ per 100 pounds. An addition by Monday of 6,000 sacks to the supply further depressed the quotations. The Humboldt steamer is expected with 5,000 sacks, and the markot closes heavy, except for choice lots, many received being rotten from the rains or other causes. 1,000 sacks, Petaluma, sold yesterday at $1.25 and $1.37 in lots. Sweets are quoted at $1.50 and $1.75 per cental.

Poultry.—Though quantities of Cali fornia Poultry are shipped to Nevada and everywhcre clse that they will bear shipment and find a market for the holidays, the market hcre continucs in over supply for the prosent. Hens are $6 to $7; roosters $5.50 to $6.25; broilers $4 to $5. Ducks, $7 to $9 per dozcn. Turkeys 13 to 15c per pound. Geese $2.25 to $2.75 per pair.

Wheat has continued tolcrably active during the week closing to-day. A slight advance took place in Spring Wheat In New York the past week, though the advance in froight and decline in gold checked that tendency there. Telograms from Liverpool of the 5th, 7th and 8th, showed little change in that markot, being steadily 9s 10d and 10s 4d for averago California Wheat, and Club 10s 4d to 10s 7d. The dispatch on the Merchants' Exchange bulletin board to-dsy, datod Liverpool, December 9th, is the same, 9s 10d to 10s 3d; and 10s 4d to 10s 7d. The large amount of engaged tonnage on the hands of the shippers here keeps them in the market, and business fairly active; on Monday salcs of 10,000 sacks choice shipping were reported at $1.52½; aud 1,200 sacks choice milling at $1.55 per cental. The following dispatch of yesterday seems to indicate that the lowest poiut has heen reached in the European Wheat market.

London, December 8th.—The "Mark Lune Express" says: "The weather is wintry, and many Russian port, are closed till spring. There is a small fluctuation in Wheat, which is firm, with a rise of a shilling. It is thought that the lowest rates have been passed. The weather is generally favorable for a now crop."

A contemporary publishes the following:

The receipts of Wheat at this port last week were the largest ou record, amounting to 547,000 contals. This quantity includes four cargoes taken on at Oakland and four taken ahoard at Vallejo, hut subsequently reported in the receipts at this point. Usually our deliveries of Wheat are tbe heaviest in August and Septcmber, but woll known causes have, this season, operated to delay the crop in reaching tidewatcr.

Wines are getting to be a common article of quotation in the market reports. The last sales noted were 500 octaves Dussol's Sherry and 60 quarts and 80 octaves Reig's Burgundy Port, ex Jaques Cœur private; 3,000 gallons Buena Vista White and Red, agent's rates. As California is rapidly increasing in the growth of the vino and the olive, both wine and oil will be sources of immense wealth to the State.

Wool shows no change here, though in both Boston and New York the past week the market was unusually active, nnd prices took a decidedly favorahle turn with considerable excitement, owing to the increased business in the goods trade. In the latter city, California spring wool was quiet and in light supply, which tends to maintain present prices; but fall Wool was dull and in buyers favor.

DOMESTIC PRODUCE.

Wednesday m., Dec. 9, 1874.

BEANS.			
Beans, sm'l wh.℔	3½	@	—
do. butter.....	3½	@	5
do. bayo.....	2¾	@	—
do, pink.....	2¼	@	—
do, red.....	3½	@	—
BROOM CORN.			
Per ℔.....	5	@	8
COTTON.			
Cal. 1874. ℔ lb....	15	@	15½
DAIRY PRODUCE			
Butter, Cal. choice			
℔	45	@	50
do, good.....	40	@	45
do, inferior.....	30	@	40
do, firkin.....	30	@	35
do, pickled.....	35	@	42½
Obcess, Oal. new	12½	@	17
do, Eastern ...	15	@	20
EGGS.			
Eggs, Cal. fresh	42	@	45
do, Oregon.....	35	@	—
do, Eastern.....	23	@	30
do, Ducks'.....	—	@	—
FEED.			
Bran, per ton.....	—	@	19 00
Middlings	—	@	28 50
Hay	12 00	@	17 00
Straw, ℔ bale..	—	@	—
Oil cake meal...	—	@	30 00
Corn Meal.....	31 00	@	32 00
FLOUR.			
Extra..	4 75	@	5 12½
Superfine.....	4 20	@	4 75
FRESH MEAT.			
Beef, fr quality..℔	7	@	
oo, second do..	6	@	7
do, third do....	4½	@	5
Veal.....	4½	@	6
Mutton	4½	@	5
Lamb.....	5½	@	6
Pork, undressed.	6½	@	6½
do. dressed....	8½	@	8¾
GRAIN, ETC.			
Wheat, coast...	1 40	@	1 45
do shipping..1	50	@	1 52½
do milling....1	55	@	1 57½
Barley, coast.....	1 20	@	1 30
do brewing...1	40	@	1 50
Oats, choice..	1 65	@	1 75
do common ..1	35	@	1 55
Corn, White.....	—	@	1 45
do, Yellow.....	—	@	1 45
Buckwheat.....2	00	@	2 25
Rye 112½	@	—	—
HOPS.			
California,1874...	35	@	37½
East'rn,'74.ch'ice	50	@	—
MISCELLANEOUS.			
Beeswax.per lb..	25	@	27½
Honey in comh..	18	@	22½
do Stralned....	5	@	10
Pulu.....			8½@9
Onions.....	65	@	1 00
NUTS-JOBBING.			
Cal. Walnuts	10	@	11
Peanuts per lb...	6	@	7
Cbile Walnuts..	8	@	9
Pecan nuts.....	13	@	15
Brazil do.....	14	@	16
Alm'ds h'rd sbell	8	@	10
do, soft.....	15	@	22
Filberts.....	17	@	18
Cocoanuts, 1000..	60 00	@	—
POTATOES.			
Sweet, per cwt ..	—	@	1 25
Cuffee Oovel	—@—		
H. M. Bay..1	30	@	1 50
Pigeon Pt...	1 50	@	1 60
Humboldt..	1 50	@	1 60
Tomales.....	—	@	1 50
Mission	—	@	—
Salinas.....	—	@	—
Bodega.....	—	@	—
St Barbara..	—	@	—
Sac. River..	—	@	—
POULTRY & GAME.			
Live Turkeys,			
hens per ℔.....	13	@	15
do gobblers....	12	@	14
Hens, per dz....	6 00	@	7 00
Roosters, young,			
large.....	5 00	@	6 00
Broilers, small..2	50	@	4 00
do large.....	4 00	@	4 50
Ducks, tame, doz	7 00	@	8 00
Geese, per pair. 2	00	@	2 50
Hare, per doz... 3	00	@	3 50
Snipe, Enr., doz	—	@	—
Quail, per doz ...1	50	@	1 75
Mallard Ducks..4	00	@	4 50
do small.....1	50	@	1 75
Wild Geese, gray	—	@	—
do white.....	—	@	—
Doves, per dozen	50	@	75
Prairie Chickens	—	@	—
Grouse.....	—	@	—
Rabbits.....1	25	@	1 50
do tame.....5	00	@	6 00
Venison, per lb..	7	@	9
PROVISIONS.			
Cal. Bacon, Light	—	@	17
do Medium....	—	@	16½
do Heavy.....	14	@	15
Eastern do.....	—	@	16
Hams, Cal	14	@	14½
do Whittakers	17½	@	18½
do Duffield, ch	17½	@	18½
do Plankton &			
Armour.....	—	@	18
do Boyd's	—	@	—
do Stewart's..	—	@	16
Eastern Sbould's	9	@	10
do new hams	—	@	—
Cal.Smoked Beef	9	@	10
Lard.....	14½	@	17
SEEDS.			
Alfalfa, Chili..	15	@	16
oo California.	15	@	16
Canary.....	8	@	10
Cotton.....	6	@	10
Flaxseed.....	3	@	4
Hsmp.....	8	@	10
Ky. Blue Grass..	50	@	60
do 2d quality..	40	@	50
do 3d quality..	30	@	40
Millet.....	12	@	15
Mustard, white..	1¾	@	2¾
do. Brown.....	1¾	@	2
Italian Rye.....	30	@	40
Perennial do....	30	@	40
Rape.....	11	@	12
Timothy.....	11	@	12
Sweet V Grass..1	00	@	1 50
Orchard do....	30	@	35
Red Top do....	25	@	30
Hungarian do	10	@	13
Lawn do.....	50	@	60
Mesquit do...	15	@	20
Clover Red.....	—	@	20
do White	65	@	75
WOOL, ETC.			
FALL—			
Good to choice..	18	@	20
Fair grade.....	16	@	18
Heavy free.....	14	@	16
Defective.....	12	@	15
Hides, dry.....	19	@	20
do wet salted	8½	@	9
Tallow, Crude..	5	@	6
do Refined....	6	@	7

FRUITS AND VEGETABLES.

Wednesday m., Dec. 9, 1874.

FRUIT MARKET.			
Tahati, Or. ℔ M	—	@	40 00
Lorita, do.....	—	@	—
Oal. do.....	—	@	—
Limes, ℔ M.....	—	@	15 00
Cal.Lemons,℔ M—	—	@	25 00
Australian do .—	—	@	40 00
do Sicily ℔ b'x.—	—	@	—
Bananas, ℔ bnch	3 00	@	4 00
Cocoanuts,℔ 1000.	—	@	60 00
Pineapples, ℔ dz.	—	@	—
Apples, ℔ box....	50	@	50
Oherries..	—	@	—
Blackberrics	—	@	—
do wild.....	—	@	—
Huckleberries...	—	@	—
Strawberries℔ lb	—	@	25
Gooseberries....	—	@	—
Raspberries.....	—	@	—
Currants.....	—	@	—
do black.....	—	@	—
Apricots.....	—	@	—
Plums.....	—	@	—
Peacnes, bskt..	—	@	—
do, ℔ box.....	—	@	—
do ont Mountain,℔....	—	@	—
Pears, Bart't, bx.	—	@	—
do Cooking....	50	@	75
Crab Apples.....	—	@	—
Nectarines.....	—	@	—
Wat'rmel's℔100	—	@	—
Muskm'l's℔100.—	—	@	—
Pomegran's℔100—	—	@	—
Figs.....	—	@	—
Grapes, Bl'k H'g	1 00	@	1 50
do Muscat..2	50	@	4 00
do Malavo'e..	—	@	—
do Sweetw'r..	—	@	—
do Mission....2	00	@	2 50
do Rose of Peru	1 00	@	1 50
do Tokay.....	—	@	3 00
do Morocco.....1	50	@	2 00
do St. Peter....—		@	—
DRIED FRUIT.			
Apples. ℔ b.....	5½	@	6½
Pears, ℔ lb	9	@	10
Peaches, ℔ lb.....	8	@	9
Apricots, ℔ lb.....	10	@	12½
Plums, ℔ lb	5	@	6
Pitted Plums, ℔ lb...	13	@	15
do Extra, ℔ lb...	—	@	—
Raisins, ℔ lb.....	5½	@	12½
Black Figs, ℔ lb....	5	@	—
White, do	10	@	15
Prunes.....	8	@	13
do German....	14	@	—
Citron.....	@	27½	32½
Zante Currants.	8	@	—
Dates.....	12½	@	—
VEGETABLES.			
Asparagus.....	—	@	—
Beets.....	—	@	1
Cabbage, ℔ 100 lbs.	50	@	75
Carrots, per ton....6	00	@	10 00
Cauliflower, doz.....	—	@	—
Celery, doz.....	—	@	—
Garlic, ℔ lb.....	12	@	15
Green Peas.....	6	@	10
Green Corn ℔ doz..	—	@	—
Sqnn'rSquash per ton	—	@	—
Marro'fat Sq'sh,tn	8	00	@ 10 00
Artichokes, ℔ doz..	40	@	75
String Beans, ℔ lb...	5	@	—
Lima Beans.....	5	@	—
Parsnips	12½	@	15
Shell Beans	7	@	10
Peppers, green, box	75	@	1 25
Okra, Green.....	5	@	6
Cucumbers, box	—	@	2 50
Tomatoes, box.....	—	@	—
Egg Plant, box.....	—	@	—
Rhubarb	—	@	—
Lettnce	10	@	—
Turnips, ton.....	10	00	@ —

GENERAL MERCHANDISE.

Wednesday m., Dec. 9, 1874.

BAGS.			
Eng. Stand Wbt..	—	—	@12
Detrick's Machine			
Sewed, 22x36, E...12		—	@12¼
do 22x36, do E W—		—	@13¼
do 20x40, do A ...—		—	@13½
Flour Sacks ½s..	9½	—	@11½
" " ¼s.	6	—	@ 7
Stand. Gunnies..			
double seam...	13		@14
single seam....	13¾		@14
" Wool Sacks.	60		@67½
Barley Bags 24x36	13		@14
do 23x40 —			@14½
do 24x40 —			@15
do 28x36 —			@16
Oat Bags, 24x40....	18		@16½
do 28x36....	—		@17
Hessian 40-in.gds	9½		@ 9¾
do 45	10½		@11
do 60	—		@16
CANNED GOODS.			
Asst'd Pie Fruits			
in 2½ ℔ cans. 2	50	@	2 75
do Table do...3	50	@	4 00
Jams & Jellies 3	75	@	4 00
Pickles ½ gl..	—	@	3 50
Sardines,qr box1	80	@	— —
do bf hoxes.3	20	@	— —
COAL—Jobbing.			
Australian,℔ ton	10	50	@12 50
Coos Bay.....	—	—	@10 00
Bellingham Bay.—	—	@	8 50
Seattle.....	—	—	@11—
Cumberl'd, cks..	—	@	18 00
do bnlk...16	00	@	17 50
Mt. Diablo.....	6	25	@8 50
Lehigh.....	—	—	@17 00
Liverpool.....10	50	@	11 50
West Hartley	—	@	14 00
Scotch.....10	00	@	11 00
Scranton .....—	—	@	13 50
Vancouver's Isl...11	00	@	11 50
Charcoal, ℔ sk...	75	@	—
Coke, ℔ hhl.....	—	@	60
COFFEE.			
Sandwich Island	—	@	22
Central Amerio'n	20	@	22
Costa Rica per ℔	23	@	24
Guatemala.....	20	@	22
Java.....	—	@	26½
Manilla.....	19	@	20
Ground in cs....	—	@	27
Chicory.....	9	@	10
FISH.			
Pac. Dry Cod, new	5	@	6
cases.....	6	@	7¾
do boneless....	11	@	12
Eastern Cod.....	8	@	8½
Salmon in bbls..9	00	@	9 50
do ½ bbls	4	50	@5 50
do 2½ ℔ cans	—	@	2 80
do 2lb cans..2	65	@	2 75
do 1lb cans..1	75	@	—
Do Col. R. ½lb...	—	@	—
Pick. Cod, bbls..22	00	@	24 00
do ½ bbls11	00	@	—
Bos'. Sm'k'd Her'g	40	@	50
Mack'l, No.1, ½bls	9	00	@11 00
" Extra....	—	@	12 00
" in kits...2	00	@	2 50
" Ex mess..3	00	@	3 50
" Ex mess.½bs—		@	13 00
Pio'd Herr'g, hx..	3	00	@ 3 50
NAILS.			
Assorted size, ℔.	5	37½	@7 50
OILS.			
Pacific Glue Co.			
Neat F't No. 1.	—	@	90
Perc.....	—	@	—
Castor Oil, No.1..	—	@	1 25
do do No.2..	—	@	1 12½
Cocoanut.....	47½	@	1 50
Olive Plagniol..	—	@	—
do Possel....	—	@	—
Palm lb.....	9	@	—
Linseed, raw....	—	@	1 05
do boiled....	—	@	1 10
Cbina nut in cs..	77½	@	82½
Sperm, crude....	—	@	1 40
do bleached..1	90	@	2 25
Coast Whales...	45	@	—
Polar, refined....	50	@	52½
Lard.....	1 15	@	1 30
Coal, refined Pet	37½	@	—
Oleophine	21	@	24
Devoe's Bril't...	25	@	28
Long Island.....	21	@	24
Enreka.....	—	@	—
Devoe's Petro'm	21	@	24
Barrel kerosene	21	@	24
Olive.....	4	20	@9 25
Downer Kerose'e	—	@	37
Gas Light Oil....	—	@	26
PAINTS.			
Atlan. W. Lead.	6	@	10
Whiting	—	@	2
Putty	4	@	5¾
Chalk.....	—	@	2½
Paris White.....	2¾	@	—
Ochre.....	2	@	5
Venetian Red....	3½	@	5
Red Lead.....	7	@	11
Litbargs.....	10	@	11
Eng. Vermillion	2	00	@2 10
RICE.			
China No. 1, ℔ lb	6¼	@	6¾
do 2, do.	5¾	@	6
Japan.....	6	@	7
Siam Cleaned...	7	@	—
Patna.....	6	@	6½
Hawaiian.....	7¾	@	8
Carolina.....	10	@	10½
SALT.			
Jal. Bay, per ton	10	00	@14 00
do Common ..	5	00	@ 7 00
Carmen Island..11	00	@	13 00
Liverpool fine...—		@	24 00
do coarse	16	00	@— —
SOAP.			
Castile ℔ lb... ..	10	@	11
Local brands....	5	@	8
SPICES.			
Cloves.....	50	@	55
Cassia.....	26	@	27
Oitron.....	33	@	35
Nutmeg.....1	20	@	1 30
Whole Pepper...	21	@	23
Pimento.....	—	@	15½
Gr'nd Allsp'r pr dz	—	@	1 12½
do Cassia do ..	—	@	1 50
do Cloves do ..	—	@	1 50
do Mustard do	—	@	1 20
do Ginger do..	—	@	1 00
do Pepper do..	—	@	1 00
do Mace do...	—	@	2 00
SUGAR, ETC.			
Cal. Cube per ℔..	11	@	—
Partz' Pro. Cube			
hhl or 100 ℔ bxs	—	@	11¾
do in 50 ℔ bxs..	—	@	12
do in 25 ℔ bxs.	—	@	12¼
Circle A crusbed	—	@	11½
Powdered.....	—	@	11
Granulated.....	—	@	11½
Dry granulated	—	@	11½
Golden O.....	—	@	10¾
Hawaiian.....	8	@	11¼
California Beet.	10¾	@	11½
Cal. Syrup in bls.	—	@	60½
do in ½ bls.	—	@	70
do in kegs..	—	@	75
Hawaiian Molasses.....	25	@	30
TEA.			
Oolong, Canton, ℔	19	@	25
do Amoy...	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moynne..	60	@	1 00
Gunpo'der, Cant.	30	@	42½
do Pingsuey	50	@	90
do Moynne.	65	@	1 25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune..	65	@	85
Japan, ½ chests, bulk.....	30	@	75
Japan, lacquered hxs, 4½ and 5 lbs	45	@	67
Japan do, 3 ℔ bxs	45	@	90
do pl'n bx, 4½ lb	25	@	65
do ½ & 1 ℔ paper	30	@	55
TOBACCO—Jobbing.			
Bright Navys....	50	@	80
Dark do	50	@	55
Dwarf Twist....	70	@	72½
12 inch do	60	@	70
Light Pressed...	70	@	80
Hard do ..	50	@	60
Conn. Wrap'r....	35	@	40
Penn. Wrapper..	20	@	45
Ohio do ..	15	@	20
Virgi'a Smok'g..	45	@	75
Fine cut obe'g, gr..	8	50	@9 25
Fine cut chewing, huo'ts.℔ lb..75		@	90
Banner fine cut..	9	00	@ 9 25
Enrska Cala.....	—	@	9 00
TURPENTINE.			
Eastern.....	55	@	60

LEATHER.

Wednesday m., Dec. 9, 1874.

City Tanned Leather, ℔ lb.....			26@29
Santa Cruz Leather, ℔ lb.....			26@29
Conntry Leather, ℔ lb.....			24@28
Stockton Leather, ℔ lb.....			25@29
Jodot, 8 Kil., per doz			$50 00@ 54 00
Jodot, 11 to 19 Kil., per doz.....			66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ℔ doz....			55 00@ 72 00
Cornellian, 12 to 16 Kil.....			57 00@ 67 00
Cornellian Females, 12 to 13.....			63 00@ 67 00
Cornellian Females, 14 to 16 Kil.....			71 00@ 76 50
Simon Ullmo Females, 12 to 13, Kil.....			60 00@ 63 00
Simon Ullmo Females, 14 to 15, Kil.....			10 00@ 72 00
Simon Ullmo Females, 16 to 17, Kil.....			73 00@ 75 00
Simon, 18 Kil., ℔ doz			61 00@ 63 00
Simon, 20 Kil. ℔ doz.....			65 00@ 67 00
Simon. 24 Kil. ℔ doz.....			72 00@ 74 00
Robert Calf, 7 and 9 Kil.....			35 00@ 40 00
French Kips, ℔			1 00@ 1 15
California Kip, ℔ doz.....			40 00@ 87 00
French Sheep, all colors, ℔ doz.....			8 00@ 15 00
Eastern Calf for Backs, ℔ lb.....			1 00@ 1 25
Sheep Roans for Topping, all colors, ℔ doz....			9 00@ 13 00
Sheep Roans for Linings, ℔ doz.....			5 50@ 10 50
California Russett Sheep Linings.....			1 75@ 4 50
Best Jodot Calf Boot Legs, ℔ pair.....			5 00@ 5 25
Good Frsuch Calf Boot Legs, ℔ pair.....			4 00@ 4 75
French Calf Boot Lsgs, ℔ pair.....			4 00@ — —
Harness Leather, ℔ lb.....			30@ 37½
Fair Bridle Leather, ℔ doz.....			48 00@ 72 00
Skirting Leather, ℔ lb.....			33@ 37½
Welt Leather, ℔ doz.....			20 00@ 50 00
Buff Leather, ℔ foot.....			17@
Wax Side Leather, ℔ foot.....			17@
Eastern Wax Leather			—@— —

LUMBER.

Wednesday m., Dec. 9, 1874.

CARGO PRICES OF PUGET SOUND PINE REDWOOD.

Rough, ℔ M.....	$16	00	
Rough refuse, ℔ M.....	12	00	
Rough clear, ℔ M..	32	50	
Rough clear refuse, M..	22	50	
Rustic, ℔ M.....	30	00	
Rustic, refuse, ℔ M.....	24	00	
Surfaced, ℔ M.....	26	00	
Surfaced refuse, ℔ M...	16	00	
Flooring, ℔ M.....	30	00	
Flooring, refuse, ℔ M..	20	00	
Beaded flooring, ℔ M...	32	50	
Beaded floor, refuse, M.	22	50	
Half-inch Siding, M.....	22	50	
Half-inch siding, ref. M.	16	00	
Half-inch, Surfaced, M.	25	00	
Half-inch Surf. ref., M.	18	00	
Half inch Battens, M...	22	50	
Pickets, rough, ℔ M....	13	00	
Pickets, rough, p'ntd...	16	00	
Pickets, fancy, p'ntd...	25	00	
Shingles, ℔ M	2	25	

CARGO PRICES OF PUGET SOUND PINE —Retail Price.

Rough, ℔ M.....	—	—	
Fencing and Stepping, M	—	—	
Fencing, 2d quality, ℔ M —		—	
Fencing, ℔ lineal foot..			1c
Flooring and Step, ℔ M	30	00	
Flooring, narrow, ℔ M..	32	50	
Flooring, 2d quality, M..	25	00	
Laths, ℔ M.....	3	25	
Furring, ℔ lineal ft....			¾
REDWOOD—Retail.			
Rough, ℔ M.....	20	00	
Rough refuse, ℔ M.....	16	00	
Rough Pickets, ℔ M....	18	00	
Rough Pickets, p'd, M..	20	00	
Fancy Pickets, ℔ M.....	30	00	
Siding, ℔ M.....	25	00	
Tongued and Grooved,			
surfaced, ℔ M.....	32	50	
Do do refuse, ℔ M.....	22	50	
Half-inch surfaced, M..	40	00	
Rustic, ℔ M	35	00	
Battens, ℔ lineal foot...			¾
Shingles ℔ M	2	75	

CALIFORNIA PORTRAYED.

The columns of the Pacific Rural Press from January 1, 1870, contain the most complete and reliable information concerning the soil, climate, products and capabilities of the different sections of California, of any publication yet made. Neither new comers or old settlers in the rural districts can well afford to do without this enterprising and leading agricultural weekly. It is a good helper at home and a welcome guest abroad.

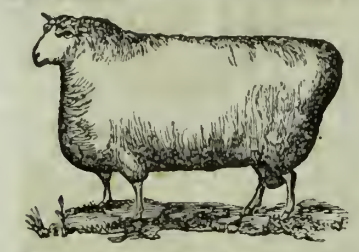
S. F. RETAIL MARKET RATES.

Wednesday m., Dec. 9, 1874.

POULTRY, GAME.			
Spring Obickens	50	@	75
Hens.....	75	@	1 00
Eggs Cal.....	55	@	60
do Eastern....	30	@	40
do Ducks'.....	—	@	—
do Farallones..	—	@	—
Turkeys, ℔ lb..	20	@	25
Ducks, large, pr.1	00	@	2 00
do small, pr..	37½	@	50
Tame, do..... 1	50	@	2 00
Teal, sa.....	25	@	—
Geese, wild, pair.1	00	@	1 50
Tame, ℔ pair..3	50	@	4 00
Snipe, ℔ doz .. 2	00	@	2 50
do English .. 2	50	@	3 00
Quail, per dozen 2	25	@	2 50
Prairie Ch'k's, ea	—	@	—
Pigeons, per pr..	50	@	75
Wild, doz.....	—	@	2 00
Squabs, doz... 4	00	@	4 50
Hares, sach ...	37½	@	50
Rabbits, tame, ea	50	@	75
Wild, do, ℔ dz..	2	00	@ —
Squirrels ea.....	10	@	15
Beef, tend, ℔ lb..	—	@	15
Corned, ℔ lb..	—	@	—
Smoked, ℔ lb..	10	@	15
Porter House Str'k	—	@	22½
Sirloin do.....	15	@	20
Round do.....	8	@	10
Pork, rib, etc., ℔	—	@	15
Obops, do, ℔ lb	15	@	—
Veal, ℔ lb.	12½	@	15
Cutlet, do.....	15	@	20
Mutton-chops, ℔	15	@	—
Leg Mutton, ℔ lb	12½

Live Stock Notices.

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal.



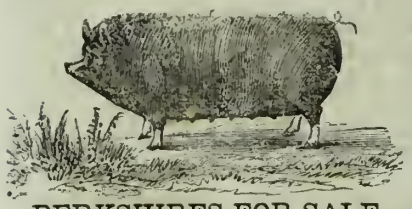
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BERKSHIRES FOR SALE.

6 Boars, 14 to 18 months old, and 5 Breeding Sows will be sold very low if applied for soon.

23v8-2t R. S. THOMPSON, Napa, Cal.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



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Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Btooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoronghbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,

San Rafael, Marin Co., Cal.,

Breeder of Jerseys and Alderneys. 7v8-3m

Grange Notices.

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—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

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7v8-tf SAMUEL HILL, General Agent.

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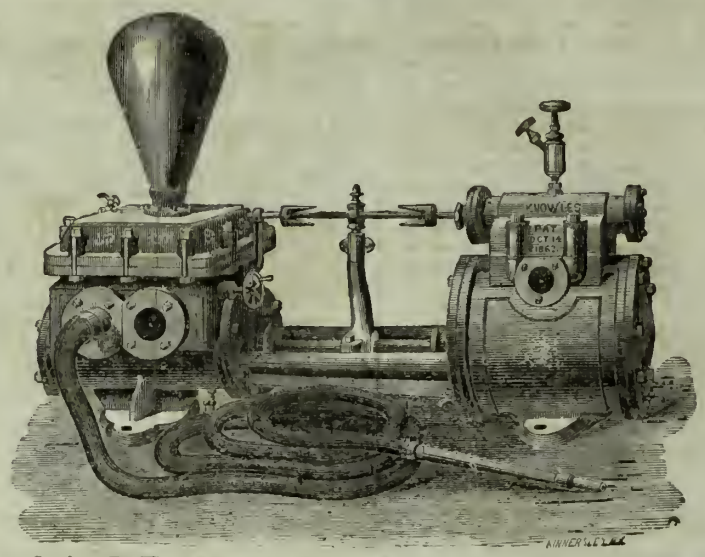
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This association is orgsnized for the purpose of affording the farmers of this State the means of safely inauring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

KNOWLES' PATENT STEAM PUMP.



It has no Cranks or Fly-Wheel, and has no dead points where it will stop, consequently it is always ready to start without using a starting-bar, and does not require hand-work to get it past the center. Will always start when the steam cylinder is filled with cold water of condensation.

CENTRAL PACIFIC R. R., OFFICE OF THE GEN'L MASTER MECHANIC,
SACRAMENTO, Cal., January 14, 1873.

A. L. FISH, ESQ., Agent of the Knowles Steam Pump—Dear Sir: In reply to your inquiry as to the merits of the Knowles Steam Pump, in use upon this road, I will say that it gives me great pleasure to report that they have performed their work well whenever called upon. In no instance have they failed. We have now over 30 of them in use on this road as fire engines, and pumping water for shop and station use. I consider the Knowles Steam Pump the best in use, and prefer it to any other. Yours, truly, A. J. STEVENS, General Master Mechanic.

A. L. FISH, Agent Knowles' Steam Pump—Dear Sir: In answer to your inquiries, we state that the highest award for Steam Pumps at the Eighth or last Mechanics' Fair in San Francisco, was a FIRST PREMIUM and Diploma, awarded to Knowles' Patent Steam Pump, as published in the Official List September 23d, 1871.

A. S. HALLIDIE, President Board of Managers.
W. H. WILLIAMS, Sec'y Board of Managers Eighth Industrial Exhibition, M. I.

WE BUILD AND HAVE CONSTANTLY ON HAND

The Largest Stock of Pumps in the World,

And for Every Conceivable Purpose.

SOLE AGENT ON THE PACIFIC COAST FOR THE

CLAPP & JONES SUPERIOR STEAM FIRE ENGINE,

Challenging the World!

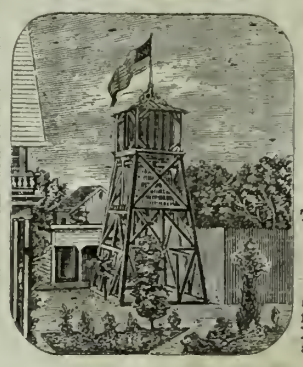
THE CELEBRATED BOOMER PRESS,

For Wine, Cider, Lard. Paper, Wool, Hops, Hides, Tobacco, Rags, etc.—the Most Powerful in Use.

A. L. Fish, Agent,

Nos. 9 and 11 First Street, San Francisco, Cal.

P. S.—All kinds of new and second-hand Machines on hand. 4v29-1am-bp-3m



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the Plains of Kansas, Nebraska, Missouri, Iowa and Illinois, where no other mills have been known to stand any length of time. All we ask is a full investigation of the DEXTER.

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO

4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.

The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept on the MERINO RANCH,



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

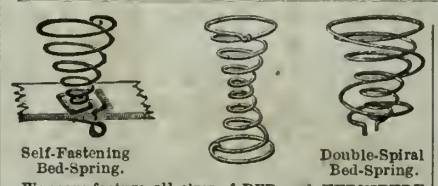
THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. City Office—315 California Street, San Francisco.

SEVERANCE & PEET,

10v7-eow Importers and Breeders of Spanish Merino Sheep.



Self-Fastening Bed-Spring. Double-Spiral Bed-Spring.

We manufacture all sizes of BED and FURNITURE SPRINGS, from No. 7 to the smallest Pillow Spring; also, the Double Spiral Spring, which is the most durable Bed Spring in use. It is adapted to upholstered or skeleton beds. We have the sole right in this State to make the celebrated Obermann Self-Fastening Bed Spring. Any man can make his own spring bed with them. They are particularly adapted to Farmers' and Miners' use. Send for Circulars and Price List to

WARNER & SILSBY,

14v28-eow-bp-3m 147 New Montgomery St., S. F

Geo. W. Chapin, Real Estate Agent, 434 Montgomery St., San Francisco, buys and sells Ranches in all parts of the State. City Real Estate exchanged for Country Property. MONEY LOANED. Post Office Box 1120.

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.

Works, King street, bet. Second and Third. fel5-eow

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,

Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.

21v2-1y



The North Pacific Coast Railroad.

It was reported that the North Pacific Coast (narrow gauge) Railroad would have been opened from Saucelito to Tomales about December 1st. The company had its locomotives (four), passenger coaches, baggage and express, flat and box cars ready, but the heavy storms so retarded the construction, and in some places damaged the new earthwork, that it is impossible now to be ready for traffic before January 1st, and if the construction parties are again detained by storms, it may be a fortnight, or even a month later. The Directors are determined on having the permanent track in as nearly a perfect condition as may be possible before opening the road to the public, that there may be no suspension of business, as has often been the case with other roads in this State, notably with the San José railroad in its earlier days.

The extraordinary difficulties the company had to contend with in running through a mountainous country with a newly built road, will be appreciated when we remember that there have been no such autumn rains as this season since 1849, and that in the Pacific Mill cañon, where the greatest destruction occurred, fourteen inches of rain fell in one storm.

The communication between Saucelito and the front was not resumed until this morning. There is now only a gap of ten miles to fill, and as the earthwork is nearly completed and all the bridge work done, with construction trains, working at each end, this gap can be closed within twenty days, if no very bad weather occur. Most of the road has been permanently ballasted with gravel, and it is in excellent condition. The storms have not only consolidated the earthwork wherever it withstood the rush of water, but have demonstrated which are the weak places that will need watching. The other end of the line runs for many miles near the shore of the Tomales bay, that long, narrow inlet which separates all the Point Reyes country from the mainland. Wherever the railroad is exposed to the action of the waves the face of the embankment has been riprapped and secured in the most substantial manner.

At Saucelito the company is building freight and passenger sheds on the wharf, and also preparing a large quantity of piles with chemical preservatives for the extension of its wharf. The northern portion of Marin county has hitherto been in want of communication with San Francisco, except by sea, but will, when this railroad is completed, be as near San Francisco as San José. This want of communication has hitherto kept back population and improvements, but from this year it may be expected that Marin county will grow in wealth and inhabitants as rapidly as any agricultural county in the State. The many nooks and beautiful building sites under the shadow of Mount Tamalpais and White Hill, will, when once brought within easy access of the city, be as much sought after as those of San Mateo county.

Had it not been for the unexpected and now regretted antagonism of some of the San Rafael people, trains would now be running for the past three months three times a day each way over the branch which was built to connect San Rafael with Saucelito, and the passengers instead of paying 75 cents each way between that place and the city, would have been charged 40 cents, whether they traveled by San Quentin or Saucelito. If the matter is properly brought before the Supreme Court they will reverse a decision clearly made under a misapprehension of the facts, and San Rafael will be taken in "out of the cold."—*Post.*

A NEW ASTEROID DISCOVERED BY PROF WATSON IN CHINA.—The Japan *Gazette* of Nov. 3d furnishes the following interesting item: Prof. James C. Watson, of the Michigan University, America, who has charge of the American Transit of Venus party, located at Peking, has had the honor of adding another asteroid to the list already discovered. This makes a total of about 140, and is the seventeenth of these miniature planets which Professor Watson has discovered. But two observers—Peters, of America, and Luther, of Germany—have more credited to them. These planets all take their names from mythology, and as this is a Chinese production Chinese mythology will yield its name. Among the many divinities there is one Neva, whose duty it is to attend to the skies, and mend them, if, by chance, a rent occurs, and whose name would not be inappropriate. The planet was first seen at 8:30 o'clock on the evening of the 10th of October, and is of the eleventh magnitude. Its right ascension on the 10th was 0h. 58m. 01.68s.; its declination, 10° 42′ 52″; on the 16th, 0h. 52m. 46.46s., and 10° 26′ 15″.

SIGNOR L. M. D'ALBERTIS, the Italian naturalist, who recently ascended the Afrak mountains in New Guinea and made important discoveries, is now at Genoa preparing for a fresh expedition in the same country. He will endeavor to penetrate into the district adjacent to Torres Straits, where mountain ranges of considerable altitude are known to exist.

SMYRNA is the only one of the great cities on the west coast of Asia Minor which has survived from ancient times, and still retains its importance as a great emporium of trade between Europe and Asia.

The Inventor of the Screw Propeller.

Americans, English, French, Germans and Italians all claim this invention, and that not for an individual of each nation; but in some countries more than one of their sons, dispute the honor of being its inventor; and probably experiments to discover the means of applying the screw as a motive power to ships were at different periods spontaneous, independently, and sometimes spontaneously made in various places by inquiring minds, who were perfect strangers to each other and to each other's discoveries and appliances.

So far back as 1726, David Bushnell, a native of England's American Colonies, made experiments by means of a screw to propel a submarine torpedo. Evidently his essays were not successful, or those infernal machines would have been heard of sooner. In 1836, John Smith, an Englishman, formed a company and built the first sea going screw steamer, appropriately named the Archimedes, from which date the success of the screw propeller was an accomplished fact. Between 1726 and 1836, many inventors took the matter up, but it was not until 1832 that one of the experimentalists, Frederic Sauvage, hit upon the idea of applying steam to the screw as a motive power. Up to that period it had been sought to drive the screw by a capstan manned by men, or other cumbrous non-practical means. In France, Frederic Sauvage is considered to have the largest share of merit in practically applying a machine which is the production of many minds, and which even now is being continually improved.

The town of Boulogne-sur-Mer, where Frederic Sauvage was born on the 20th of September, 1786, has lately gone to considerable expense in awarding him posthumous honors, which on Monday culminated in the unveiling of a monument to his memory.

Glass-Lined Tanks and Cisterns. — Mr. Hartley, a brewer of Orminsk, has suggested an idea which may solve a difficulty felt in many trades. He proposes the use of a lining of glass to the vats employed for the fermentation of liquors, and has patented a means for attaching plates of glass to iron or other materials commonly used for the construction of such vats. The idea arose from his own requirements, as there is considerable difficulty experienced in perfectly cleansing wood, stone, or slate from the germs of organisms which accompany or induce putrefaction. With glass there is no such difficulty, and especially where no elevation of temperature is necessary this device of Mr. Hartley's appears to be satisfactory. The strength necessary to contain large hulks of liquid is of course given by the wood or iron basis of the vessel, while cleanliness is secured by the lining, which in many cases may be ordinary window glass, and in none exceed three-eighths of an inch in thickness. Although primarily intended for the use of brewers, we do not see why the use of glass linings should not be extended, and it is likely to prove very valuable for house cisterns, as besides being more cleanly, a wooden cistern, glass-lined, would probably cost much less than a zinc or leaden one, and offer no chance of corrosion or contamination.

Petroleum Oil for Dressing Leather.— Petroleum oils are coming into use for dressing leather, and their use for this purpose is largely increasing. The use of petroleum oils for leather dressing is protected by several patents, issued at different times to R. H. Lightfoot, and now controlled by the Meriam & Morgan Paraffine company, of Cleveland, Ohio. Mr. Lightfoot claims that by the use of petroleum many advantages are gained, among which are: that the leather can be reduced to the desired pliable condition more rapidly and with less cost than with pure animal oils; that the coloring of tanned leather is effected more rapidly and thoroughly than by the old process, and that the finished product is superior, both in pliability and toughness, to leather tanned and curried by the use of pure animal oils. The heavier gravities of petroleum, such as paraffine and steam reduced oils, are the only ones used in this way, and the general introduction of these oils all over the country for these uses, seems to be only a matter of a short time.

Danish Improvement in Ballooning.—The Danes, too, it seems, have got the balloon fever. It appears that Sivel, a celebrated Danish aeronaut, made an ascent and crossed the Sound into Sweden for the sixth time this year. *Galignani* says that Sivel has no fear whatever of alighting in the sea, as he has invented a little safety apparatus which would have been of great service to his French colleagues. He drops into the sea a sort of canvass cylinder, of a conical form, and held by a guide-rope to the car. It fills with water and is kept down by the weight of the liquid. He then throws out a little ballast and the balloon arises, but is retained like a captive only a short distance above the sea. He can thus wait until a vessel comes to deliver him or until he drifts ashore. Should he wish to rise again, he pulls a cord attached to the point of the cone and which turns it upside down. The water escapes and the balloon is freed. The invention has been tried by him over twenty times at sea with perfect success.

The Agassiz Monument Fund, in Boston, amounts now to $121,005.

Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

First—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

Second—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

Third—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

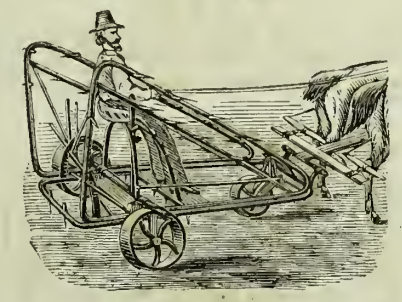
Fourth—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

Fifth—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

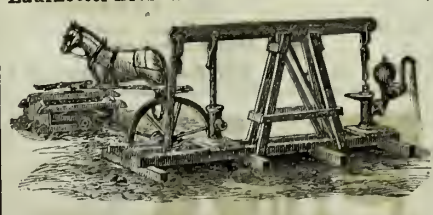
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[Patented February 13th, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

v7-2m-3m Cor. J and 10th Sts., Sacramento.

Farmers and Threshers

WISHING TO HAVE

STRAW BURNING ENGINES

For next season must engage them soon, as most of those now building are already sold. Threshing Engines for Repairs should be sent in now. A number of Second-hand Engines—taken in exchange for "Straw Burners"—for sale cheap. For particulars and prices, address: H. W. RICE,

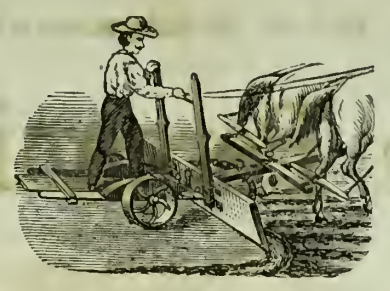
v8-23-3m Haywood, Alameda County.

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so conetructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or depoeit it gradually, as the case may require, leaving the ground emooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

C. OREGO. S. O. BOWLEY.

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest stylee and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jereey;
Holfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harnese, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,

No. 9 Merchants' Exchange, California street,

24v5-3m San Francisco.

THE TREADWELL SULKY



GANC PLOW.

Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50; old style, $25. The largest and best stock of Plowe, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

17v8-tf San Francisco

MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON,

Stockton, Cal.

Miscellaneous Notices.

POISON! POISON

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is SURE DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz:

Santa Clara, April 20th, 1874.

H. P. Wakelee, Esq.:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. Arguello.

San Leandro, Cal., April 3d, 1874.

H. P. Wakelee, Esq.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. Estudillo.

Dougherty Station, Alameda Co., Cal.

Mr. H. P. Wakelee, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours. O. M. Dougherty.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

ARE YOU GOING TO PAINT?

THEN USE THE BEST.

THE AVERILL CHEMICAL PAINT

WILLLAST THREE TIMES AS LONG as the best lead and oil, without CHALKING; is of any desired color. It is prepared for immediate application, requiring no Oil, Thinner or Drier, and does not spoil by standing any length of time. It is equally as good for inside as outside work; over old work as well as new; in fact, where any paint can be used the AVERILL CHEMICAL PAINT will be found superior to any other. Any one can apply it who can use a brush, which truly makes it the FARMER'S FRIEND.

IT IS JUST THE PAINT FOR THE AGE.

IT IS SOLD BY THE GALLON ONLY.

One gallon covers 20 square yards 2 coats.

For further information send for sample card and price list.

MANUFACTURED BY

The California Chemical Paint Company.

TYLER BEACH, Pres't. M. C. JEWELL, Sec'y.

Office—Corner Fourth and Townsend streets, San Francisco. 16v7-eow-6p-3m

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office, 422 Montgomery St., S. F.

G. W. DEITZLER, President.
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BANK OF CALIFORNIA, Treasurer.

11v7-6m

FARMERS' LINE.

THE SPLENDID IRON SHIP,

CITY OF YORK,

1255 Tons. A 1.

AULD.....Master

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co. RODGERS, MEYER & CO.,

aug5-tf 212 Battery stree

SANTA BARBARA COLLEGE,

SANTA BARBARA, CAL.

A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER.

22v6-1y President Board of Directors.

LOOK!



ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,

1v8-3m 43 & 45 Cal. Market S.F

ATTENTION, LAND OWNERS!

Just received a fresh consignment of TEN TONS of the very popular

Australian Perennial Rye Grass Seed!

IN PRIME CONDITION.

This Grass has been grown by some of our most intelligent and largest land-owners for the past three years, and

GIVES UNIVERSAL SATISFACTION.

It withstands long seasons of drought, remaining GREEN LONGER THAN OTHER GRASS. It is well adapted to FARM CULTURE, yielding largely and making a superior quality of fine Hay. For LAWN PURPOSES it is specially adapted, as it produces a very fine stalk and requires but LITTLE WATER; besides COSTING ONLY ONE-THIRD THAT OF OTHER LAWN GRASSES.

FOR UPLAND OR LOWLAND CULTURE IT HAS NO SUPERIOR IF ANY EQUAL.

S. L. JONES, Esq., 207 and 209 California street, says: "I have it growing in my orchard and it pleases me better than any grass I have tried. As soon as I can ge the land ready I will sow more of it."

JOHN PARROT, Esq., 528 Sacramento street, says: "For PASTURE AND HAY I commend it, as it surpasses any grass I have tried on this Coast for these purposes."

Messrs. BURLING & BRO., 323 California street, say: "For LAWNS it is the BEST GRASS IN THE WORLD."

This superior Grass Seed is offered at the low price of $20 per 100 lbs. A Liberal Deduction made on orders of 300, 500, 1000 and 2000 pounds or more.

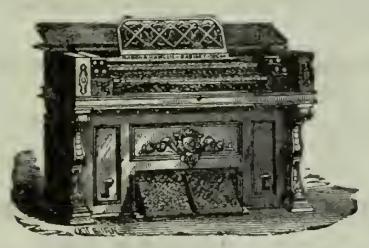
R. J. TRUMBULL,

427 Sansome street, San Francisco, Cal.

Grower, Importer, Wholesale and Retail Dealer in Seeds, Trees, Shrubs, etc.

THE

Mason & Hamlin Organ Co.



Make the Best Cabinet Organs in the World,

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1. **At competitive comparisons in Industrial Exhibitions, they have always taken highest premiums.** It would be easy to do this by exhibiting at small fairs where there was little or no competition, or where judges were incompetent, or could be influenced. But the Mason & Hamlin Co. have won their honors at most important Expositions, where competition was widest, and comparisons most competent and rigid. At the recent Vienna Exposition, was the most extensive and exhaustive comparison ever made, the contest being between makers of all Countries. The Mason & Hamlin Co. were awarded the highest honors for demonstrated superiority. The Austrian Industrial Society also awarded their Grand Medal and Diploma of Honor for improvements presented in these organs. Other American organs were declared, in an official report to the Austrian government, "not to rise above respectable mediocrity," in comparison. At the Paris Exposition, 1867, the Mason & Hamlin Co. also received the first medal, and they are the only American makers who ever obtained any award at a World's Fair.

2. **The mass of evidence from cultivated musicians that these organs are unequalled is overwhelming.** Any one who will examine the Testimonial Circular of the Mason & Hamlin Co. will find such opinions from more than one thousand musicians, including many of the most eminent in both hemispheres

3. **The Mason & Hamlin Cabinet Organs are the only American instruments of the class which have been able to present such superiority as to obtain wide sales in Europe, notwithstanding difficult competition there with products of cheap labor.**

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Emden Geese, Houdans, and GAMES.

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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, DECEMBER 19, 1874. [Number 25.

Mushroom Culture.

In Robinson's interesting work, "The Parks, Promenades and Gardens of Paris," a chapter is given to the cultivation of mushrooms. A portion of this chapter is devoted to a description of underground mushroom culture as it is carried on in the environs of Paris. The writer visited these "mushroom caves," some of which contain six or seven miles of mushroom beds, and gives us a carefully prepared account of their construction, mode of culture, productiveness, etc., accompanied with suitable illustrations; but as this system—though possessing great practical value under the circumstances under which they are worked—would be impracticable in California, at the present time at least, we have not thought it worth while to reproduce it in the columns of the PRESS, and will pass on to the portion devoted to "Mushroom Culture in Cellars and in the Open Air."

The information to be found here can be made available in various circumstances existing in this country. In order to make the method still more practicable we have had the accompanying engraving executed by our own artist. The author of the work referred to speaks of the cellar and open-air process as follows:

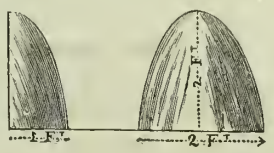
Culture in Cellars and in the Open Air.

Of course they are only professional mushroom growers that carry on such extensive operations as those just described, but the mushroom is also grown extensively in cellars and like places. As an analogous mode of culture is more likely to meet the general wants, the following observations on the subject may prove acceptable. They are by M. Laizier, the president of the Mutual Aid Society formed among the Paris market gardeners.

"The manure to be used for this method of cultivation should be prepared in the same way as that for the open-air system described further on. Preference should be given to a cellar producing saline efflorescence; it should be as dark as possible, and exposed to no draughts. The warmth generated by the fermentation of the manure will subside, and the sowing of the spawn must not be commenced until the temperature of the bed has fallen below 76 degs. Fahr.; if it is above this the layers of spawn are liable to be burnt. Beds can be made in cellars in many ways. Those made in the middle should always be formed with two sides, while those against the walls should only be half as thick, on account of their having only one useful side. It is also possible to arrange them on shelves, one above the other. For this purpose strong bars of iron are driven into the walls, upon which are placed shelves of the proper sized covered with earth, upon which is formed a bed, that is treated exactly as those made upon the ground. These beds are just as productive as any of the other kinds. They may even be made on the bottoms of casks, which should be at least two feet six in diameter; and they are built up in the shape of a sugarloaf, about three feet in hight, and the pieces of spawn are placed an inch and a quarter deep, and sixteen inches apart. A barrel is sawn cio soways into two pieces, each forming a tub. Holes are made in the bottom of each, and a thin layer of good soil is spread over them inside. They are then filled with good well prepared stable manure, just like that used in the case of ordinary mushroom beds, the different layers of dung in each tub being well pressed down. When the tub is half full, six or seven good pieces of spawn are placed on the surface, and the remainder is piled up with manure, which is well pressed down, the operation being completed by giving to the heap the form of a dome. The tubs thus prepared are placed in a perfectly dark part of a cellar, and eight or ten days afterwards the dung is taken up until the spawn is visible, in order to see whether it has commenced to vegetate and develope little filaments. If the spawn has struck, the surface must be covered with soil, care being taken to use only that which is fresh and properly prepared. The necessity of procuring good mushroom spawn cannot be too strongly insisted upon, this being the indispensable condition for arriving at a good result. An excellent kind is sometimes met with that has been formed spontaneously in some old dungheap, which is called virgin spawn. When this cannot be procured, excellent spawn may be formed in the following manner:—A little bed of stable manure is prepared, either in a cellar or in the open air, and sown with good ordinary mushroom spawn, the proper amount of care already described being bestowed upon it. As soon as the mushrooms appear on the surface of the bed the spawn remaining must be speedily removed and placed in a dry, airy situation. The spawn thus prepared can be preserved for two or three or even four years. Specimens have been kept as long as fourteen years, from which excellent results have been obtained."

We will next turn to the culture of the mushroom in the open air. In old times the market gardeners of Paris used to grow the mushroom

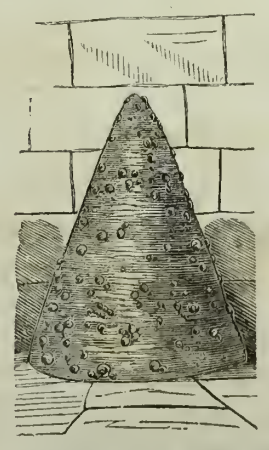
Fig. I. *Fig. II.*



Newly Made Mushroom Beds.

amongst their ordinary crops with great profit but since the Champignonnistes cultivate it under no danger from cold in the caves, the market gardeners, who used to raise it to a great extent in the open air, do so now in a lesser degree. They begin with the preparation of the manure, and collect that of the horse for a month or six weeks before they make the beds; this they prepare in some firm spot of the market garden, and take from it all rubbish, particles of wood, and miscellaneous matters; for, say they, the spawn is not fond of these bodies. After sorting it thus, they place it in beds two feet thick, or a little more, pressing it with the fork. When this is done the mass or bed is well stamped, then thoroughly watered, and finally again pressed down by stamping. It is left in this state for eight or ten days, by which time it has begun to ferment, after which the bed ought to be well turned over and re-made on the same place, care being taken to place the manure that was near the sides of the first-made bed towards the center in the turning

Fig. III.

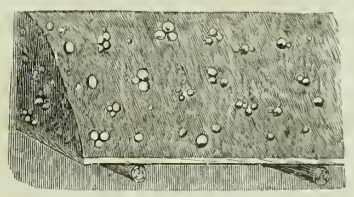


Pyramidal Mushroom Bed on Floor of Cellar.

and re-making. The mass is now left for another ten days or so, at the end of which time the manure is about in proper condition for making the beds that are to bear the mushrooms. Little ridge-shaped beds—about 26 inches wide and the same in hight—are then formed in parallel lines at a distance of 20 inches one from the other.

In a market garden they may stretch over a considerable extent. Their length being determined by the wants of the grower. The beds once made of a firm, close fitting texture, the manure soon begins to warm again, but does not become unwholesomely hot for the spread of the spawn. When the beds have been made some days, the cultivator spawns them, having of course ascertained beforehand that the heat is genial and suitable. Generally the spawn is inserted within a few inches of the base, and at about thirteen inches apart in the line. Some cultivators insert two lines, the second about seven inches above the first. In doing so, it would of course be well to make the holes for the spawn in an alternate manner. The spawn is inserted in flakes about the size of three fingers, and then the manure is closed in over, and pressed firmly around it. This done, the beds are covered with about six inches of

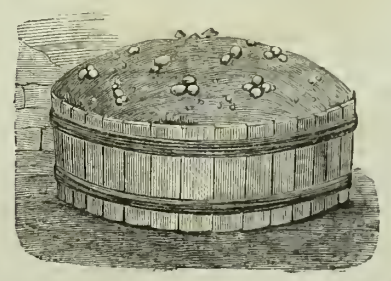
Fig. IV.



Mushroom Bed on Rude Shelf Against Wall of Cellar.

clean litter. Ten or twelve days afterwards the growers visit the beds, to see if the spawn has taken well. When they see the white filaments spreading in the bed they know that the spawn has taken; if not, they take away the spawn they suppose to be bad and replace it with better. But, using good spawn, and being practiced hands at the work, they rarely fail in this particular; and when the spawn is seen spreading well through the bed, then, and not before, they cover the beds with fresh sweet soil to the depth of about an inch or so. For cover, the little pathway between the beds is simply loosened up, and the rich soil of the market garden applied equally, firmly, and smoothly with a shovel. With these open-air beds they succeed in getting mushrooms in winter. A covering of abundance of litter is put on immediately after the beds are earthed, and kept there as a protection. They have not long to wait till the beds are in full bearing, and when

Fig. V.



Mushrooms Grown in Bottom of Old Cask.

they are in that state it is thought better to examine and gather from the beds every second day, or even every day where there are many beds. And thus they grow excellent mushrooms, and in great quantity, all the further attention required being to renew the covering when it gets rotten, and an occasional watering in a very dry season.

THE bean crop raised on the patches of ground cultivated by the Chinese along the San Joaquin river, says the Stockton *Independent*, is quite large this year. The Chinamen clean the beans well, sack them up, transport them in boats to this city, and what they fail to sell here they ship to the bay. It is a profitable business.

WHEAT AND WOOL IN SAN DIEGO COUNTY.—The wheat crop of Lankershim & Co, of the Cajon ranch, San Diego county, amounted to 1,500 tons this year. The wool clip of the same firm for 1874 amounts to 39,000 pounds; 18,000 pounds spring clip, and 21,000 pounds fall clip.

SEEDS BY MAIL.—Seeds and cuttings in packages as large as four pounds now pass through the mails and post-offices at a comparatively low rate of postage. A bushel of orchard grass seed weighs 14 pounds, which may be mailed in four packages for 32 cents to any part of the United States.

Local Partiality Again.

It is only two weeks since we took occasion to define our position in regard to writing up, or writing down, certain places or portions of the country. We always endeavor to write plainly, and had supposed that from the explanation referred to, and from the general tone of the RURAL PRESS, people would learn that the pages of this paper are not the proper places to blow up some localities and traduce others. But we were mistaken; for a communication has just reached us of precisely the character against which we protested. The writer in traversing a portion of California describes one district as being all wrong and another as being right in every particular, closing his praises of the latter by assuring the reader that parties wishing to purchase may obtain further information by applying, etc.

This is an old tune and a very discordant one. There is a large amount of culpable unfairness at the bottom of this system; and even where this is wanting and these descriptive contrasts may be supposed to have been prompted by candor, they result in great injustice and much disappointment, owing to a lack of discernment on the part of those who assume the responsibility of sitting in judgment on such localities. Gross errors have been committed in this connection by those who were credited with sound judgment in such matters. We are rather disposed to "chuckle" over the mistake committed by those who ten years ago scouted the idea that California possessed any agricultural resources; but another ten years will, we are confident, prove that errors of as great magnitude are now being committed by those who disparage certain portions of the State. Within the past two years, even a marked change has occurred in the estimation in which our foothills are held by progressive agriculturists; and it will not need, at the farthest, more than the ten years which is here allowed, for this change to enable these foothills to sustain a very prominent part in the grand system of diversified farming which is destined to be the crowning glory of California agriculture.

People should be extremely careful—for the sake of their own reputation for sound judgment—how they speak of any locality as "a god-forsaken county" "the sink of creation," etc., for they may live to see—especially in California—these same localities the favored districts where dairying, hop-growing, cotton, flax, or ramie culture will flourish permanently.

The remarkable individuality of the people of California is in strict keeping with the distinguishing characteristics of various localities in the country; and out of this marked individuality some peculiar manners are discernable, among which none strike the observing stranger more forcibly than *a rather bold expression of extreme opinions*. This is particularly noticeable in estimating character. If we wished to obtain an estimate of any man, we might go to a group on one corner of the street and hear that he is nearer perfection than it is possible for mortal to be; and on the next corner be assured that he is a perfect "bilk." It may very easily be seen how the strongly contrasting pictures which we receive of places grows out of this very characteristic.

But should we not endeavor to modify this? It is offensive and unjust in both cases, and for our part, at least, we shall endeavor to keep the PRESS from becoming the medium through which correspondents vent their spleen, or puff anything beyond its deserts. The honest pride which people feel in the neighborhood in which they reside is commendable in the highest degree; and the evidence to be seen of the growth of this feeling is one of the most hopeful signs which the present aspect of California rural life presents. This we shall always endeavor to foster; but it will grow with the growth of the vines and trees that the people have planted whether it is fostered by the press or not.

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

A Review of the Departmental Report on Education.

EDITORS PRESS:—The annual Report of the Department of Agriculture for the year 1873 has been distributed, and a copy is before us. The head of the Department addressed letters of inquiry to each of the universities or colleges deriving funds from the U. S. Government, and from them a very gratifying report is made up on the Progress of Industrial Education. Of California it is said: "The College of Agriculture, as a distinct department with a separate course of study has not yet been opened, but provision has been made in the scientific course by which students may select, in the junior and senior years, special studies relating either to Agriculture, chemistry or engineering, to which they give their chief attention. Of the buildings one is called north hall, or the College of Letters; the other south hall, or the College of Science." A summary of studies and of property is given, "One-half of 200 acres used for the site of the University being considered as belonging to the College of Science, is valued at $100,000."

For economy of outlay, thoroughness and number of students in the industrial specialties Illinois takes the lead. Its name, "Illinois Industrial Uuiversity," may have something to do with these results. It has thirteen professors, seven instructors, a manual labor system for all its students, eighty-seven students in Agriculture, seventy-four in Mechanic Arts—402 in all. Its stock farm cost, including stock and implements, $51,366; horticultural farm, $34,965; green-house and plants, $4,135; machine shops, $7,082; carpenter shops, $3,601; civil engineering department, $1,637; chemical laboratory, $6,007; physical do., $1,956; etc.

Iowa reports the building of a model barn during the year, at a cost of $4,916. The description makes us realize the increased cost of building on this coast. "This barn is 70 ft. long by 54 wide, surmounted by a ventilating cupola. The basement is arranged for stabling 48 head of cattle, with the necessary breeding and calf pens, and a root cellar capable of holding 4,000 bushels. A drive way on the principal floor, is 16 ft. wide, and runs the whole length of the barn. On either side of the drive-way are five rooms, each 14 by 19 feet, one of which is for a herdsman's room, one for farm implements, four for granaries, and four for breeding boxes. Over these rooms is space for 150 tons of hay, with shoots for carrying it into the basement. The barn has a wing designed for a wagon shed, with 62x24 ft., with posts 12 ft. in length. Under the wing is a basement 9 ft. high, containing a covered passage and four bull boxes." I have written out this description because it is of some interest to the stock or dairy farmer to know how cheaply some sixty herd of cattle may be housed, fed and tended, where buildings must be made tighter and warmer than with us. Iowa Agricultural College has planted five acres with nut trees during the year, and accomplished much substantial work in other directions. Out of 263 students, 243 are pursuing the Agricultural course and 20 the mechanical.

Kansas, whose president went from our own State, makes a noble showing. The industrial course of study is arranged in four departments, viz.: the farmers,' the mechanics', the commercial and the women's. The full curriculum occupies six years. They have carpenters, wagon blacksmiths, paint and harness shops and shops for women! in which dressmaking, photography, engraving, telegraphing and printing, the use of sewing machines, churns and other domestic machines is taught. The nursery is the largest and best west of the Mississippi. It occupies 67 acres, and contains 40,000 fruit and forest trees, with 650 varieties of apples alone. All the students are pursuing agricultural and mechanical studies. The students of the agricultural and mechanical colleges of Kentucky, number 181, and perform four hours' labor daily.

In New Jersey, the department of agriculture of Rutger's college, New Brunswick, is in a flourishing condition. Sixty seven young men are pursuing agricultural and mechanical studies. Twelve Ayrshire and Shorthorn cows are milked and the milk sold in the city, each cow averaging during the year, 2,699 quarts. The prof. of agriculture, George H. Cook, delivers during the year at least one lecture in each of the 18 counties of the State, in order to impart instruction to farmers.

The report of the State of Massachusetts furnishes much information and completely refutes the statement which has often been made that education takes young men away from agricultural pursuits. One example of the Massachusetts college should be followed by every State, viz: the setting apart of a portion of the ground for a garden of indigenous botany. Another is the offering of prizes for collections of plants, insects and woods. We would suggest that our State and county fairs offer prizes next year for the best collection of insects, (named), put up by students of the public schools, and for the best collection of woods. If we ever have a descriptive botany which will enable students to name their plants, prizes for herbaria will be in order. Boys and girls prizes for silk, for varieties of flower and garden seeds, would encourage industry, and we have no doubt bring out a lively competition.

E. S. C.

The Excursion to Monterey.

EDITORS PRESS:—When the railroad was first commenced it seemed a long time for those to wait who said, "I am not going to Monterey until I go in the cars." There were many unlooked for difficulties to encounter, but owing to the untiring energy of the Directors it was finished at near the appointed time. It was the original intention to have had the excursion as soon as the road was completed; but there was so much grain waiting shipment, and the weather being unsettled, it was thought best to postpone it until that was secured (business before pleasure, you know). At last the 16th of November was the time appointed. Many said, "of course it will rain," but they were agreeably disappointed when the morning sun arose bright and no signs of rain. Arriving at the depot there was the usual amount of hurrying to get tickets, and mamas were anxious to see that they had all the little ones, and that the baskets were safely disposed of. The cars were very comfortable, differing only in the width from the ordinary ones. There being but two passenger cars they were reserved for the ladies, the gentlemen occupying the open ones. The only fault we found was that all our escorts were banished in the open ones; but we consoled ourselves with the thought that probably they were not quite happy without us.

When all was ready to start the "Castroville Band" furnished some fine music. The first part of the road lay through some of the finest farms in Salinas valley. I could not help thinking of the contrast between the present time and a few years ago, when it was almost impossible to ride through the wild mustard. I was surprised after crossing the river to find so much land under cultivation. I had been under the impression that it was nothing but sand hills. After a very pleasant ride of an hour and a half we arrived at the ancient town of Monterey. Our Worthy Master then informed us that until the hour of noon we could amuse ourselves as our fancy suggested, when lunch would be spread in the ware house; after that dancing, and those who wished could go on board the "R. L. Richardson," which was being loaded with wheat. The track which here runs along the beach, is raised several feet. The new wharf is 1,100 feet long; the cars run out to the end and the wheat is put aboard the vessel without farther handling.

Leaving the depot we passed through the lower portion of the town, and from there to the whale fishery. It was a bright, warm day and we found the walking very pleasant. A whale had been brought in a short time before, and the whalers were busy trying it out. It looked like large pieces of pork. Every thing is very greasy, and when the oil has been tried out the scraps are used for fuel. The smoke is very black and offensive. One of the whalers said: "Oh, that is nothing, it is healthy." It may be, but nevertheless I did not envy him his work.

Our appetites agreed with the watches that it was getting noon; so we retraced our steps, the baskets were brought out and with united help the tables were soon spread. Had you witnessed the disappearance of the good things provided, you would have acknowledged that our appetites were far from dainty. After a little preliminary tuning the call was heard, "Take your partners for a quadrille," and those wishing were soon treading the mazy dance. The Captain seemed to enjoy himself as much as any one; several availed themselves of his invitation to go aboard the vessel which was anchored in the bay. At 4 o'clock the shrill whistle of the locomotive warned us that it was time to return to Salinas where we arrived in due time well pleased with our excursion.

FLOY.

Salinas Valley, Dec. 12, 1874.

Bees Wanted.

EDS. RURAL PRESS:—Will you please inform me through the columns of your paper where a start of bees can be obtained? What would be the least sum a start would be likely to cost, and in what time would they probably pay for themselves? If you will answer these questions, you may enlighten and perhaps benefit a would be bee holder.

G. N. HAGADORN.

Contra Costa, Dec. 9, 1874.

[We do not know of any bees advertised for sale on this coast. Will some one please inform Mr. H. and other readers through the PRESS.—EDS. PRESS.]

Mr. Bancroft's Library.

EDITORS PRESS:—A visit and inspection of the rich treasure contained in the library of Mr. H. H. Bancroft who is now engaged in compiling a history of the Pacific Coast, will well pay anyone who like myself feels a deep interest in the love of other days. This library consists of about 16,000 volumes nearly all having reference to the history, habits and lives of the inhabitants of the Pacific Coast from its northern inhabitable limits to the Isthmus of Panama—which Mr. Bancroft has by indefatigable research collected from every part of the world—and this library which perhaps cannot be equaled by any other private collection in the world consists of volumes of all sizes and sorts from the vellum manuscript, the labors no doubt of priestly hands with its pen characters as clear and sharply defined as modern type could make them. The hieroglyphic tablets of ancient Mexico, telling to those who can decipher them many a tale of love, war and blood, of conquest and of sacrifice and ambition of those long since crumbled to dust. Copies of printed works, so ancient that they are bound in vellum, tied with thongs down to the gilded and calf bound volumes of modern times. Manuscript correspondence from Monk and Layman and soldier of the past as well as the present. Agriculture is the source from which he is compiling a record which will give to the world at large information which it never before possessed in such a tangible shape as to be either intereating or usetul.

From this crude mass Mr. Bancrott is now by a systematic process of his own—extracting great flakes of gold which when wrought into shape, tashioned and furnished by the skillful hand of the cunning artizan will be the wonder and admiration of all literary men and be a lasting monument of the indomitable energy and perseverance of a man who is devoting the best part of his life to enrich the literature of the world by giving to it a correct history of this hitherto almost unknown and incomprehensible part of the globe.

J. M. HAMILTON.

San Felipe Bottom.

EDITORS PRESS:—The land in San Felipe is composed of a rich alluvium of sand and vegetable mould, washed down from Pacheco mountain, through the annual overflow of the Pacheco creek, forming a soil the peer of anything in California, if not in the world. In no part of California has the benefits of tree planting been more marked, than in San Felipe; as it is only a few years since the traveler coursing in that direction could see any trees there, save a few gigantic sycamores growing at sparce intervals, while the chilling winds used to rush through the Pajaro pass as through a funnel from the ocean, making the climate at times exceedingly disagreeable. But mark the change that three years have wrought, through the judicious syatem of tree planting, inaugurated by J. D. Culp, Esq., of the consolidated tobacco company and William Buck, Esq., the old and well known orchardist of San Jose. Mr. Culp and the consolidated tobacco company have planted out avenues of Monterey cypress and soft shelled almonds at distances forming squares of 225 yards each way, and the effect in a landscape point of view is truly beautiful; whilst the climate is so greatly ameliorated that the most delicate almond blossoms are not effected by the frost, and the chilling breezes from the ocean are arrested in their progress as they rush toward the Pacheco mountains, to fill the vacuum created on the heated plains of San Joaquin. Mr. Buck has planted out on his grounds 1,000 orange trees from 5 to 10 years old, they are thriving excellently well, and Mr. B. is fully of the opinion that oranges will do as well at San Felipe as at Los Angeles or elsewhere. Mr. B. has the most extraordinary growth of the blue gums—the common *eucalyptus globulus*—that I have seen in this State. He has trees not two years old till next April, which are now 20 feet high, and from 3 to 4 inches in diameter. It that can be beat in this State or any where else on this terrestrial globe I would like to know where.

J. BEGG.

DISAPPEARANCE OF THE DANUBE.—The Swiss journals have just reported a strange phenomenon which has taken place in the Upper Danube. This river has suddenly disappeared between Morhingen and Immiudingen, upon the frontier of the duchies of Baden and Wurtemburg. Already for more than half a century it has been observed that near this point a portion of the water has filtered through calcareous rocks to appear once more near the town of Aach in the Hobgau between Engen and Stockbach. In sober truth, the whole mass of the river has disappeared in a similar manner near to Immindingen, all the locality is deprived of its water-falls and supplies; and it really seems to be a difficult engineering task to attempt the only reparation by stopping up the holes by which the water filters away in the porous and crevassed rocks which form the separation between the Swiss Jura and Suabian Jura.

POULTRY YARD.

Practical Poultry Growing.

(Written for the RURAL PRESS by M. EYRE, JR.)

Numerous letters have reached me lately, all describing the same disease among the fowls of the writers, and asking for a remedy. The chickens have colds, running at the nostrils, difficulty in breathing, and in some cases, "swell head" or roup. The causes are damp houses, drafts in the houses, over-crowding and damp, cold weather. If the hen-houses have leaky roofs, or are so insecure that the floor becomes damp and muddy, it is impossible to keep the fowls in health. During our rainy season our fowls should be well housed; and it will most assuredly pay any one who rears chickens to provide a house with a tight roof and free from drafts, so that the floor may be dry and the fowls afforded a place in which to roost without being chilled by currents of cold, damp air. A bad cold soon degenerates into roup, and in nine cases out of ten the fowl so afflicted dies.

A simple remedy for cold or running at the nose, with more or less wheezing, is to confine the birds in a small house or large box, and fumigate with sulphur. Place a few live coals in an old frying-pan or other vessel, and set in the box with a dozen fowls. Throw on a teaspoontul of pulverized sulphur. Let it remain for five or ten minutes. This, repeated night and morning for a few days, will effect a cure. But the cause must be removed, and a warm, dry house, with tight roof, will prevent the recurrence of the disease.

I have already written, in the PRESS, directions for the cure of "swell head," or roup, where the fowl is valuable, and the owner disposed to take some trouble to cure. For common fowls, where it is thought much trouble will not pay, I recommend that all those affected be placed in a warm, dry place, a good dose of castor oil be given at least once, and that they be fed with soft food; corn meal or bran and middlings, mixed up with hot water, morning and evening. Many will recover with no other treatment, but, in any case, a roupy fowl should be separated from the flock, as the matter which is coughed out or oozes from the head will cause the spread of the disease. Roup is easily cured by using a wash made of chlorinated soda diluted with twice its bulk of water; but those who are not inclined to handle each fowl twice or thrice daily, can at least treat as above described. It is becoming more apparent each year that the proper care of poultry pays, and that the raising of improved breeds is a gain in dollars and cents. I saw last summer, in Napa, a case in point. A farmer shipped (through McClelland & Co.) some five months old chickens, nearly full-blood Brahmas—for which he received nine dollars per dozen, while full-grown fowls, such as his neighbors, who had never used "fancy blood," raised, were sold at six and seven dollars. There are few of us men who are not members of the Grange, and it will be but a short time before we shall be able to obtain, through Bro. Hegler, twice the price for a large, fat Brahma that is given for a common fowl. If we send our good fowls to the store to be mixed up with a lot of lean, small chickens, we can expect the price only of inferior fowls. I have walked through the markets in San Francisco, and looked at the specimens on the poultry stalls, and my only wonder is that anyone could be induced to purchase such specimens. In nearly every stall among the live fowls I saw many diseased and totally unfit for the table. I hope and believe it will not be long before fowls will be sold by the pound, and good fat ones at a much higher rate than others. Even now it pays any one who has good fowls to ship them separately I would recommend those who have Brahmas, or part Brahmas, to wait until they can send one or two dozen or more, and then to get them in good condition and ship them to Bro. Hegler for sale. After a few shipments they will be surprised at the difference in the price they receive, and they will find that it pays, and pays well, to rear fine poultry.

Napa, Cal., Dec. 12, 1874.

Roup.

One of our female correspondents gives the following roup receipt:

"Give the diseased fowls each a tablespoontul of castor oil, and an hour afterward administer the following: Olive oil, 1 oz.; gum camphor, 1 drachm; carbolic acid, 12 drops. Take a sewing machine spring bottom oil can, hold the bird firmly between the knees, open the mouth and inject a few drops in the slit in the roof of the mouth, on and under the tongue, and in each nostril. Use this mixture twice a day in mild cases, but oftener in severe ones, from three to five. Use the "Douglas mixture" freely in the drinking water, if you havn't that, use alum in water. Mix kerosene oil in the food, and if the eyes and head are swollen, bathe them with this oil. The camphor gum is pulverized by adding a few drops of alcohol or ether. Your druggist will prepare the mixture."

Hop Department.

Hop-Growing on Wires.

The *Farmer* (English) gives the following description of the wiring method of hop-culture, which is now being adopted by some growers of this crop in Britain:

"Hearing that Mr. Sheldrake, proprietor of the *Aldershot Military Gazette*, had a good breadth of hops under the wiring method of culture, we applied to that gentleman for permission to inspect and report upon it. He very courteously rendered us every assistance; and we are thus enabled to give the following particulars:

Farnham and Aldershot are contiguous, and form the great hop-growing districts for which these adjoining corners of Hants and Surrey are famous. The soil is of a deep, tenacious, loamy character, and an enormous quantity of hops are grown in the district.

Pole growing is the universal method adopted there, Mr. Sheldrake's being the only example of wire growing. A close inspection of the two methods has resulted in the formation of the opinion that the wire system of cultnre is by far the best.

In pole planting the hills (*i. e.* plants) are generally planted 6 ft. by 6 ft., which gives 1,200 plants to the acre, and on an average there are three poles, varying from 10 ft. to 18 ft. high, according to the adaptability of the ground to vigorous growth, and two vines trained to each pole; and if only two poles are used, three vines are invariably trained to each. Others plant 6¼ ft. by 6¼ ft., which gives 1,050 hills per acre. So far as the crop in this district can he judged at present, the yield will be 9 to 10 cwt. per acre.

On the wire system and planting purposely for it, as Mr. Sheldrake did last year, he recommends planting 8 ft. by 4 ft., which gives the same number of hills per acre, but has this advantage: the saving of one-fourth in the expense of horizontal wires and posts, while this method of planting admits of cartage between the rows, for manure and tillage, as well as the accommodation of the pickers, and cartage to the kilns. This plantation of a year old will be wired next winter.

The plan of wiring is this: At each end of the rows are stout upright scaffold poles about nine inches in diameter and about 12 feet high, with a slanting support to keep each end pole upright and thoroughly firm, the slanting support resting on stone slabs let into the ground. In the rows, at intervals of 40 feet, are uprights, with a cross-piece at the top, as in a telegraph post, a single horizontal wire runs along the hottom, ahout one foot from the ground, and two horizontal wires run along the top, at each extremity of the cross-piece, at a distance of about 36 inches apart. The wires both at top and bottom, are strained tight, so that the whole structure is firm and durable. From each hill or plant, four vertical wires are fixed at the hottom, to each of which two vines are trained; and of course these vertical wires are fastened to the top horizontal wires, at distances of two and a-half to three feet each way.

One piece of wired hops consisting of rows, each of 100 hills, each hill six feet apart in the rows, is just now a sight which, like William Paul's roses, should be seen once and dreamt of forever. Duriug our inspection the afternoon's sun was full upon them, and the wire system of training presented an unbroken surface along the line, and we looked upon long, wall-like masses of foliage, densely studded with golden-tinted hops, with here and there branches which had caught an opposite wire, forming a festoon.

But how about picking? Well, this is a very easy matter, for light ladders are used, which rest against the horizontal wires, and a man easily pulls away the lateral branches, and throws them down to the pickers. The cost in picking is on the wire system a little in excess of the pole method of culture, inasmuch as three men are required for wires to two men on poles, in gathering and preparing hops for the pickers, but as this extra cost is only for a period of three weeks or so, the matter is of small moment compared with the advantages of the wire system.

First, as to the cost of the two methods. Under the pole system of culture, poles 14 feet high are delivered in the grounds at from 22s. to 25s. per 100, and taking the average of three poles per plant, the cost would run about $30 per acre. Then there is to be added the cost of labor in fixing, attention to breakage of poles during the season, removal after, and pointing and pitching, as necessary, to say nothing of renewal of poles annually, and, greatest loss of all, the great check which the plant positively sustains in the premature pruning to within three feet of the ground, under the system of pole growing. Now this statement may appear problematical, and will be accepted as such by those who deliberately set their faces against the wire system of culture. But facts speak for themselves, and the proof is now to be found in Mr. Sheldrake's plantations.

Here, side by side, planted at the same time and undergoiug precisely the same system of tillage, are those on poles and those on wires, and the difference in the estimated yield is—and, we think, a truthful one—of 15 cwt. to 18 cwt. per acre on the wires, as compared with 8 cwt. to 10 cwt. per acre on poles. Under this system there is uniformity of growth, a weak vine being the exception; for instead of cutting down in the growing season—for at the time of picking the hop plant has not finished growing—only the laterals are pulled away, and the sap action is not arrested and annihilated, as in the pole system of culture. An old hop grower the other day, on looking through Mr. Sheldrake's wires, observed, 'Ha! I see it makes every hop a hop;' and it does, for the system compels a free circulation of air and exposure to the light, and immunity from friction; giving size to the hops, as well as quality and color. The pole system will not assure this, for the vine is often blown close together, and the poles sometimes broken. Altogether the advantages of the wire system appear to be of so decided a character that we venture to affirm that only prejudice and the fear of first cost stands in the way of its adoption.

At present the wire system is a patent, registered by Mr. Farmer, of Kerby, near Worcester and Mr. Sheldrake informs us that the cost of wiring an acre, planted 8 feet by 4 feet, with uprights, etc., complete, is about $75 per acre; but the first cost is the only one. as the wires last for a number of years, and there is a great saving of labor."

The Dairy.

Abortion in Cows.

The season will soon be at hand when the loss of calves from abortion will again become prevalent. There are many causes which tend to this fatality in winter, the chief of which are: Accidents, from injury or bruises; and these may be divided into two classes—those which are purely accidental, and are always liable to occur, and those inflicted by brutal attendants. To these may he added injuries inflicted by one animal on another, such as goring, being forced violently over fences or against obstacles, by master animals.

Another cause is insufficiency of food; by which the animal and the phœtus are insufficiently nourished, and consequently more liable at any time to become affected with germs of disease that may he floating in the air; or, if the calf be starved *in utero*, it naturally becomes an irritating body that is apt to be expelled from any cause operating to disturb the uterine tunctions.

One of the principal causes of abortion is the eating or drinking, in the food or water, of something possessing parturient properties acting directly on the uterus, and causing the explosion of the fœtus. The chief cause here undoubtedly is the fungus known as spurred rye, and its kindred growths in other grains and grasses. How necessary, then, that we know that the forage is clear from this contamination, since one or two animals in the stable becoming affected to the extent of aborting, the air is filled with the germs voided by the sufferers, the disease becomes epizootic, and each individual animal is likely to become contaminated, and, in turn, abort. This may become so wide-spread that perfectly healthy animals may become contaminated. The cause may become specific and epizootic, and may spread from stable to stable wherever herds exist.

There is every probability that, when once this trouble becomes specific, its germs are carried in the air, breathed by the animal, passed into the circulation, and become a blood poison. The brain and nerve centers are thus affected and the uterus is acted upon owing, perhaps, to its greater susceptibility during the condition of pregnancy. Violent contraction of the organ and expulsion of the fœtus take place. Thus, every animal attacked adds to the virulence of the infection, and the trouble may become wide-spread and most fatal in its character, so that a disease which, at first, was only contracted by eating some substance not congenial to the animal, might become contagious and finally infectious in the highest degree.

A contagious disease is one that is communicated by actual contact with the virus of a diseased subject. Thus it may be communicated by contact of the litter used in bedding and in various other ways. An infectious disease is one that spreads by means of floating germs or in a more insidious way than by actual touch, and, hence, surrounds us with far more complicated difficulties and dangers. Thus, the peculiar conditions which produce abortion should receive prompt attention, and the animals attacked ought to be removed and isolated at once, and the most efficient means promptly used to cleanse the stalls and surroundings. When, therefore, an animal shows signs of aborting, the feed should be carefully examined, and all the conditions surrounding the affected animal inquired into. Indeed, it would be advisable to entirely change the forage furnished to the female animals, and by the most scrupulous cleanliness prevent further danger.—*Western Rural.*

A New Cattle Disease.—Charles O. Tappan in the *Rural New Yorker* says: My brother, who is a farmer, residing near here, has lost five cattle during the season. The first died in May last; the others have died at intervals since, the last on the 17th instant. None of the animals have lived more than 24 hours after it was discovered that they were ailing. They were in good condition, apparently healthy. In each case it was first noticed that they ceased to chew the cud. Soon after that their heads drooped and they continued to follow the other cattle about until about half an hour before they died. They then appeared to be in great distress, groaning and straightening the limbs, and quivering. Soon after death, in each instance, froth appeared at the nose. Before death the pulse was quicker than natural; respiration natural until about 30 minutes before; the bowels appeared to be in a normal condition. Nobody here has been able to form an opinion respecting the disease. We suspected poisoning, but nothing has been discovered tending to confirm the suspicion. A *post mortem* examination showed nothing unnatural except discoloration about the large blood vessels. The disease seems to be so obscure in its origin, and without remedy that I would like to know whether you or your subscribers can give any information about it.

How to Feed Corn Stalks Profitably.

The rearing and feeding of animals are receiving, as they should, from farmers and herdsmen, in all parts of the country greater attention every year; and especially is this true of dairymen, whose only hope of gain rests in their success in obtaining paying yields from their cows. Corn stalks enter largely into the fall feed of dairy cows, and how to feed them is the important question. The common practice is to feed them in the bundle, as but few farmers feel able or willing to use a cutting machine. This feeding in a bundle without any preparation, I am fully satisfied, is very wasteful, as not only are the butts left, but frequently near the whole stalk. I have learned by experience that a little brine sprinkled upon stalks once every day just before feeding, is of material advantage in many respects. The weak brine will cause the cows to consume nearly all, even when fed whole; the flow of milk increases, the condition of the cows improve, and they show greater contentment; especially is this last remark true on cold, windy and rainy days. I find it much better as a general rule, when it can be done, to feed salt on the food, instead of feeding it alone. In no case should more than one day be permitted to pass without brining the morning's feed. The brine should not be strong, only enough to furnish sufficient salt to the cows. Of course the cows should have access to plenty of water; this brine food will cause them to drink more, and thus increase the flow of milk. Let my brothers try this and they will hereafter place a greater value upon corn stalks.—*Live Stock, Farm and Fireside Journal.*

Horseback Riding.

We regard it as peculiarly unfortunate that there is so little horseback riding in the Northern—especially the Northeastern States—and so few good riding horses. It is unfortunate in our judgment, for the following reasons:

1. It is a most healthful and invigoratiug exercise for man or woman.

2. It is a graceful accomplishment to be ahle to ride well.

3. It is au easier and more economical mode of movement—easier for the horse, involving less costly equipments than where a harness and carriage must be provided, less loss of time in harnessing and unharnessing, and carriage, and is less dangerous to the rider, when the risk of breaking harness and buggy are taken into account.

4. It is more convenient for the rider, because he can go with his horse where he can not drive with his carriage. He can open gates, let down bars, or scale fences and corn fields, and thus save time and distance, which it is impossible to save with a carriage attached.

Every farmer ought to have one good riding horse—that is, every farmer who keeps three horses or more. Even if he keeps but two, it is more economical to keep a saddle and use it whenever it can be used as a substitute than to wear and tear a harness and carriage over the miserable roads which are too generally found. A good riding horse can geuerally be purchased for the price of a good harness and carriage. The cost of keeping is scarcely greater if the utility and improvement in value of a well cared for horse is taken into account. We should like to see horseback riding for both men and women, become fashionable. We would far rather see a young farmer well mounted on a good stroug saddle horse than see him riding in a sulky behind his fancy trotter simulating the air and appearance of a jockey. There is great opportunity for improvement of manners and general appearance to result from the physical exercise horseback riding will give our young men and women. It would destroy much of the effeminacy which exists, beget a nobler and more graceful physique and carriage, and save a vast amount of time and money, if horseback riding were more generally substituted for carriage riding among our people.—*Rural New Yorker.*

The Study of Chemistry.—We often hear it said, by way of excuse, that the study of chemistry is so dry, and the time required so great that the student must begin young or not at all. Now this is simply nonsense. There is no branch of science so interesting and none more easily acquired. Three or four hours a week for a few months would so open up the eyes and interest the understanding of any ordinary mortal that, without laying any claim to the prophetic mantle, we may safely assert that he who will make the trial shall have provided for life a source of pleasure for himself, and a power to interest and instruct his fellow men.—*Western Photographic News.*

The Vineyard.

The European Wine Crop of 1874.

For the fine Burgundy the gathering of the grapes did not begin till the 24th of September, and not till the 7th of October for the poorer qualities. Owing to the frosts in May and hail storms in July, which extended to Italy, nearly all the vines of Burgundy producing inferior grapes were destroyed, and the quality of the second-class vineyards of fine wines so seriously impaired that this year there will be little Burgundy intermediate between the best and the worst, and a small supply of the latter. But wherever the vines escaped the meteorological incidents we have named, as did those about half-way up the eastern slopes of the famous hills which are the renowned vineyards of Burgundy, the crop is abundant, and of superb quality. It is predicted that both in quantity and quality the high-class wine of 1874 will be equal to that of 1857, 1858, and even that of 1865 and 1870. For the best product of 1874, the prices in the cellars of the growers are now quoted at from £48 to £52 sterling for two hogsheads of 228 litres each, casks not included.

Of Bordeaux wines the accounts are most favorable, although as in the ancient Duchy of Burgundy, frost and hail have made bad work in certain localities. Notwithstanding this the general product is represented as so enormous as to outrun the supply of casks, the price of which latter nearly doubled. The first tastings gave indications of harshness in the grape, but as since then the temperature has been favorable to perfect ripening, it is believed the quality of the clarets of 1874 will not fall below the quantity.

Of the Champagne district, and along the Marne, full information is not yet received, but the Economists Francais speak most favorably of it, and put the whole crop of France for 1874, of all wines as high as 70,000,000 of hectolitres. If this prediction turn out correct, it will be the largest since 1869. The product of 1854 was only 11,000,000 of hectolitres; that of 1855 about 15,000,000; from 1863 to 1873 the average annual yield was about 53,000,000, and that even in 1870, the year of German occupation. In 1873, however, the product was less than 36,000,000.

With such a wine product—to say nothing of her silk and other industries, and the frugality of her people—and open foreign markets secured by her free trade policy, who wonders that France can endure cheerfully and prosperously a taxation which astounds all the rest of the world?

If the temperance agitators of this country could but see where lies the powerful preventive of drunkenness amongst us, they would demand that these pure and harmless wines of Europe come to us unhindered by existing tariff rates, so that a sound and cheering but not inebriating red or white wine could be bought here by our laboring and all other classes at twenty-five or forty cents a quart bottle; but with the present high tariff, it is impossible for any but the very wealthy to use any imported wine. Below we quote from the present rate of import duties:

Wines imported in casks, containing not less than twenty-two per centum of alcohol, and valued at not exceeding forty cents per gallon, twenty-five cents per gallon; valued at over forty cents, and not over one dollar per gallon, sixty cents per gallon; valued at over one dollar per gallon, one dollar per gallon, and, in addition thereto, twenty-five per centum ad valorem.

Wines of all kinds, imported in bottles, and otherwise provided for: the same rate per gallon as wines imported in casks. But all bottles containing one quart, or less than one quart or more than one pint, shall be held to contain one quart, and all bottles containing one pint, or less, shall be held to contain one pint, and shall pay in addition three cents for each bottle.

Champagne and all other sparkling wines, in bottles, containing each not more than one quart and more than one pint, six dollars per dozen bottles; containing not more than one pint each and more than one-half pint, three dollars per dozen bottles; containing one-half pint each, or less, one dollar and fifty cents per dozen bottles; and in bottles containing more than one quart each shall pay, in addition to six dollars per dozen bottles, at the rate of two dollars per gallon on the quantity in excess of one quart per bottle.—*N. Y. World.*

Profits of Grapes.—We are often asked the question as to whether grapes will pay. Good varieties certainly will. If a man is prepared to lay out of the use of his land for three years, at the end of that time the money will begin to come in. There is not a great deal of labor or expense attending the planting of a vineyard, and in this part of the State no irrigation is needed, as in the lower counties. Now wine sells from 40 to 50 cents per gallon. The mountain sides, so far as tested produce he very best fruit. A large cluster on the table where I write grew on the range in sight near Calistoga, and sold for a cent a pound. If hung on the plate glass window of some Eastern city this cluster would attract a crowd on the sidewalk. There are numerous places where the crop may be sold. Land for vineyards can be purchased in the hills at reasonable rates, say from five to fifteen dollars an acre, depending upon the location.—*Sacramento Valley Agriculturist.*

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms; Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, 415 California street, S. F.

Grange Clubs for the Rural.

The Secretary (or some other Patron) is invited to act as club agent for the Pacific Rural Press in every Grange. Circular and sample copies sent free. Five or more names will constitute a club, at the rate of $3 a year. No new subscriptions will be taken without payment in advance. We will pay the poslage after Jan. 1st, 1875. All club subscriptions in Granges should end on the last day of the month. Old subscribers may join the club by paying the Secretary up to club dates. Every Patron farmer should read a reliable agricultural paper. We need the support of all on this coast. Help the Secretary (or club agent) to make up a large list in your neighborhood. Don't delay.

NOTICE.

From and after this date, all moneys due to the State Grange by Subordinate Granges should be forwarded to the Grangers' Bank of California, No. 415 California street, San Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. CARRINGTON,
Treasurer State Grange.

November 4th, 1874. 19-v8-tf

Extra Copies of the Pacific Rural Press

Containing Grange addresses, resolutions, obituaries, etc., will be furnished post-paid at ten cents per copy. Grangers wishing numerous copies should send the order for them with the MS.

Secretaries will be supplied with a printed list of subscribers for this paper upon sending a list of post offices within the range of their Grange. Also with blank reports, etc., for clubs.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

Anniversary Dedication and Celebration.

The Patrons of Yountville dedicated their new and elegant hall, with appropriate ceremonies on Friday, December 4th. The hall consists of a brick building, 30 by 55, two stories high. The first story is 14 and the second 15 feet high in the clear. The builders are the "Granger's Hall Association of Yountville;" the cost was $6,000, and is believed to be the finest Grange hall in the State. The front is neatly ornamented with emblems of agriculture, and near by is a fountain of never failing, pure, cold water, furnished by Mr. Groesinger.

The feast was spread upon their long tables, well loaded with eatables, provided by the ladies. After the feast was over, Worthy Master Hamilton solicited the attention of the company for a few moments in the hall above, and gathering a few of the business spirits of the company around him, broached to them the project of the "Grangers' Business Association," the incorporated company which it is desired to form to transact the business of the State Grange, and perform such functions as that body are not legally competent to discharge.

Since the failure of Morgan's Sons, this organization has become a necessity for the Order, as a medium through which the business of shipping wheat and selling other products may be carried on. Bro. Hamilton assured his hearers that outside capitalists stand ready to take the stock and supply the necessary means, but it is desired to have it all in the hands of the Grangers and distributed among as many holders as possible, and to that end he is urging it upon the different Granges to take hold of the project and have the stock taken among their members. The Association will act as a grand business center and agent for the Grangers of the State, filling the position heretofore occupied by Morgan's Sons, and will have separate departments for wine, wool, wheat, dairy produce, and the various other articles of agricultural industry. We condense the above from the Napa *Register*.

In Memoriam.

Resolutions of Point Timber Grange, No. 14, P. of H., on the death of Sister Jennie E. White:

Whereas, We recognized in Sister White one in whom there was the brightest promise of a useful life; leaving us not in weakness, but in the full glory of her strength and just budding into womanhood, but without having the tender and fostering care of a mother to protect her, yet she was a worthy example of what energy could accomplish. Accepting with a joyful heart every means to gain useful knowledge, aiming to be in the front ranks of the good and wise, with a disposition that made everyone around happy and life worth living nobly, it was impossible for her to be otherwise than a kind, loving and dutiful daughter. The sad bereavement has taught us how frail is our thread of life. The dark shadow is cast—it is ours to mourn her as one of our brightest and our first. Her mission was just begun and her work is ended. "She sleeps."

Resolved, That we hereby tender our sympathy to the father and brother of the deceased in this dark hour.

Resolved, That a copy of these resolutions, under seal of the Grange, be forwarded to the family of the deceased, and one each to the *Granger*, Rural Press, and *Antioch Ledger*, for publication.

Bro. J. B. Henderson, }
" H. C. McCabe, } Com.
Sister L. J. Wills, }
J. E. W. Carey, W. S

Grangers Everywhere.

"There seems to be a general disposition not only among traders and the press, but among the people everywhere throughout the country to bring charges upon the word "granger." Everybody who lives outside of a city or town is a "Granger;" every person who gets roped in by a three card monte dealer or other shave is a "Granger;" every man who goes in for a fight with the railroads or monopolists is a "Grangor." We have Granger watches, Granger sewing machines, Granger reapers, Granger railroads, Granger dry good stores and Granger all other kinds of stores. If a man has anything to sell, if possible, a Granger prefix is attached to its title to make it "take." The attention of the Grangers is sought almost everywhere by advertisers and venders. A suit against a railroad is a Granger suit. There are at this time no less than three cases pending before the Supreme Court of the United States, at Washington, which are popularly known and designated by the press as Granger cases. These suits have been brought to test the rights of State legislatures to enact restrictive legislation with respect to railroad rates of fare, feights, etc. The Granger is evidently the coming man—in fact he has already arrived. Don't you see? Well, we don't see as the real Granger cares much about all this talk and huncomb. He seems to go on very quietly minding his own business in his own way. When he talks it is in a very quiet manner, as though he was perfect master of the situation—as indeed he is or soon will be. When he votes, that also is done very quietly; but the effect is electrical—"a political earthquake" is the way some people put it. It is quite certain that the real strength of the Granger is becoming pretty well known and appreciated.

Farmers' Mutual Insurance Company.

We are pleased to state that the California Farmers' Mutual Insurance Company, promises to become an important feature in connection with the Grange movement in this State. The subject has received much care and study on the part of those Patrons who have had the matter in hand. As organized, it presents a scheme of insurance perfectly equitable, and just and beneficial in its workings. None but isolated, farm risks are taken, and thus the farmer is not called upon, in any way, to bear a proportion of the conflagration risks incident to property in cities; and moreover, each person insured, instead of being mulcted in a share of expensive offices, great profits to the company, and incidental expenses such as characterise the ordinary companies, has only the actual cost of his own insurance. The plan, although accomplishing so much, is simple in its workings, and is giving universal satisfaction; the details can readily be understood, and will be fully explained by the local agents, the secretaries, the several subordinate Granges, and the visiting agents of the company to all who may desire to inform themselves. The officers of the association are as follows:—

J. D. Blanchar, President; I. G. Gardner, Vice-President; G. P. Kellogg, Treasurer; W. H. Baxter, Sec'y.

Finance Committee.—1. G. Gardner, J. C. Merryfield, A. W. Thompson.

Directors.—J. D. Blanchar, I. G. Gardner, A. W. Thompson, G. P. Kellogg, J. C. Merryfield, I. C. Steele, A. Wolf.

Installation of Officers.—The first regular meeting in January is designated by the constitution as the date of installing officers of subordinate Granges. The duty of installing officers by deputies in large counties will be more than they can be expected to accomplish, unless by concert of action, called meetings are arranged for on different days of the week by the various Granges. However, as postmasters (who can come to the aid of deputies) are not so scarce as last year, there need be no difficulty in the matter.

Resigned.—Bro. J. C. Merryfield has resigned the mastership of Dixon Grange, to which he had been elected the third term. Bro. Joseph Kline has been chosen to succeed him. Bro. M. has also resigned his position as Justice of the Peace of Dixon township, which he had filled for fourteen consecutive years. His duties as a member of the Executive Committee, for the present at least, require his attention almost exclusively in this city.

Grangers' Tax-payers' League.—The Patrons of Dallas county, Ala., have formed a tax-payers' league, the object of which is to secure honesty and efficiency in the administration of local affairs, and to bring proper legal punishment to county officials guilty of high crimes and misdemeanors in office.

The name of Mrs. R. G. Dean, of Point of Timbor Grange was inadvertantly omitted in our publication of the State Committee's report on education and labor, recently.

The next annual session of the State Grange of the Patrons of Husbandry of Colorado will be held in Denver city, commencing on Tuesday, January 13th, 1875.

Election of Officers.

Georgina Grange, No. 122 Rio Vista.—Josiah Pool, M.; Henry Schultz, O.; J. B. Allington, L.; Phil. Gardiner, C.; G. A. Kuett, Sec'y; J. N. Holt, T.; Peter Hansen, S.; T. W. Wilcox, A. S.; Y. Allington, G. K.; Mrs. J. Knott, Ceres; Mrs. R. Davis, Pomona; Mrs. M. A. Pool, Flora; Mrs. J. W. Holt, L. A. S.

Nord Grange, Butte Co.—George Van Woert, M; L. H. Mclutosh, O.; J. B. Clark, L; L. Swenn, C.; H. P. Gwin, S.; J. F. Fitten, A. S.; Peter Kern, Sec'y; J. R. Haughton, T.; A. Ash, G. K.; Mrs. M. Kern, Ceres; Mrs. E. Warren, Pomona; Mrs. F. Van Woort, Flora; Mrs. A. Pettit, L. A. S.

Ferndale Grange, Humboldt Co.—F. Z. Boyinton, M.; J. C. Dungan, O.; James Smith, L.; Wm. Slover, S.; J. Criss, A. S.; B. Robinson, C.; J. A. Davenport, T.; E. C. Damon, Sec'y; Chas. Gibbs, G. K.; Mrs. J. C Dungan, Ceres; Mrs. E. C. Damon, Pomona; Miss A. Winfield, Flora; Mrs. Wm. Stover, L. A. S.

Garretson Grange, Fresno Co.—Joseph Burns, M.; P. R. Perry, O.; W. J. Hutchison, L.; H. C. Higby, Sec'y; Andrew Jackson, T.; Levi Lindsay, S.; Lewis Jones, A. S.; S. M. Odom, C.; D. E. Groover, G. K.; Mrs. W. D. Black, Ceres; Mrs. A. A. Schaeffer, Flora; Miss Sallie Yeargin, Pomona; Mrs. A. M. Miles, L. A. S.

Officers of Butte Co. Council—organized Nov. 28, 1874.—E. Hallet, M.; W. Thorp, O.; G. W. Colby, L.; V. T. Runnels, C.; G. C. Nelson, S.; John Ball, A.; W. W. Stone, Sec.; Geo. Van Wort, T.; H. L. Lassell, G. K.; Mrs. G. W. Colby, Ceres.; Mrs. W. Thorp, Pomona: Mrs. Geo. Van Woert, Flora; Mrs. Peter Kern, L. A. S.

Cottonwood Grange, Merced county, No. 116. [corrected]. From J. M. Daley, Sec.—J. C. Crittenden, re-elected, M.; A. Ewing, O.; I. J. True, L.; Samuel Ewing, S.; A. H. Packard, A. S.; R. S. Coyle, C.; Chas. S. Johnson, T.; Miss Nettie Dougherty, Sec.; J. L. Hale, G. K.; Miss L. A. True, Ceres.; Miss Nora Dougherty, Pomona; Miss Lizzie Babcock, Flora; Miss Lutitia Tinnin, L. A. S.

Yuba City Grange, No. 65, Sutter Co.—Officers Elect: B. F. Walton, M.; B. F. Frisbie, O.; C. P. Barry, L.; J. Hardy, S.; J. W. Moore, A. S.; Mrs. L. S. Walton, C.; H. Elmer, T.; Miss M. Estella Hardy, Sec'y; H. C. Jones, G. K.; Mrs. S. E. Walton, Ceres; Mrs. E. Obleyer, Pomona; Miss Josie R. Hedden, L. A. S; Mrs. M. S. Smith, Flora.

Ojaia Grange, No. 165, Ventura Co.—C. E. Sowle, M.; John Larmer, O.; H. J. Dennison, L.; T. Todd, S.; F. M. White, A. S.; W. Perri, C.; R. Ayres, T.; J. Hobart, Sec'y; G. L. Water, G. K.; Mrs. Georgie Jones, Ceres; Mrs. E. Reith, Pomona; Mrs. A. Sowle, Flora; Miss M. Hutchinson, L. A. S.

Crescent Grange, No. 223, San Mateo Co.—H. M. Jewell, M.; J. B. Gilchrist, O.; Geo. W. Love, L.; W. A. Hammond, S.; Montgreary Diggs, A. S.; A. L. McDougal, C.; James Compton, Sec'y; John Holmes, G. K.; Mary J. Johnson, Ceres; Sarah J. Hammond, Pomona; Miss Nellie Hammond, Flora; Mrs. M. Jewel, L. A. S.

Livermore Grange, No. 91, Alameda Co.—Daniel Inman, M.; J. W. Clark, O.; E. P. Bragdon, L.; W. W. Wynn, C.; J. T. Taylor, S.; J. R. Taylor, A. S.; E. S. Allen, T.; F. R Fassett, Sec'y; Adam Faith, G. K.; Mrs. J. H. Taylor, Ceres; Mrs. A. Weymouth, Pomona; Miss Emma, May, Flora; Miss Hattie Clark, L. A. S.

Princeton Grange, No. 62, Colusa Co.—R. R. Rush, M.; A. S. Himstreet, O.; M. P. Furguson, L.; L. H. Helphenstine, C.; A Caldon, S.; Charles High, A. S.; H. Jameson, T.; P. H. Scott, Sec'y; C. H. Merrill, G. K.; Mrs. A. Caldon, Ceres; Mrs. P. H. Scott, Pomona; Mrs. R. R. Rush, Flora; Miss. A. Cartmel, L. A. S.

Wildwood Grange, San Joaquin Co—E. D. Morison, M.; Joseph Marvon, O.; F. M. Furman, L.; Frank Stanley, S.; G. W. Monroe, A. S.; J. M. Purves, C.; Joseph Leighton, T.; W. M. Muncy, Sec'y; John Monroe, G. K.; Mrs. Leighton, Ceres; Mrs. Stanley, Pomona; Mrs. Turman, Flora; Miss Phœbo Purves, L. A. S.

Calistoga Grange, Napa Co.—W. B. Pratt, M.; Thos. Walker, O.; Andrew Safley, L.; J. N. Bennett, S.; John McFarling, A. S.; C. A. Dimick, C.; John Cyrus, T.; C. A. Menofee, Sec'y; Wm. Dunleavy, G. K.; Mrs. C. Bennett, L. A. S.; Mrs. E. Wilohy, Ceres; Mrs. Mary Martz, Pomona; Miss Alice Bennett, Flora.

Alhambra Grange, No. 230, Contra Costa Co.—J. Shentzel, M.; H. Raap, O.; B. R. Holliday, L.; E. B. Barber, S.; L. M. Smith, A. S.; J. McHany, C.; J. McHany, T.; W. A. Frazer, Sec'y; J. Stewart, G. K.; Mrs. E. J. Boss, Ceres; Mrs. L. Raap, Pomona; Miss L. Strontzel, Flora; Miss May Holliday, L. A. S.

Sebastapol Grange, Sonoma Co.—Jas. M. Hudspoth, M.; G. N. Sanborn, O.; James Gannon, L.; James Gregson, C.; George J. Ragle, S.; J. Wesley Sullivan, A. S.; L. Harbine, T.; W. J. Hunt, Sec.; S McReynolds, G. K.; Mrs. Mary J, Ray, Ceres; Mrs. Lizzie Harbine, Pomona; Miss Libbie Hicks, Flora; Miss Minerva Sullivan, L. A. S.

Santa Barbara Grange.—O. L. Abbott, M.; Robt. W. Smith, O.; J. M. Garretson, L.; W. E. Foster, S.; Samuel Seaman, A. S.; Mrs. S. E. A. Higgins, C.; B. F. Owen, T.; Virginia F. Russell, Sec.; Henry Hill, G. K.; Velona Bradley, Ceres; Mrs. LaSalle, Pomona; Mrs. Packard, Flora; Lenisa E. Abbott, L. A. S.

Jackson Valley Grange, Amador Co.—J. C. Hamrick, M.; Wm. Prouty, O.; C. S. Black, L.; J. Docley, Sec'y; Jas. Parkinson, S; J. P. Martin, A. S.; Jas. Violet, C.; F. A. McMurray, T.; H. Dillian, G K.; Mrs. Wm. Prouty, Ceres; Mrs. J. C. Hamrick, Pomona; Mrs. H. Dillian, Flora; Mrs. C. S. Black, L. A. S.

Those Remarks of Sister Clark.

Editors Press:—In your issue of Dec. 5th, a sister wished for the remarks made by Sister Clark, at Stockton, on the dress question. Those remarks are not come-at-able, they were made on the impulse and excitement of the moment, and we would be very sorry to see them produced in print.

The resolution Sister Clark offered can be found among the minutes of the State Grange.

We will here say that one of the reasons for offering the resolution, was hearing of some remarks made by one of the sisters to others, that they did not dress nice or stylish enough, and their dresses were not trimmed enough.

We would be very sorry to have any sister attend the State or subordinate Grange, for no higher motive, than of showing fine clothes. Every one must acknowledge there is too much money, time and thought spent on dress. One of the great principles on which the Grange is founded is reform. Why cannot the sisters march up to the line with our brothers and try a reform on the dress question? Some say, oh, we must show people, that although we are farmers' wives, we can dress and be stylish.

I say, let us be independent, and let them know, that as farmers' wives, we think there is something higher and nobler to live for than ruffles and flounces. A. C.

Elmira, Solano county, Dec. 8, 1874.

Officers of Granges.—We are devoting considerable space, from week to week, to giving the names of the officers of the various subordinate Granges throughout the State, as fast as they come to hand. Some of our friends may think that the space so appropriated is not very interesting reading matter; but we are quite certain that very many think otherwise. As a case in point we give what our correspondent, J. O. Blakeley, of Visalia says, and no doubt there are thousands of others who are in sympathy with the following:

"There are but few people in this State with whom I am acquainted, and yet I always look over the lists of names published in your paper to see if any of them should happen to be of my friends; and not long since a member of Visalia Grange said to me. I see from the Rural Press, that friend such a one is an officer in such a Grange, and such another friend an officer in another Grange, and seeing their names was almost like seeing them, or, at least, almost like receiving a letter from them; so I conclude that lists of the newly elected officers in our Granges are of interest to your readers; and being willing to contribute as well as receive pleasure, I inclose a list of officers as chosen in the Visalia Grange, at its recent annual election."

[The names of the officers of Visalia Grange have already appeared.—Eds. Press.]

Will be Removed.—Probably the greatest obstacle which Patrons meet with in their attempts to get special rates on goods, is the general hope among manufacturers and jobbers that the Grange is but an experimental institution. Once satisfied that the Grange is a fixed fact, they could make calculations on a fixed basis, and have something on which to rely. Time will soon remove this objection, when it is fair to presume that the average outsider will become better reconciled to the new and improved manner of doing business which it is the mission of the Grange to introduce, and from which the public generally will be almost as largely benefitted as the Granger himself.

Diagram of the Wheat Market.—We have received a copy of a diagram showing the monthly fluctuations of the San Francisco wheat market during a period of ten years, from January, 1864, to September, 1 74. The readers of the Press will remember that we prepared and published on September 26th, a complete table of statistics containing the same information. These fluctuations are shown in the diagram referred to, which has been copyrighted by Alexander Watson, Cashier Grangers' Bank of California.

Progressive Granges.—In many Granges an effort is being made to render their organization more complete and permanent. Some are building or renting halls, furnishing them nicely, and ornamenting them with works of art; some are establishing libraries, and some are providing rooms.

Splendid Angora Fleece.—We are informed that a ewe 2½ years old, owned by the Gaudalupe company, has yielded a fleece averaging 19¼ inches in length; the longest portion being 22 inches. This splendid fleece will be sent to the Centennial exhibition. It is the third clip from this valuable animal.

Notes and Comments.

[By Sister C. A. C.]

A letter for the Press has been brewing in my brain for a month past, but what with getting settled for winter housekeeping, after a whole summer's absence, and doing the honors of Thanksgiving with the inevitable roast turkey and mince pie, I have had barely time for reading your valuable journal, to say nothing of writing for its columns. I believe the spark that kindled my desire to write into a flame was the communication of "E. T. H.," from Spring river, touching the matter of ladies' dress.

I thought out my letter while washing the breakfast dishes, and although it is "blue Monday," have left the domestic service for an hour in order to commit it to paper. I suppose Sister Clark's resolution, introduced at the late Grange meeting, is in Brother Baxter's hands, and for the rest, her remarks were to the effect that she thought the ladies who attend the Grange should set an example of economy by wearing a plainer style of dress.

I hope Sister Clark will speak for herself, and that this important subject will not be left until the next annual meeting without discussion. As this is a many-sided question I may venture to say here that after the resolution and remarks some of us felt like rising to explain that our dresses were for the most part black silks that had long ago seen their best days, half-worn alpacas, cheap grenadines, or, in one or two cases, a new traveling suit, purchased especially for that important occasion. I am far from taking the negative on this dress reform question, and am convinced that extravagance in this particular is, among a certain class, one of the leading immoralities of the day.

As I hope we may succeed in reaching a golden mean in this matter, I would not indorse the somewhat radical suggestion that "we all appear in calico at our next session." To say nothing of the expense of keeping clean, it is far too cool a fabric for woman's wear in the latitude of San Francisco. In fact to prescribe any single material or style of dress for all would be as absurd as to dictate a certain article of diet for all classes of people. Dressing well is a fine art, and always implies fitness in regard to station, occupation, age, figure, complexion and climate.

Something is always due to self-respect, and no one will deny that a woman's influence is everywhere governed to a certain extent by her personal appearance. No wife or mother can afford to lose the advantage which a neat and becoming dress is sure to give among the members of her household. Few husbands are so obtuse as not to feel the influence of a well dressed wife, and "Does its mother look pretty?" from a child surely repays a little painstaking, though bestowed upon ever so humble a toilet. So I think the question of first importance is not ordinarily "How can I dress most cheaply," but what is due myself as a member of society, and what to my friends, always answering to an enlightened conscience, and I am keeping especially in mind sisters of our Order who desire to know and do the right.

I do not forget that many *must* ask "How can I manage to dress with decency, at the least expense; but I still say let good taste and judgment supplement a slender purse, and if you are conscious of lacking these qualities *par excellence*, haven't you some neighbor who knows just what is cheapest in the end to buy, and how to make the most of it afterward? This is what American women proverbially lack—a talent of making the most of themselves—externally, on a given expenditure, and none of us should be above studying so useful an art. And now I am coming to the point, my patient friend from Spring river.

The question is "what shall a plain farmer's wife wear, and be neither extravagant nor old-fashioned?" I answer out of a full heart; first—it is unquestionably wicked to purchase 30 yards of material, when 12 or 15 will make a suit that is in all respects sufficient; and more, when the added weight is taken into account. And, second—I confess I am puzzled when I think of people's getting old fashioned in these days of models, patterns and fashions, and fashionable people. But I ask pardon, and explain that among so many styles one can hardly go astray, if she can take hints, and adapt what she sees other people wear to her own wants. I say adapt and not copy.

Few of us are so poor as not to have a dress, that in its best days, was good enough for any occasion. I should sponge, turn, press, or do whatever is required to make it look good as new, borrow, beg, or buy a sensible polonaise pattern, and make a new garment of it. Then, perhaps, you have another straight, old-fashioned garment, out of which you can make a modern skirt, narrow you know, and complete your suit. Or two old dresses, if of harmonizing colors, may be so blended now-a-days, as to have almost the effect of a picture. If you are buying new, a plain basque and skirt made from some becoming and substantial material, will hardly look old-fashioned if you can procure one of the modern basque patterns whose name is legion and often requiring very little cloth to cut.

The soft, gray fabrics so popular now, or plain black, would hardly look old-fashioned made thus, and worn with a knot of bright ribbon at the throat with a bit of lace, and a natural rose in the hair. I rejoice to tell you, by way of example, that I have a noble mother living not far from San Francisco, who does not wear overskirts and trimming because she cannot afford the time and strength required to secure and carry them. And yet she looks charming in her plain dresses and dainty laces, and everything is so neat and becoming that I don't believe people remember to call her old-fashioned.

This brings me to the pith of my subject, which to verify the analogy, shall be in a small compass. After all, I regard the greatest criminality in the whole matter, to be, the tax imposed by the present style of dress, upon the health, not only upon females themselves, but their offspring of both sexes. One eminent physician has said that a greater percentage of death is caused by erroneous styles of dress among women, than by the use of intoxicating drinks, and I not partly, but wholly, believe him. To test the matter, let us array our sons in a complete feminine outfit, from hair pins to boot lacings, and see what he would think about his chance of making his way in the world. And so when girls of 12—that is the proper age, I believe—are put into glove fitting corsets, dresses a la mode as to trimming, and consequent weight, and high heeled boots, I fail to see where her chance is to become other than a weak-minded, weak-spined woman, unless we credit her with greater original vigor than her robust brother. And now I will tell you something that we can do practically for humanity, in the present and future generations. We are strong enough in numbers, to wage war against fashions and time-honored customs, so far as they interfere with health and comfort.

To make good my term, practical, I will say that our costume might consist, first of a garment made either of flannel or linen, according to climate and season, in which a jacket and drawers are combined, made in one piece, after a somewhat popular French pattern, or buttoned together. Next a skirt—one or more—fastened to a waist, and outside, a basquine or Gabrielle dress of convenient length, shorter for the street than the house. This may be made of any material from velvet to calico, and trimmed to suit the style of the wearer; (a sash loosely worn, would also be admissible), and sensible shoes. How much better in health and spirits should we all feel in one year, under this new dispensation. No more tight bands to interfere with the action of our poor abused stomachs, and compress the vital organs into half the space they are entitled to occupy. I am sure of a hearty "amen" to my suggestions from hundreds of women who daily groan under the growing burden of clothes.

And yet who is so wise that a word is sufficient? And will not woman's millenium be near at hand when she is disenthralled from health injuring fashions? Is this radical or enthusiastic? Let us hear somebody else.

With this I send a list of our Grange officers newly elected, and I want to say for them, that if steady, persevering efforts to maintain Grange meetings during the past summer, are any indication of fitness for office, we have got the right people in the right place.

I must take another half sheet to say we are planning to have a Christmas tree at our hall for the benefit of the children and all neighbors who will unite in providing a Grangers' supper and decorating the tree. It affords a good opportunity for carrying out the social features of our Order, and will be a fit time to remember the poor.

It would seem that I ought to be done, but we have organized a County Council in brave old Butte, and I don't want the fact entirely ignored by our brothers who can make a better showing in point of numbers. I intend telling you how we enjoyed the occasion, and with what dispatch business was accomplished. Suffice it to say we exist, and you will hear from us again.

Nord, Butte county, Cal., Dec. 7, 1874.

The Antioch *Ledger* is authority for the statement that the committee of the Grangers, appointed to select the best locations for the building of warehouses at points north and south of the Sacramento river, met at Vallejo on Tuesday and Wednesday last, and after due deliberation settled on Vallejo on one side and Antioch on the other.—*City Papers.*

We hardly think the Antioch *Ledger* is as good authority as usual in this matter. It is very probable that when the committee does act the result will be as above indicated; but the committee appointed to make the selection are instructed to report their choice to the "Grangers' Business Association—*when incorporated,*" for final action. As that association is not yet organized, we presume the committee have not taken any further action than to "receive propositions."

Changes in Grange Papers.—The *Patron's Helper* has changed hands, George William Jones superceding N. W. Garretson as proprietor and editor. The *California Granger* is being removed from San Jose to San Francisco.

The business of the State Grange Agency, No. 6 Liedesdorf street, S. F., is going quietly and steadily forward. Consignments of wool, grain, hides, tallow, live stock, dried fruit and other domestic produce, are received and disposed of to the best advantage possible by Bro. Garland. His efforts are quite successful in making purchases of all kinds of goods upon the order of Granges and individual Patrons, to their advantage. All Patrons can avail themselves of the benefits of the State Agency.

Anniversary Celebration. — Watsonville Grange had a fine celebration on Friday, the 4th inst. A procession was formed, which marched, preceded by a band of music, from their hall to the park, where the exercises consisted of eating, singing, speaking and dancing. An anniversary address was pronounced by Bro. J. McCollum, Master of the Grange, which the *Pajaronian* characterizes as excellent—temperate yet firm, and filled with many valuable suggestions to farmers.

The Grangers' Bank of California is steadily increasing its business. There is no moneyed institution in our community more safely and economically managed. We have unquestionable faith in its reliability and success. It is established and conducted on correct principles, by men of stability and honesty. Farmers who have banking business to transact should patronize their own bank, for it is worthy of their friendship.

Centinela Colony.

The Centinela Rancho, situated on the coast, in a westerly direction from Los Angeles and about three miles distant from the limits of that beautiful city, contains 25,000 acres of good, arable valley land, a large portion of which is choice bottom and well adapted to the cultivation of semi-tropical fruits. Near the highest elevation is a cluster of large springs, from which flows a stream of crystal water several feet wide and six or eight inches deep, which may be conducted to almost any portion of the rancho. On the adjoining ranches are strong flowing wells, and it is the opinion of Governor Downey, Mr. Garey and others, that artesian water can be readily secured on a large portion of the land purchased. The surveyor is laying out a town in a central position and about three miles from a well sheltered bay. The Los Angeles and Pacific Railroad Company has been incorporated to build a railroad from the landing, where a wharf will be built, running through Centinela to Los Angeles.

There are orange, lemon and lime trees now loaded with fruit, 6,000 orange trees growing in the orchard, 7,000 three-year-old orange trees growing in the nursery, 1,500 Languedoc almond trees just commencing to bear, several hundred other fruit trees, and $50,000 worth of sheep and other personal property.

The soil is first rate, water pure, landing convenient, market handy, and the land dog cheap, less than $11 per acre for good arable land. Centinela will sell well under the hammer. Here is a chance for those looking for homes. Over 200 shares have been taken already, and I presume the whole will soon be gone. Persons desiring to join the colony should lose no time in making a personal examination of this property.

These lands will be disposed of by the auctioneer, as at Lompoc, to the highest bidder, whether a member of the association or not. The purchaser of homesteads will pay ten per cent. of the purchase money on the day of sale, and ten per cent. semi-annually thereafter, with interest at ten per cent. per annum until the whole purchase price has been paid.

Persons desiring homes on this beautiful rancho should secure stock equal to the value of the land desired, so that if high prices are obtained, as at Lompoc, the dividends on their stock can be applied to their final payments on their homesteads, and reduce the cost to or below the original purchase price by the company.

O. L. Arnott,
Santa Barbara.

Parties desiring to visit the land should take steamer from San Francisco to Los Angeles (fare, $12); or take the Southern Pacific Railroad at San Francisco at 8.10 A.M. *via* Soledad, or the 4 P. M. train *via* Bakersfield, to Los Angeles.

A man in Jasper county, Ga., gathered from one head of wheat 2,370 grains. His corn will average 45 bushels to the acre.—*Ex.*

Our contemporary probably meant to say that 2,370 grains were produced from a single kernel of wheat. California can discount that, as well as corn—two to one.

Agricultural Machinery.—The farmers of the United States annually expend $20,000,000 in reaping and mowing machines. The annual production is estimated at about 125,000 machines.

Olive Oil.—The olive oil refinery at San Fernando, Los Angeles county, has commenced operations. Several thousand gallons of oil will be manufactured this season.

Fruit to Mexico.—Lusk & Co have recently shipped to Mexico ten tons of fruit from Santa Clara county.

General News Items.

Earthquake at New York.—The staid Gothomites were pretty severely shaken up on Thursday night of last week. At Washington Heights it sounded like a prolonged roll of thunder. At Spuyten Tuyvel the people kept lights burning all night, fearing a repetition. The alarm was general in these districts. A rocking and rumbling sensation was felt at West Mount Vernon, White Plains, Mt. Kisco Kensico and Kalanah. Houses shook, windows rattled, and several instances are reported where persons fell out of bed, ceilings cracked and fears were entertained that houses would topple over. Many agree in describing the sound as resembling a terrific explosion. At Dobbs' Ferry houses were violently shaken, and at Bellsrung the concussion lasted five or six seconds. At Mount Vernon the whole town turned out in alarm. Several occupants at the hotel were thrown out of bed. The proprietors were frightened and rung a general alarm. In Rockland much damage was done in broken ceilings and glassware, and many people rushed into the streets in their night clothes. Many persons are seriously indisposed through fear. California bids fair to be beaten in what it has heretofore considered one of its special sensationals.

The Back Salary Business.—The aggregate sum voted for back pay by the Forty-second Congress was $1,180,000, of which the opponents of the measure and those who repented of their mistake in drawing it paid back into the National Treasury $240,000. There were 185 members in the House of Representatives who pocketed the back pay, and just 17 of the number have succeeded in being chosen to the Forty-fourth Congress. Forty-nine of those who drew the pay contributed it to the "Conscience Fund." This act redeemed some of them in the estimation of their constituents, and 18 of the number were re-elected. Nine of the offenders devoted the amounts drawn to charitable and educational purposes. Five of these were returned. Thus we find that the voters discriminated between the degrees of offense committed, and rewarded or punished the parties implicated, according to surrounding circumstances.

Count Von Arnim. The evidence in this case is all in. The trial has been the sensation of the hour in Europe. The Count was charged with having abstracted from the Paris Embassy certain State papers which belonged to the public vouchers; but the real offense for which he has been so closely followed by Prince Bismarck is the higher one of disloyalty to that prince minister. The defense of the Count is based on technicalities. He denies his guilt, pleads want of jurisdiction by the Court; also that the powers of the Foreign Office over him had lapsed, because he was placed on the retired list. The first point was overruled by the Court, and the second was decided against him, witnesses being produced who testified that it was an Ambassador's duty to hand over the archives of the Legation to his successor. The final result is looked for by Europeans with much interest and anxiety.

Arbitration.—The libel case of Miss Proctor *vs.* Mr. Moulton, of Beecher notoriety, has been settled by arbitration, without recourse to the Courts. Mr. Moulton admits that he was wrong, and voluntarily purposes to pay damages; while Miss Proctor accepts his apology, and refuses to accept a dollar above costs. The settlement is alike honorable to both parties, and furnishes another step toward the abolition of the uncertain and expensive machinery of courts in favor of a common sense settlement of all personal disputes by arbitration. Probably a large portion of the cases that drag their slow length along our courts could be settled by a three-hours' conference before a Judge capable of expounding the law, if such a tribunal existed.

The International Postage Treaty, about which so much is said and so little known, has for its object the consolidation of all Christendom into one territory for postal purposes, making postage on international letters uniform at five cents, and on postal cards two and a half cents, with an additional charge for long sea voyages. The only hitch is the proposition to pass books from one country to another through the mails at two cents per ounce. This would be free trade in literature, whereat the politicians are alarmed. The Senate will be called to express an opinion upon the subject at the present session, in the exercise of its treaty-making powers.

"Who will be the Next."—Great Britain has made another addition to her empire—this time Grigaa Land has been annexed to her—South African territories. England is spreading out her arms, looking like Victor Hugo's devil fish, and what she gets she keeps. The United States has got land enough; but would it not be well to secure a few more outlying ports as places of refuge for our mercantile and war marine. The time may come, when all or nearly all the ports of the world shall be closed against us; then, if not before, we shall see our mistake in neglecting opportunities.

Mechanics Out of Employment. — Over 30,000 mechanics are said to be out of employment in New York city. This is exclusive of several thousand that are idle on account of strikes among the trade unions. The number of laborers out of employment would swell the grand total to nearly or quite 100,000. The present promises to be a winter of terrible suffering in New York.



A Tired Woman's Last Words.

Here lies an old woman who always was tired,
For she lived in a house where help wasn't hired.

Her last words on earth were, "Dear friends, I am going
Where sweeping ain't done, nor churning, nor sewing;

And everything there will be just to my wishes,
For where they don't eat there's no washing of dishes.

I'll be where the loud anthems will always be ringing,
But having no voice, I'll get rid of the singing.

Don't mourn for me now, and don't mourn for me never,
For I'm going to do nothing forever and ever."

What They Went For.

The poet has come in for *his* say, and this is the way he puts it:

The settler went to the west.
What did he go for there?
Money to make and flails to shake,
And with hay-seed fill his hair.

The railroad went to the West.
What did it go for there?
Money to make for its own sweet sake,
And to strip the settler bare.

Both went out to the West,
And what they are doing there
Is trying to cut each other's throats,
That both may vanish in the air.

Our Saturday Night.

Several miles out from the city, just in the edge of a village, stands a white house with green blinds. A pretty cottage home. Many a time have we opened the gate, passed into the yard where the young wife had trained roses to climb and pinks to spread as they gave beauty and fragrance to a place which had become a workingman's paradise. Of a Saturday night there was indeed no place like home. No more happy place than this home, at last. It was like basking in the mellow sunshine of God's smile to visit here and behold what love, affection, industry and confidence could do towards making life beautiful beyond words.

The owner of this cottage home was not rich, but no man had greater wealth. He was an honest man. His eyes were like the cushions on which angels bear infants to heaven, so soft, gentle and full of tenderness were they. His heart seemed more like some beautiful thought budding into flower than the arena wherein struggled human passions, so well had he controlled himself. He lived to concentrate his life—to make home the dearest and sweetest place on earth, and the rectitude of his life spread sunshine all over and about the dear ones who waited his coming. What God, the great Chemist, had joined together, no silent yet powerful influence had put asunder, for our friend and the pure woman from whom he drew so much inspiration lived in the doorway of that beautiful belief that home is heaven when home holds none but loving hearts.

Day after day our friend labored at his trade. Like the father of Jesus, he was a carpenter. He built houses for others and used the reward of his skill and labor to beautify his home. Thus he puts his money to greater interest than any miser yet received or Shylock could demand. He studied and worked. He built himself into a magnificent manhood. He trained his intelligence, which is immortal, toward heaven, and frittered not himself away in fretfulness, dissipation or fault finding with his station or condition in life. He turned his strength to profit—his life to success—his vines to beautify his life and home. He planted contentment, and bounteous was the harvest of happiness he reaped, for he was dearly beloved by a loving wife and three beautiful children. His wife was loving because she could not help being so. Mated as well as married, their lives went sweetly on like wedded rivulets singing their way to the sea. Their children were beautiful. They were conceived in love and born in the garden of complete confidence. While the weaver was at work in his mysterious chamber, there was no storms, no fits of ugly passion, no lowering skies, no crossing of purposes and filling of hearts with agony to the tangling and twisting and warping of life threads in the unborn, so the little ones who came into the world were beautiful and dearly loved blessings. Would that we knew words in which to convey ideas. Oh! that we could sit with all who are waiting to be parents and tell them how love beautifies, and unkindness to her who is to be a mother, mars, scars and distorts the innocent till they come into the world laden with the seeds of misery for their after lives on earth. When men know what men should know, and women live as women should live, every child born to earth will be born to happiness. But not of this now.

Our friend was an honest man. He dared to be true to himself. He dared to be true to his manhood. He dared to be true to the woman he loved. Few are the men so brave as he. His home held him by night as did his duty by day. He lived, not to add to that insane throng which makes excitement for happiness, but to aid his wife and his children to develop and grow in that strength of heart and soul which gives us positions in the ranks of those who are God's companions in the Gardens of the Golden Eternal.

When the labors of the day were over, he hastened to his cottage home. He was welcomed on the way by those whose little feet ran to meet, whose little lips did sweetly greet him. He was not too proud to play with his little ones. He was not too dignified to love his wife. He was not so great as to make his home ones unhappy in the shadow of his selfish ambition. He was a workingman, untitled on earth, but weaving on his heart the garter of the knighthood of God. He loved his children and they loved him, because he was good and his presence was the balmy air wafting them on to the lasting and everlasting happiness.

* * * * *

The heart-broken wife was kneeling by the bedside as we entered the room. The two eldest children were sobbing as if their hearts were broken. The father and husband had crossed the river and moved out of the mortal temple in which he had dwelt for years. He had crossed the river by whose earth bank his loved ones were kneeling in tears as the waves of bitterness dashed in great breakers over their hearts. He had gone with his patterns to build for those he loved a home in that Land of the Leal where there is no sorrow—where *hearts* are at rest and the stings of earthly circumstances do not reach to wound the studious soul.

It was a death-bed scene. The hour of trial for the living—of grief for those left in the desert while the faithful guide is journeying on the oasis and finding the camping ground and shady groves wherein will come those whose grief-wrapt hearts are now lifeless in their sorrow.

A lady friend of the afflicted ones entered the room, bearing in her arms the two-year old child of him who slept never before so quietly. She bore the babe to the bedside. The little darling looked at those who were bowed in grief. Then it looked at him who slept, and from her lips came in inquiring tones—

"Pa-pa!"

His face was as one asleep. So quiet and full of rest. The good friend held the child down so it could kiss the cheek of him but for whom she had not been. At once she sprang from the arms of the good friend, nestled close to the face of the dead, and with her little arms on his face, repeated in her baby voice—

"Pa-pa! Baby wake pa-pa!"

Then she bent over, printed a sweet little kiss on one of the eyes of him who slept, quickly raised her head and laughed in glee. But papa did not waken. At once, she bent over, kissed the other closed eye, threw back her head and said:

"Papa, wake for baby!"

This had been her early morning play. Oft and oft had she climbed up to his face and kissed his eyes till they opened to smile on baby, as he held her to his heart and wakened for the morning romp which flavored with love the labor of the day. The little orphan knew not that his sleep was eternal. But she saw that papa would not waken to her kisses, as the sobs came from breaking hearts, and tears ran like rain down cheeks unused thereto. Her little lips were put up in grief, the tears of disappointment came to her eyes as she cuddled down by the face of him whose life-love had been to her food for the heart and sunshine for her infant soul. Her sobs and tears came free and fast. Her faith was broken. There was a mystery she could not fathom—something her young intelligence could not comprehend.

Yet, who dare say that the angels who went with father to prepare a home for his loved ones in the golden gardens had not returned, and whispered to her soul a knowledge hitherto unknown.

Papa was dead. His spirit had gone on to its real work. Well might that little innocent know that papa was dead when her sweet, warm kisses could not open his eyes to see her eager smiles, as she waited at the threshold of slumber for his return.

* * * * *

The world is all too full of dead fathers and dead mothers. Of those who have closed their eyes to love, innocence and that affection which marks the God-like of human nature. If men knew the happiness there is in heart-warmed houses, they would close their eyes to true love or depart on selfish missions as do those who die moral deaths.

The heart of the child was broken when she realized that no longer could her little kiss open the eyes of the papa she loved. The world is full of men and of women, children of larger growth, whose hearts are breaking because of their inability to open with tokens from the hearts the eyes of those they have idolized. To such mourners time brings scars oftener than men know of. God pity all such. Their grief is greater and with reason, than is those who live for each other—who walk hand in hand, as heart in heart, through life to accomplish good and who are left only for a time, certain of soon meeting in the Land of the Leal, where those who were the best, truest, the noblest and most devoted to home and to humanity in this life, will wear crowns and be blessed with angels in that beautiful home wherein all the good actions and kind thoughts here are preserved to our credit, to glory and reward there is for all who are deserving, in the beautiful life beyond our final Saturday Night.

How a Coat used to be Made.

Boys in these days who can go to a clothing store, try on a coat, and when they find one that suits, pay for it and take it home, may be interested to know how boys came by their coats in the old times. Hon. Amasa Walker tells this story:

"After I had obtained the wool for my coat, and carried it a long distance to be carded, I found the parties overwhelmed with business. Everybody desired their wool carded as well as I, and I was obliged to wait the natural course of events, which meant two weeks. I returned home, and when the two weeks had elapsed, again presented myself at the mill, and inquired for the wool. It would be done in less than another week. It was done when I next visited them and I took my possession home. My mother was quite delighted on my arrival, and at once set to work to spin it on a great wheel. At the appointed time I made another journey on horseback with my bundle behind me, to to the store at Knoxville. I was obliged to be contented with receiving a promise of the cloth in three weeks. When the time had gone by, I went again, and had to wait a long time, but finally obtained my treasure and went home. After three weeks delay and disappointments Uncle Daniel gave me the cloth for my surtout, and then Aunt Debby, the tailoress, had to be engaged to make it. Aunt Debby could not come for some days, but at last, after more hardships in going for her at early sunrise on a cold, frosty day, and waiting for her to finish a job, she was obtained, and the hard earned garment was at last completed, as well as my brother's clothes."

Failures in Business.

Peter Cooper failed in making hats, failed as a cabinet-maker, locomotive builder and grocer, but as often as he failed he "tried again," until he could stand upon his feet alone; then crowned his victory by giving $1,000,000 to help poor boys in time to come.

Horace Greeley tried three or four lines of business before he founded the *Tribune* and made it worth $1,000,000.

Patrick Henry failed at everything he undertook until he made himself the ornament of his age and nation.

The founder of the New York *Herald* kept on failing and sinking his money for ten years, and then made one of the most profitable newspapers on earth.

Stephen A. Douglas made dinner tables and bedsteads and bureaus many a long year before he made himself a giant on the floor of Congress.

Abrahsm Lincoln failed to make both ends meet by chopping wood; failed to earn his salt in the galley slave life of a Mississippi flatboatman; he had not even wit enough to run a grocery, and yet he made himself a grand character of the nineteenth century.

Gen. Grant failed at everything except smoking a cigar; he learned to tan hides, but couldn't sell leather enough to purchase a pair of breeches. A dozen years ago he "brought up" on top of a wood-pile "teaming it" to town for $40 a month, and yet he is at the head of a great nation.

THE LOTTERY OF MARRIAGE.—Marriage is often a lottery in a general sense; but here is one case on record, at least, in which it was made most literally so. A certain youthful swain in France, relying upon his personal attractions mainly, actually put himself up as the one grand prize in a lottery of 10,000 tickets of the value of $2 each. This novel matrimonial experiment created a wondrous sensation among the belles of the French capital, and the result was that all sorts of speculations went on among the fair, who eagerly bought up the tickets. A fair young damsel who speculated for the frolic of the thing, become the holder of the prize ticket. The lucky youth tendered her the pecuniary proceeds of the lottery, $20,000; they became a case of "love at first sight," and within the brief limits of the day, Hymen settled their destiny, and the "twain became one flesh." Whether this marriage turned out happily, we never heard; at all events, it was certainly as likely to do so as many others that are contracted, in which the motives are frequently no less whimsical, and not a whit nobler.

JACK'S WIFE.—This is the way a seafaring man, recently married, "told to the marines" what sort of a wife he had secured: "My wife is just as handsome a craft as ever left a millinery dry dock, is clipper built, and with a figurehead not often seen on a small craft. Her length of keel is five feet eight inches, displaces twenty-seven feet of cubic air; of light draught, which adds to her speed in a ball room; full in the waist, spare trim. At the time we were spliced she was newly rigged fore and aft, with standing rigging of lace and flowers, mainsail part silk, forestaysail of Valenciennes. Her frame was of the best steel covered with silk, with whalebone stanchions. She also has a set of storm sail for rough weather, and is rigging out a small set of canvass for light squalls, which are liable to occur in this latitude sooner or later. I am told, in running down the street before the wind, she answers the helm beautifully, and can turn around in her own length if a handsomer craft passes her.

WHY is a restless sleeper like a lawyer? Because he lies on one side, and then turns, and lies on the other.

A Plea for Privacy at Weddings.

As the semi-annual bridal season is at hand, it is the time to plead for a reform in weddings. Every year this sacredest of all occasions is turned more and more into a mere opportunity for display and for replying to some fancied social obligation. Instead of the and time when a few of the closest friends gather to witness the solemnest compact human beings can frame, it is chosen as the moment for bringing together the larger part of the family's social circle, to show the bride in her bridal garments; to prove how many flowers and refreshments the family can afford; and, with shame be it said, to exhibit to criticism and light comment the precious tokens that should have come with tender regard to the maid on the eve of her new life.

A wedding must not be uncheerful: but it must certainly be solemn to all who realize what it is. On the one side, it is renouncing old ties, promising to begin with faith and hope and love, a new and wholly untried existence. On the other, it is the acceptance of a sacred trust, the covenant to order life anew in such ways as shall make the happiness of two instead of one. Can such an occasion be fitting for revelry? Is is not wiser, more delicate, to bid only the nearest of friends to a marriage ceremony, and leave the feasting and frolic for a subsequent time? We are sure there are few girls who, if they reflect on the seriousness of the step they are about to take, will not choose to make their vow within the loving limits of their home circle. All our best instincts point to the absolute simplicity and privacy of wedding services; only perversion of delicacy could contemplate the asking of crowds of half sympathetic or wholly curious people to attend the fulfillment of the most solemn of contracts. Let there be as much party-making, rejoicing and pleasure-taking afterwards as hearts desire; but let the solemn vows be made in the presence only of those nearest and dearest.—*Scribner's*

HOW TO SHOW LOVE FOR A WIFE.—Show love for your wife, and your admiration of her, not in nonsensical compliment; not in picking up her handkerchief, or her gloves, or in carrying her fan; not though you have means, in hanging trinkets or baubles upon her; not in making yourself a fool by winking at and seeming pleased with her foibles or follies, or faults; but show them by acts of real goodness towards her; prove, by unequivocal deeds, the high value you set on her health and life, and peace of mind; let your praise of her go to the full extent of her deserts, but let it be consistent with truth and with sense, and such as to convince her of your sincerity.

He who is the flatterer of his wife, only prepares her ears for the hyperbolical stuff of others. The kindest appellation that her Christian name affords, is the best that you can use especially before other people. An everlasting "my dear" is but a sorry compensation for the want of that sort of love that makes the husband cheerfully toil by day, break his rest by night, endure all sorts of hardships if the life or health of his wife demand it. Let your deeds, and not your words, carry to her heart a daily and hourly confirmation of the fact, that you value her health, and life, and happiness beyond all other things in this world and let this be manifest to her, particularly at those times when life is more or less in danger.

HER LADYSHIP IN THE KITCHEN.—There is a Prof. Buckmaster at the South Kensington museum who lectures on cooking, which I dare say is easy enough, though far from satisfying to a hungry man. Lady Barker, however, who in her course of instruction, mixes theory with practice, is the really popular culinary professor of the day. A month or two ago the daughter of a very grand lady went to study under Lady Barker, and returning home after her last lesson, wished to show her mother, the Duchess of ——, how clever she was, and how well she could make an omelette, which she manufactured somehow or other in the domestic kitchen. The servants of the establishment were so disgusted that the same evening the cook, and all the scullery maids gave notice to leave. Whether the cook was jealous of the superior acquirements of her young mistress, or simply maintained that in a kitchen the cook alone is queen, I have not heard. *N. Y. Times.*

THE FASCINATIONS OF A CITY.—The New York *Times* refers to the deadly harm the fascinations of the great city inflict upon the thousands of innocent souls by the strange grip which they get upon them. Out of the thousands of immigrants who pour through New York, there is a certain per cent. held by the dire fascination of the metropolis. It would be a positive kindness to hundreds of squalid and degraded families to remove them bodily from the unhealthy rookeries to cheap and comfortable homes in new lands. But these people would resist such an attempt to the death if it were possible to make it. It is probable that they would never reconcile themselves to any other life than that of the blind alley and the tenement-house, redolent of foul vapors. They always turn a cold shoulder, the editor says, to the emigration agent, and it is in vain that he draws glowing pictures of the golden harvests of the West and the delicious climates far away.

THE LEEK is the heaviest vegetable that grows; a small one will sink the largest ship. The carrot is one of the lightest as well as the most uniform in weight, it always weighing exactly four grains.

The First Grapevine—A Grecian Legend.

When Bacchus was a boy, he journeyed through Hellas to go to Naxia; and as the way was very long, he grew tired, and sat down upon a stone to rest. As he sat there with his eyes upon the ground, he saw a little plant springing up between his feet, and was so much pleased with it that he determined to take it with him and plant it in Naxia. He took it up and carried it away with him; bnt as the sun was very hot, he feared it might wither before he reached his destination. He found a bird's skeleton, into which he thrust the plant, and weut on. But in his hand the plant sprouted so fast that it started out of the bones above and below. This gave him fresh fear of its withering, and he cast about for a remedy. He found a lion's bone, which was thicker than the bird's skeleton, and he stuck the skeleton with the plant in it into the bone of the lion. Ere long, however, the plant grew out of the lion's bone likewise. Then he found the bone of an ass, larger still than that of the lion; so he put the lion's, containing the bird's skeleton and the plant, into the ass's bone, and thus he made his way to Naxia. When about to set the plant, he found that the roots had entwined themselves around the bird's skeleton, and the lion's bone, and the ass's bone; and as he could not take it out without damagiug the roots, he planted it as it was, and it came speedily up, and bore to his great joy, the most delicious grapes, from which he made the first wine and gave it to men to drink. But behold a miracle! When men drank of it, they first sang like birds; next, after drinking a little more, they became vigorous and gallant like lions; but when they drank more still, they began to behave like asses.—*New York Wine and Fruit Reporter.*

Business Periods.

Perhaps ten years measure the average life of a business generatiou. Each new set of men, growing up under like usage and maxims, run a like round of experiences; expend their resources in the hope of winning, with the odds of ninety-five iu the hundred against them, and at the end of that time all but five per cent. sink into the abyss of bankruptcy.

The general suspension of specie payment by the banks and the general failure of business men in 1827, 1837, 1847, 1857, is familiar history. The effects of the crisis of 1827 are nearly forgotten now. The almost universal bankruptcy of 1837 hurt the country immeasurably. Many a man still thinks of that time with a shudder. The revulsion came when the State banks, stimulated by government deposits, undertook to fulfill the offices previously performed by the bank of the United States from which the public funds were removed by Gen. Jackson; and in the midst of large speculative adventures in land, which widened the derangement of business, greatly increased the volume of obligations and intensified the general distress. Men were not only ruined, but were bewildered as well. They saw no future escape from the slough of despond they were wallowing in. Business revived very slowly, and did not fully recover the ordinary measure of activity before the fated tenth year arrived; and in the collapse of 1847 many stroug houses went down finally. Of the panic of 1857, the Bank Commissioner of the State of New York, in his report made the following year, said: "The crash fell like a thunderbolt from a clear sky."—*Phrenological Journal.*

The Dangers of Dancing.—The *Pall Mall Gazette* says: "At an inquest held in London on the body of a young lady who died suddenly, a few hours after attending an evening party, of apoplexy, the corouer remarked that it was a pity to say anything agaiust "so healthy and pleasurable exercise as daucing," but it most certainly produced apoplexy in certaiu cases. The cases in which death is directly produced by dancing are happily rare, but the seeds of death are often sown in a ball-room, not so much from dancing as from the circumstances under which it is carried on. For instance, what can be more likely to produce apoplexy or some serious illness than the practice of eating ices, when thoroughly heated by violeut exercise? Again, the atmosphere of mauy a ball-room, crammed as it often is with three times as many people as it can comfortably contain, is enough, of itself to poison any one not acclimatized to suffocation by previous training. Then there are the sudden changes of temperature which youug ladies, insufficiently clad, are exposed on leaving the heated rooms as they return home, overtired, and in precisely the conditiou under which such changes of temperature are likely to affect them if they have any tendency to lung disease, the late hours also which are necessarily kept in the season, cannot be otherwise than very prejudicial to the health of both young and old, and probably cause many illnesses that are unjustly credited to other sources. There is, in truth, great need of reform in most of the social habits of the present day, and the wonder is not that one young lady is killed by dancing, but that any, save the strongest, survive the amusements and dangers of a summer in London."

The Way the Money Goes.—The number of American tourists who returned from Europe during the last fiscal year was 36,830. Allowing that each of these individuals spent $500 during their absence, we have the enormous amount of $18,415,000 in gold going out of the country in this direction only—probably two or three times as much as is returned by European tourists coming hither.

Young Folks' Column.

Give the Little Boys a Chance.

Here we are! don't leave us out
Just because we're little boys!
Though we're not so bold and stout,
In the world we make a noise.
You're a year or two ahead,
But we step by step advance;
All the world's before you spread—
Give the little boys a chance!

Never slight us in your play,
You were once as small as we;
We'll be big, like you, some day,
Then, perhaps our power you'll see.
We will meet you, when we've grown,
With a brave and fearless glance;
Don't think all this world's your own—
Give the little boys a chance!

Little hands will soon be strong
For the work that they must do;
Little lips will sing their song
When those early days are through.
So, you big boys, if we're small,
On our toes you needn't dance;
There is room enough for all—
Give the little boys a chance!

A Story for Children.

"Papa, will you tell me a story before I go to bed?" said little four-year old Willie, climbing up into my lap and nestling close to me in his child-like way.

Yes, I said, smoothing his goldeu curls and looking into his blue eyes; but it must be very short, for it is past your bedtime.

In a far off country there lives a great king. His city is paved with gold, and his gates are of lovely pearls. The king is good as he is great; so that his people call him Father, and he calls them his children. Many of his children live in a country far away from him, and never see him. But though he is separated from them, he never forgets them, and is always thinking of them with love.

These children would never know anything about their tender, loving Father, if he did not often send messengers with words of affection and gifts to make their hearts happy.

Besides all this, the good king has promised that if his children are kind and gentle, doing to others as they would have others do to them, they shall come to live with him in that lovely land, be always happy.

"I know," said little Willie, opening wide his blue eyes, "who that good king is; he is God; and that lovely land is heaven; and I shall go there it I love the Saviour, and I mean to, so good-night, dear papa."

Boys that have Prospered.—Of the large number of boys who have been transplanted from New York City to the West since the agent for the commissioners of public charities and correction, on his last visit with a party of children, learned a few facts that are worth knowing. Out of a party taken to Danville, Illinois, one boy (now a young man) served four years in the Uuion army, is now working on a farm, and has $600 at interest. Another married the daughter of the farmer he was placed with, and possesses a farm worth $70,000 to $80,000. Another keeps a provision store at Danville, and is one of the most respected and wealthy men of the town. Another is corporation counsel at Danville, and is one of the first lawyers in the State. Still another is a telegraph operator further west earning $900 per anuum.

The Future of Dull Boys.—Parents should never despair because their children give little promise of eminence in early life. Douglas Jerrold was considered a dull boy; at nine years he could scarcely road. Goldsmith was a very unpromising boy. Drydon, Swift, and Gibbon, in their earliest pieces, did not show any talent. The mother of Sheridan, herself a literary woman, prouounced him to bo the dullest and most hopeless of her sons. The father of Barrow is said to have exclaimed: "If it pleased God to take away any of my children, I hope it will be Isaac." The injudicious parent regarded tho lad as a miracle of stupidity, but he afterwards proved the glory of his family.

Why Everybody is Cross.—"O, Mary!" said a little boy, named Johu, to his sister, "I have found a pretty thing. It is a piece of red glass and when I look through it, everything looks red, too. The trees, tho houses, the green grass, your face, and overything is red."

"It is very beautiful," Mary replied; "would you like me to tell you how to learn a useful lesson from it? You remember the other day you thought everybody very cross with you. Now you were like this piece of glass, which makes everything red because it is red. You were cross, so you thought everybody about you cross, too. If you are in good humor, and kind to every one, all will seem kind to you. Try if they will not."

A Schoolboy's Toothache.—An exchange tells us that a schoolboy's toothache generally commences at eight in the morniug; reaches its highest altitude at a quarter to nine, when the pain is intense to an extraordinary degree, commences to subside at nine; after that disappears with a celerity that must be very comfortable to the sufferer. If at night the boy hasn't got four quarts of walnuts spread out to dry up stairs, it is because there is no place up stairs to do it.

A high note—One of a thousand dollars.

A fact is worth a thousand statements.

Good Health.

Imaginative Medicine.

Charms, amulets, talismans and phylacteries all belong to the list of articles which produce imagiuative cures; seeing that the persons who trust to them believe in some good obtainable from them, iu purse or iu person, in health or in welfare; and if the good does come, more assuredly the imagination is the channel through which it approaches. Two or three years ago, at a town in Worcestershire, after the inquest on the body of a man drowued in the Severn, a woman applied to the chief constable for permission to draw the hand of her son, a boy eight or nine years of age, nine times across the dead man's throat, in order to bring about the removal of a wen from the boy's neck. In another instance, iu the same county, this was actually done, with fatal results; for the man had died of typhoid fever, which was iu this way communicated to several living persons. A ring made of the hinge of a coffin, and a rusty old sword hung by the bedside, are (iu some districts) charms against the cramp; headache is removed by the halter that has hung a criminal, and also by a snuff made from moss that has grown on a human skull in a graveyard. A dead man's hand, and especially the haud of a man who had been cut down while hanging, dispels tumors. Warts may be removed by rubbing them with a bit of stolen beef; the chips of a gallows, worn in a little bag round the neck, will cure the ague; a stone with a hole in it, suspended at the bed's head, will prevent nightmare. Many verses are known, which if repeated aloud, are credited with curing cramp, burus, and other bodily troubles. When you have the whooping-cough, apply for a remedy to the first person you meet with riding on a piebald horse—a ceremony that Dr. Lettsom, the physician, was fated more than once to become acquainted with.—*All the Year Round*

How Poor Eyes are Made.—I have, during the past two months, seen lace veils drawn tight over the face in church, both morning and eveniug. I have seen ladies teachiug in Sunday-school and in sewing-schools, where the expression of face has so much to do with claiming and retaining the scholars' attention, with the inevitable veil covering like a mask both faces and expression. Ladies were seen at the evening receptions at the Metropolitan museum of art, looking at pictures and porcelain through lace veils, which in one or two instances were beaded. I myself saw a lady at the Astor library procure the seveuth volume of Froude's History of England, which she proceeded to read through a dotted lace veil. And last, but not least, I am told by a friend who attends the art school at the National Academy of Design, that young ladies go there and draw from plaster casts for hours at a time without litting their black lace veils.—*Cor. New York Evening Post.*

A Word About the Lungs.—In nearly all cases the natural capacity and area of the chest are sufficient for all the uses of respiration. Bnt the capacity of the chest may be diminished by the habit of stooping, or by the abominable practice of tight-lacing. The false grace of the wasp form in woman is almost always gained at the expense of the lungs. The tight belt and the armour above it fatally compress the air-cells, and forbid all easy union of the oxygen of the air with the currents of the blood. The lungs cannot well spare one square iuch of the space which they naturally fill. Consumption is the sequel of corsets. The war of hygiene upon tight waists must be positive and unceasing, for fashion is in nothing more destructive to human life than in this. The lungs are also injured by being over-worked, strained, or made to do more than any reasonable estimate of their powers would allow.

Walking as an Exercise.—There is no exercise so fine as walkiug, if one knows how to take it. When a disoase in one part of the body becomes incurable, the physician will sometimes attack some other part with the design of diverting the sickness from its stronghold. So a man who uses his head till his brain is weary needs to tire his legs. One complains that he cannot walk. It is because he does not observe the rules. Walk easily. Take time and do not hurry yourself into exhaustion. By walking a short distance at first, and gradually increasing it, one soon is able to walk eight or ten miles without fatigue, and with good results to health. "At the end of a mile," says an old pedestrian, "walking is delightful. You wouldn't ride if you could." The road to health is too narrow for wheels.

Dyspepsia.—"Dyspepsia is the demon of America," says tho Philadelphia *Bulletin.* "Making haste to get rich, America has neglected her stomach; she has forgotten to learn how to enjoy her riches, and her generations of sallow, nervous, unstrung men and women will not be reconstructed in the sturdiness of their forefathers until men and women reach a point where they can take time to dine."

To Stop Nose Bleeding.—Two small arteries branching up from the main arteries on each side of tho neck, and passing over the outside of the jawbone, supply the face with blood. If the nose bleeds from the right nostril, for iustance, pass the finger along the edge of the right jaw till the beating of the artery is felt. Press hard upon it for five minutes, and the bleeding will cease.

Domestic Economy.

The Christmas Pudding.

B—"Jeannette and Jeannot."

If you wish to make a pudding in which every one delights,
Of a dozen new-laid eggs you must take the yolks and whites;
Beat them well up in a basin till they thoroughly combine,
And shred and chop some suet particularly fine.

Take a pound of well stoned raisins and a pound of currants dried,
A pound of powdered sugar and a pound of peel beside;
Stir them all well up together with a pound of wheaten flour,
And let them stand and settle for a quarter of an hour.

Then tie the pudding in a cloth, and put it in the pot,
Some people like the water cold, and some prefer it hot;
But though I don't know which of these two methods I should praise,
I know it ought to boil an hour for every pound it weighs.

Oh! if I were Queen of France, or, better still, Pope of Rome,
I'd have a Christmas pudding every day I dined at home;
And as for other puddings, whatever they might be,
Why, those who like the nasty things should eat them all for me.

Unfermented Wine.—This article is coming quite extensively into use for church purposes and when mixed with water it also forms a very refreshing summer drink. In order to prepare it the grapes should be allowed to thoroughly ripen. They are then picked and the stems and all green and rotten grapes removed. The grapes are then crushed and pressed in the usual manuer. The juice may be put directly into bottles, or it may be first concentrated somewhat by boiling, and then bottled; in either case the bottles are put into hot water and brought to the boiling point, where they are maintained for half an hour. At the end of this time remove them from the fire and cork thom tightly, while still hot, wiring in the corks. Then replace them and continue the boiling another hour. Glass bottles are better for this purpose than tin cans, though the latter may be used. An analysis of a specimen prepared in New Jersey gave the following result: alcohol, none; sugar and extract, 23.00; ash, .40; water, 76.60; total 100.00. This had probably been concentrated somewhat before bottling. The flavor was fine. Some acid tartarate of potassium had crystallized out.

Home Made Candy.—Use a new tin basin; put into it four tablespoons of water, one pound of coffee sugar, one teaspoonful of good cream tartar; boil, stiring constantly to avoid burning. After it begins to have a sappy appearance try it often by dropping a little in cold water and if done it will at once become brittle. Butter an earthen dish and pour the hot candy into it, that it may cool just enough to handle. Flavor to taste with oil of peppermint, wintergreen, sassafras or lemon. Two drops of oil will flavor it strong. For variety, divide into three or four parts and flavor differently by touching one kind of oil to each. Work in the hands at once; the more it is pulled the whiter it will get.

How I Made My Catsup.—I selected fair ripe tomatoes, cut out all blemishes, also the hard parts about the stem end, then slice them into a porcelain kettle, filling it full; added a red pepper and put the kettle over a slow fire to stew gradually stirring to prevent burning. When reduced to half the original quantity I strain the whole through a common wire sieve. To five pounds of the pulp I added one and one-half pounds of sugar, one pint of cidor vinegar, one tablespoonful of clovos, one of allspice, two of cinnamon, one of salt. I put the mixture back over the fire and boiled until the thickness suited. When mine was tested the only fault found was that it was too good to last.

Scotch Broth.—Put a teacupful of pearl barley into 4 quarts of cold water and let it boil; add 2 pounds of scrag of mutton or thin flank of beef, 2 onions, 2 turnips, 2 carrots cut in dice, and 1 carrot grated; boil slowly for three hours; add salt and pepper to taste before removing from the fire.

To Sweeten Salt Pork.—Cut as many slices as will be required for breakfast the evening previous, and soak till morning in sweet milk and water; then rinse till tho water is clear, and fry. Tho pork will be found very near as good as fresh.

German Toast.—To one egg, beaten well, add one cup sweet milk or cream, season with a little salt and pepper. Cut in slices stale bread, and dip in the milk to moisten, and fry in butter on griddle. This we think is an extra nice dish for breakfast.

Nice French Cake.—Two cups of sugar, one half cup of butter, four eggs, one cup of milk, three cups of flour, one teaspoonful of soda, and two teaspoonsful of cream of tartar. This makes two loaves.

To Disguise Castor Oil.—Rub up two drops of oil of cinnamon with an ounce of glycerine and add an ounce of castor oil. Children will take it as a luxury, and ask for more.

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No Quack Advertisements inserted in these columns.

SAN FRANCISCO:

Saturday, December 19, 1874.

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Our Paper this Week.

The readers of the PRESS will find the following articles in the present issue especially interesting and readable: "Mushroom Culture," with cuts engraved by our own artist, an article of much practical value as well as interesting to the general reader. The article on "Dairying in Siskiyou County" is not, by any means, limited to that locality in its interest and practical suggestions. "Beautiful Horticultural Importations" will give the reader an idea of what California is doing in this matter. Other pleasant and profitable reading will be found in the editorial department, while the communications from casual correspondents and regular contributors will be found particularly valuable, embracing a wide field of observation and thought. The Patrons of Husbandry will find an unusually fresh and wholesome feast set before them in their special department. Other departments will be found to contain their usual amount of appropriate selections, with a goodly portion of fresh matter.

Read our paper, and see if the RURAL PRESS is not all that it claims to be.

Dairying In Siskiyou County.

The Yreka *Union*, of Nov. 21st, gives some advice to the people of Siskiyou county which deserves their careful consideration; and, if properly considered, their good sense will undoubtedly induce them to put it in practice. We do not profess to be up to the prevailing fashion in utterly condemning wheat-growing. It is a bridge that has carried us over a dreary chasm in our agricultural history, and it does not become us to curse it.

Among the means by which the huge proportion of the Californian wheat crop may be curtailed, there are none that are more practicable, none more substantial and enduring in their results, and none that are more immediately available than dairying. The *Union* says: "There has been made in Siskiyou county during the present season at least 30,000 pounds of butter, in addition to what has been required for home consumption. This has been shipped to markets outside the county, and has commanded here about 30 cents a pound." The question which they are now discussing is: can they make butter making pay at 30 cents a pound?

Why should it not pay here at this price when the dairymen of the East consider 28 cents a pound for butter, and 14 cents for cheese, good, round prices? They make money on these rates, from farms worth $200 per acre; having nothing but first-class white help in their employ, and buying nearly everything that a farm produces except butter and cheese; and in some sections of the richest dairy districts of the East you will find cheese makers buying their own butter, and butter makers buying their own cheese. If we cannot compete with our Eastern dairy brethren in low prices for butter and cheese we might as well hang up our fiddles, or our milk-pails.

Those who are acquainted with the character and tone of the RURAL PRESS know that it is not joined to Eastern idols; but we are perfectly willing to take the position of learners in dairy matters; and would advise such searchers of practical knowledge, as our Siskiyou county friends evidently are, to profit by the teachings of Eastern dairymen, those of New York especially, in everything that pertains to the subject; from the primary rules, up to the commercial complications of dairying. Having spent half a century in the Mohawk Valley, which probably has not its peer in the world as a dairy district, the result of our observations may possibly be of some benefit to our friends in California.

A person riding through this valley on the N. Y. central railroad, and observing the rich meadows and pastures, the splendid cattle, the fine residences and complete clusters of out buildings, with everything indicating a thorough system of dairying and consequent thrift, would very naturally be led into an error which travelers and tourists often commit; namely: crediting the locality with too much, and the people with too little.

The inhabitants of this glorious valley, and of the other districts in New York, who have made that State famous the world over for its dairies have had vastly more to contend with than at the present time obstruct the road to success for the dairymen of California. Fifteen years ago they were deeper in the rut than we are at the present time, and it is only by persistent trying that they have worked themselves out of it. At the beginning of the period mentioned above their dairy stock was really no better than the average California stock at the present time; though it must be confessed that it was never so carelessly managed as ours has been. Their farms have been drained and thoroughly worked; and while their meadows have been liberally manured and sown to the best grasses and clovers and scrupulously preserved from over cropping, their pastures have been seeded with the best material for grazing; have become permanent, and their condition as carefully attended to as that of the meadows. While these cardinal principles were being carried out the minutia of dairying was, of course, strictly attended to; and while the productive part of the business was being thus perfected a closer communion with other dairymen, and a more extended intercourse with the world of trade learned them how to dispose of their products to advantage. In the meantime dairying apparatus and other agricultural implements were improving in a manner that aided them materially in their progress.

We have thus given a condensed but faithful history of New York dairying through a brief but important period. Our object in doing so is to convince the people of Yreka and many other portions of California, not recognized as agricultural districts, that they can go and do likewise. And we would state here, that though the Mohawk valley has become more renowned in dairy statistics than any other locality—probably because it has been more traversed by tourists—still there are dairy districts in the northern portion of New York which correspond closely with some of the higher portions of our own State, and which go "neck and neck" with the Mohawk valley in the race for the honors and profits of dairying; Lewis county being scarcely second to Herkimer.

Those who are starting, and those who are preparing to extend dairy operations, should be careful how they undertake impossibilities. Our Yreka friends should, in the first place, follow the advice of the *Union*, and place their main reliance on alfalfa for feed. No one attaches more importance to the improvement of stock than ourselves; but at the same time we are aware of the danger of setting up this principle as an idol and sacrificing other points to it. Cull, unsparingly, the stock now on hand. We know from observations how such portions of the State are overrun with worthless stock. After the culling, use every means for improving the picked cattle. See that suitable and sufficient feed is provided in all seasons, and that they are well cared for in every respect.

Localities that are cold enough to favor dairying are too cold to allow the cattle to remain unhoused. Let none but reliable parties have the handling of your cows, especially in milking. See that the cows are *milked clean*, and at strictly regular periods. Cultivate desirable milking habits in your cows; among others that of milking close up to the period of calving. Do not let the calves run with the cows. This is one of the besetting sins of California dairying. Only allow the calves to be with the cows twice a day, morning and evening. This induces a flow of milk at milking times. Save but few calves, and those only of the best; bringing them up in the way they should go. Educate them for the dairy.

As things "come round right"—as they surely will if you follow these simple rules—then introduce choice stock. Do not spare money in this matter, if you have the money to spare, but don't run into debt to do it.

We have refrained from saying anything concerning "woman's mission" in the dairy, for the reason that we sincerely believe that any suggestions that we could offer would be entirely superfluous. From our own observations we are satisfied that women keep in advance of men in progressive dairying; and it may truly be said of many an important improvement in this department that "a woman was at the bottom of it." But dairying—except under the factory system—makes hard work for women. Let everything be done that can be done to save them hard work. The task of milking should at least be done by the men, *not by the boys*, and if possible that of churning, and handling the cheese, also.

Winter Irrigation and Drainage.

In our California winters we have to look two ways for danger. In some portions of the State we are fearful of too much rain. In such places let each farmer see if a portion of his land cannot be drained to advantage in winter. Cannot several landholders in a neighborhood work jointly to advantage in draining their lands? Is there not an opportunity to make ditches or embankments to carry the water shed around your lands? We are living in new fields here. We have not had a long line of ancestors to plan all the improvements possible on our lands, and hand them down to us carefully improved. Nature has done much for us in the lay of our lands, but cannot we often gain much by a little assistance in completing some of her simple plans?

Then in some sections we may not receive rain enough. Let us look about such lands, and see if a little labor will not enable us to economize water streams now running to waste, by bringing their contents onto the land at a proper period during the winter or spring. Perhaps reservoirs can be built, or a dam stretched across the lower end of your field to produce an overflow, which will secure you good crops in a dry season. There are more points to set farmers thinking; and don't stop thinking, but "write for the RURAL PRESS."

Shorthorn Statistics.

We have just received the following from Alex. Charles, which we publish for the benefit of our friends, the stock breeders:

"The National Association of Shorthorn Breeders, which recently met at Springfield, Illinois, having entrusted Alex. Charles, Cedar Rapids, Iowa, with the work of procuring complete statistics of all Short-horns now living in the United States and Canada, for publication in the report of their proceedings, we would urge upon every one of our readers who are breeding Short-horns, either upon a large or *small* scale, to send in prompt and careful returns; and those who have not received blanks for that purpose will be furnished them free of charge promptly, on application to Mr. Charles. Short-horn men will please give this their very earliest attention for by so doing the forthcoming report of the American Association of Breeders will be made the most valuable and interesting publication ever issued in this country."

TESTING SEEDS.—In a portion of Denmark, where one-fifth of the land is cultivated to clover, the vitality of the seed is tested by placing a quantity on a knife blade, and heating it over a lighted candle. The good seed will pop open and pop off, while the worthless remains and carbonizes on the blade. Mr. Christian Bagge, of Odense, reminds us of this fact in response to an inquiry for practical tests for seeds.

Agricultural Education.

The London *Farmer* gives a synopsis of an address by Hon. Harris Lewis, on the "value of roots for cattle food." According to the *Farmer*—English journals are always correct; not like us Yankees, you know—the address was delivered before the "Little Folks' Farmers' Club."

Now we happen to know that there is a "Little Falls Farmers' Club" in Herkimer county, N. Y., our name being on the books of the club as a member thereof; and we have met Mr. Lewis in the discussion of agricultural subjects at the rooms of this club. But we do not know the whereabouts of the "Little *Folks'* Farmers' Club." Probably our London contemporary had been meditating upon the marked attention which the subject of agricultural education is now receiving in this country; and supposing that "Little Folks" had been transformed into "Little Falls," by some careless Yankee compositor, considerately corrected the supposed typographical error.

It would be perfectly natural for those of our European friends who watch the tone of the American Press, to suppose that the saviours of the agricultural world, the leaders in educational reform, are going about, crying "suffer little children to come unto us," etc. Possibly they imagine our burly, good natured friend, Harris Lewis, instructing a Sunday-school class on "the value of roots for cattle food."

Speaking of the Little Falls Farmers' Club—not "Little Folks' Farmers' Club"—reminds us of an anecdote told us while attending one of its meetings.

A gentleman who was then very prominent as a writer on dairy matters, and is now still more prominent, was also a member of the club, and was the owner of a small dairy farm in Herkimer county. His writings abounded in directions for carrying on a model dairy, and one of his credulous converts, who believed that agricultural, like other teachers, practise what they preach, was smitten with a longing to behold a model dairy farm, and made a special journey to Herkimer county to behold the farm of this eminent agricultural reformer, which he fondly supposed would exhibit the workings of all the precepts and maxims taught by the great newspaper oracle.

He had reached a village in the vicinity and engaged a man to drive him out to the model dairy farm. The driver was finally enabled to point out the shrine to the devout pilgrim. But he was quite taken aback when he saw, on every hand, evidences of slovenly, slipshod, hand-to-mouth farming. Instead of getting down from his carriage he stood up in it and spoke as follows: "And is this the man who tells farmers that 'cleanliness is next to godliness;' who beseeches them to 'beautify their homes,' to 'look after their fences,' to 'provide comfortable, well ventilated quarters for stock,' with lots of other agricultural bosh? Turn back, driver. I am sick, and want to go home!"

He accordingly returned to his home in another State, with his faith in the divinity of agricultural oracles irreparably broken.

POTATO ROT.—Various and contradictory reports are afloat concerning the condition of the potato stock. The complaints at present come principally from dealers, and there is a suspicion afloat that they are making a bugbear of the subject in order to run up prices; but from what we can learn in the matter we are convinced that potatoes are seriously diseased, and that they are affected by the regular "potato rot." The trouble with the growing potato crop last summer was probably an incipient stage of the disease, and it may be several years before it entirely disappears. We are not inclined to yield without an effort to any difficulty; but it must be confessed that there is little encouragement for fighting the potato rot. There is little that can be done either as prevention or cure.

ON FILE.—"Wool Growing in Sonoma Co.," E. G.; "Letter from Waldo Hills," R. P. E.; "Letter from Auburn," R. G.; "Inquiries about Adobe Land," Constant Reader; "How to Plant Trees," W. W. B; "Home Hunting," G. K M.; "From Riverside," G. D C.; "Inquiries about Jute and Ramie," Wm F. B; "Farmers Don't," P. H. M.; "On the Cultivation of the Eucalyptus," W. P. G. "Constant Reader" will find a note addressed to him at San Luis Obispo.

THE RURAL AT LESS COST TO SUBSCRIBERS IN 1875.—After January 1, 1875, "by Act of Congress" we shall have to prepay the postage on all our papers. This will save each subscriber 20 cents per annum on the cost of his paper, and add, we anticipate, $1,000 or more, per annum, to our necessary expenses. We hope, however, that enough more subscribers will renew their patronage to compensate for this enormous tax on newspapers.

HOW IS JUTE DOING?—Will those of our friends who are engaged or interested in jute growing inform our readers through our columns of the condition and prospects of this industry.

Beautiful Horticultural Importations.

The horticultural missionaries, who manifest their zeal in the good cause, by entreating the heathens of California to plant trees, should be informed that tree-planting in this, as in most other parts of the United States, has been almost a mania for the last ten years. Consequently all such appeals are like sending flannel shirts to the babies of Africa.

No stimulus is needed in this matter, and if any advice is to be offered for directing this tree-planting movement, it must come from the highest and best informed sources to be of any avail; for it is evident that a high degree of taste and practical judgment are, and have been employed in this great work.

In California, especially, the progressiveness indicated in this direction is remarkable. From information derived from our exchanges, and from inquiries and facts communicated by correspondents, we are impressed with the conviction, that not only are trees being planted in abundance, but that there is a sufficiency of taste and judgment employed in the matter. The State University is keeping pace with the popular taste in this direction, and is doing much to add to the wealth of California in its timber, fruit and ornamental possessions, and capitalists are manifesting a commendable interest in this subject, and are spending their money in thus improving the property owned by them; while people of more limited means are steadily improving and beautifying their possessions in cities and villages as well as in the country.

The recent importations referred to are twenty-four varieties of maple from Japan, which we had the satisfaction of examining at the establishment of R. J. Trumbull in this city. The trees were accompanied with beautifully colored plates descriptive of the foliage of all the varieties. These plates were executed by the Japanese, the coloring as well as other parts being done by hand. A leaf of every one of the 24 varieties is given, its form and color being represented in all their minutia. The varieties of foliage displayed here is remarkable, many of the leaves being extremely unique in form and color.

The importation consists of six trees of each variety; all grafts and all in excellent condition for planting. They were sent here to a gentleman who recently visited Japan, and observing these trees in full foliage there, resolved to try them in California. A large portion of them were engaged before the box was open, and on learning the names of the parties who obtained them, we were satisfied that they had fallen into good hands. The growth of this interesting family of maples will be watched with a good deal of interest by horticulturists generally, as well as by those who were fortunate enough to procure them.

Names of Plants—English vs. Latin.—My friend asks, "What is this pretty flower?" "*Galasine azurea.*" "What a long name!" "I cannot shorten it." "But why have a Latin name? Better call it Blue Smiler in plain English." "Then you like such names as Shamrock, Blue-bells, Eglantine and Culowkeys?" "Certainly, every one can understand them." "You can recognize the plants?" "Easily." "Well, I can show you in point endless discussions as to what they are. On the other hand, I defy you to produce two persons who disagree as to what is meant by *Eucharis Amazonica*. Paradoxical as it may seem, Latin is, in such matters, more intelligible even to an Englishman than English."—*Cor. Journal of Horticulture.*

Profitable Farming.—One year ago a gentleman bought thirty acres of land in the Nietos District, Los Angeles County, for which he paid $45 per acre, making the total cost $1,350. He planted his land in corn, and this Fall harvested 3,150 bushels, clearing for his crop above all expenses, about $900.

Cotton seed is becoming one of the principal exports of Egypt. In 1860, 1,090 cwts only were exported from that country, whilst last year 3,490,080 cwts were exported, the value being £770,000. England took nearly the whole of this quantity.

The mushroom crop in Anglesey was so heavy this season that for three days the London and Northwestern railway company were obliged to run special trains for the conveyance of the crop to the English market.

Not far from San Bernardino there is a field of corn where the stalks are twelve feet high, and the ears cannot be reached by a person on horseback.

Land Sale.—Two hundred and one acres and two-thirds of an acre of the Visitacion ranch have been sold for $120,000.

Hogs from Colusa.—J. H. Bailey has shipped 6,000 head of hogs to San Francisco this season from Colusa county.

Thirty-six vessels have loaded wheat at South Vallejo this season.

Mules are selling at $9 a piece at Fort Briso.

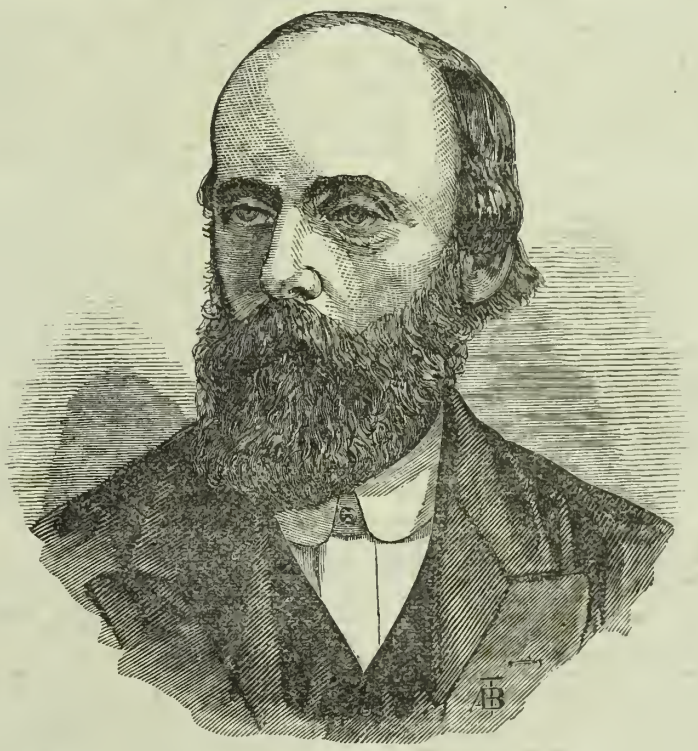
Thomas A. Garey.

We give in the Press of to-day a likeness of one of the prominent Patrons of Husbandry in Southern California, Thomas A. Garey. The engraving and following sketch are taken from the *Mutual Aid*, published in Los Angeles.

Mr. Garey was born in Cincinnati, Ohio, July 7, 1830. At an early age his parents moved to Hagerstown, Maryland, where he was raised and educated at Hagerstown Academy. In the spring of 1850, Mr. Garey, then twenty years of age, joined a company of emigrants bound for California. The company left Independence, Missouri, in the spring, and arrived at Albuquerque, New Mexico, in October, where the marriage ceremony was performed for Thomas A. Garey and Miss Louisa J. Smith, both members of the company. They stopped at Socoro, New Mexico, and worked one year, and then proceeded to Tubac, Sonora, where Mr. Garey spent a few months at agricultural pursuits. After suffering many privations and burying their first-born at Tubac, they again pursued their journey and arrived at Fort Yuma, on the Colorado river, in August, 1852. In October, 1852, they came to Los Angeles county, and settled in El Monte. With the exception of one year, which was spent in San Bernardino county, Mr. Garey has been a continued and prominent citizen of Los Angeles county ever since.

In 1865 Mr. Garey purchased land on San Pedro street, where he now lives, and commenced the nursery business. Possessing an enterprising spirit, he worked for success, and now stands the most prominent semi-tropical nurseryman on the Pacific coast. When the farmer's movement started on this coast, Mr. Garey was one of the first in Southern California to enlist in the work. He was a charter member of Los Angeles Grange, organized in August, 1873. He was at that time chosen Master of the Grange, to which position he has been twice re-elected. He was also appointed District Deputy for Los Angeles and San Bernardino counties in 1873, and has lately been re-commissioned as Deputy for Los Angeles county. Twice has he represented his Grange at the sessions of the State Grange, and in October, 1873, he was elected as a member of the State Grange Executive Committee, which position he hold one year. For over a year he has held the position of Master of the District Council, which is now composed of twenty Granges in Los Angeles and San Bernardino counties.

Mr. Garey was one of the incorporators of the Southern California Mutual Aid Association, and was vice-President of the Association during the fiscal year 1873-4. He is still a member of its Board of Directors. He was also one of the incorporators of the Grange Co-operative company; is a member of its Board of Directors, and vice-President of the company.



THOS. A. GAREY.

Not Credited.—The article on page three of last week's Press, entitled "Blue Gum and its Culture," should have been credited to Trumbull's *Guide to the Vegetable and Flower Garden.*

Wheat in Butte County.—W. Henry Silsby, of Butte county, has finished sowing 4,500 acres of wheat, 3,000 of which are summer fallow. It is all looking fine where up.

Good Wool Yield.—G. W. Berth, of Napa, has sheared for the second time his pet Spanish merino ewe, and gets therefrom the large fleece of 33 pounds.

Tobacco.—The Consolidated Tobacco Company now has a force at work securing the ninth cutting of Tobacco on the San Felipe ranch.

California Not Considered.

The second annual report of the New York Produce Exchange is criticised rather sharply by the *Railroad Gazette*, on account of lack of uniformity in terms and estimates used in constructing its tables. The *Gazette* expresses its dissatisfaction as follows: "For instance, there are statistics of grain for different places and countries, which give quantities in one table in bushels, in others in English "quarters" (480 pounds) in others in English hundreds (112 pounds), in others still in Russian "tschetwerts" (about six bushels). We should doubtless have the California wheat trade given in centals of 100 lbs., but for the astounding fact that no account whatever is given of this traffic, though California already exports nearly as much as Russia; (to which several pages of statistics are devoted), and is very likely much of the time to export more than all the rest of the United States, and is really the most formidable competitor of the country which exports through the Atlantic ports, with the single exception of Russia and is sure to remain so, as nearly its whole product must be exported for want of home market."

The fact *is* rather "astonishing;" and to attempt to account for it on the score of imputed jealousy would simply prove that the imputation itself was founded on jealousy. It is simply another instance of the fallibility of figures. The ordinary statistician, like a hedgehog, displays his bristling figures, evidently thinking himself invulnerable; which is really the case in too many instances; the lack of interest which characterizes a large portion of the subjects which bring forth these bristling tables, rendering them entirely safe from critical attacks. The fact that this blunder on the part of the compilers of the report referred to is properly criticised by such authority as the *Railroad Gazette*, should thoroughly reconcile us to the seeming slight in failing to notice the wheat exports of California. We shall probably continue to grow and export wheat even though no estimate of our operation should ever be admitted within the tables of the statisticians.

Curious Trees.—Just beyond the Darbonne or Calcasieu river, in the parish of Calcasieu, is a white-oak tree, about two and a half feet in diameter. There are no branches for 25 or 30 feet up. About 12 or 15 feet up, a pine limb or top part of a pine tree, six or eight inches in diameter, and 12 or 16 feet long, runs at right angles through the center of the tree, sticking out about the same distance on either side. It tapers a little to one end, where there are two or three knots, giving it the appearance of a tree top. The oak, where it passes through, is grown closely around it. The pine is rich in turpentine and will not decay. There is no fork or hollow in the oak; but it has the appearance as if a hole had been made and the pine stuck through, after which the oak closed on it by growth. The question is, how did the pine get through the oak, or the oak round the pine? In Mallet woods there is another white oak, of considerable size, that divides into two prongs about one a half feet from the ground, which after running up like a pair of bowlegs, about fifteen feet, unite in one round compact stem. The prongs are about one and a half feet in diameter; and where they unite above, the tree is larger than either of them, but smaller than both together. A man can walk between the two prongs, and the tree stands on a land boundary line. Forked trees are very common; but the question here is, how did the two prongs unite so perfectly into one stem above?—*Opelousas, La., Journal.*

Horticulture.

Seasonable Hints.---No 3.

Nobody who possesses a home is satisfied without a few climbers, to twine around the pillars of a verandah or porch, to cover trellises and conceal unsightly corners and offices. We are often asked what are the best, and we always answer "roses." Honeysuckles and jessamines, the old familiar forms which, intrinsically beautiful, are so precious from association. To have a posy for every day in the year, one need only to make a judicious selection of climbers. This is a good time to plant them. Let us select with a view to the closeness and cleanness of verdure, as well as flowers. First of all, therefore, we must choose the Lady Banks and Cherokee rose. Suppose we have a bay window of the usual size. We will plant a Lamarque, and on either side a white and buff Banksia, putting the buff on the side nearest the door or corner of the house. As near the latter as we can have it and cultivate well, we will plant a Wistena. On another side of the door, or near the next window, we will plant Plumbago Capensis, and with it the Trapoleum, which is annual in habit, and requires frequent renewals; or the Persian Jessamine. We will keep our honeysuckles for the rear of the house, and on the lattices we will have a profusion of them, the evergreen and ever-flowing, the blessed old scarlet and orange trumpets, though its foliage is so homely—and a great bush of *Clianthurs* or lobster's claw. With our honeysuckle, sweet clematis, some perennial peas, *Solanum jasminordes*, and the rich foliaged Japan honeysuckle, we can cover up a multitude of architectural sins. Our investment made, in about two years we may look out for a dividend. Lamarque, the banksias and wisteria have kept an even pace roof ward, and hang around our cornices in a soft lovingness which expresses all that the precious word home should mean.

The large, full Lamarque roses are cups of flower cream, the little daisy-like banksias foam over like froth. The purple clusters of lilac bloom are flower grapes, made to feed the finest sense. The pale buff of the colored banksia gives relief to the purple lines, and one sees how great an impertinence the presence of any other plant would be in this company.

So with the blending of tones with plumbago and trapoleum. Keep other things at a distance. The fringed, delicate growth of trapoleum makes a setting for the plumbago.

Clematis requires delicate treatment. The new, large flowered kinds require protection, and should never be exposed to a "norther." The heavy ones ought to trail over a screen of Cherokee rose.

Any one who likes to play at geometric gardening can find amusement in planting banksia roses in the form of a star, putting a strong root at the points, and a very rich red climbing rose in the center. When they begin to run, fasten them to stakes, and keep them quite near the ground, preserving the form intended by clipping unmanagable shoots. In the season of bloom you will get a mass of flowers which seem like a heap of snow with a live coal in its heart. Cleanthus should have a pillar or a whole window to itself. One bignonia or trumpet creeper should be in every collection, though it is rather cool for it around the bay. It is a rampant grower and full bloomer in the winter. J. C. Carr.

Thos. A. Garey's Nurseries, at Los Angeles, must form one of the interesting business features of Southern California. The *Mutual Aid* alludes to Mr. Garey as follows: As a semi-tropical nurseryman, Mr. Garey occupies the most prominent position of any man on the Pacific coast. During the past nine years he has built up a business that now reaches gross sales of $75,000 per annum. During the past two years his sales have been so large that he has been compelled to purchase trees to supply his trade, as the quantities raised by him were entirely inadequate to the demand. Especially was this the case as regards the different varieties of Northern fruits. Finding that the semi-tropical fruit tree trade was growing beyond his reach, Mr. Garey and other nurserymen, in June, 1873, incorporated the "Co-operative Nursery and Fruit Company of Los Angeles County," with a capital stock of 250,000. This stock was all taken and at a premium before a dollar had been paid in. The company has bought 283 acres of land within and adjoining the city limits, 100 acres of which will be planted out to standard four-year-old orange trees, as an orchard, in the spring of 1875, and the same ground will also be covered with nursery between the orchard trees, the plants for which (750,000) are now growing in beds, and average one foot in hight. Mr. Garey is a large stockholder in this company, and is also a director and the president of the company. In January, 1877, he will turn over his entire semi-tropical nursery business to the company and take charge of its affairs.

The Northern Spy Apple, S. O. Knapp, of Jackson, Mich., is reported as saying, is constantly gaining in favor in Michigan, and he thinks it will ultimately become the great market apple of the State. Prof. Beal, of Lansing, concurred in this opinion.

Useful Information.

How a Feather Grows.—In the skin of a bird where a new feather is to grow, there is a little pit, and at the bottom of this an elevation or pyramid; extending up one side of this pyramid is a groove or furrow, deepest at the base, and gradually growing shallower until it disappears, near the top; from this furrow a great many smaller grooves extend around to the other side of the pyramid, and these also decrease in depth and at last disappear just as they are about to meet on the side opposite the large furrow. The whole pyramid is covered with skin, and the surface is made on the same scales, or flattened cells that are made over the rest of the surface of the body, but, instead of falling off when they are pushed out by the new ones below them, they become united or welded to each other, so as to form a horn coat over the surface of the pyramid, with ridges on its lower or inner surface corresponding to the grooves on the pyramid; and as new cells grow at the base, this coat or cast of the surface is pushed upward till it breaks at its thinnest part which, is of course, the smooth part without ridges opposite the large furrow; and then as it is pushed onward and flattened, it assumes the form of a feather, the ridge formed in the main furrow being the shaft, while the casts of the side grooves form the separate barbs of the vane. When all of the vane has been formed and pushed forward, the pyramid looses its grooves and becomes smooth, and the wall now formed on its surface, being of the same thickness in all parts, does not break, but remains tubular, and forms the quill, which is attached to what is left of the pyramid. A finger-nail or a hair is formed from the same kind of scales in the same way, the process differing only in those features which give to each organ its special character. Feathers, scales, hair, claws, all are made alike from the dead, flattened cells crowded to the surface by the process of growth.

Durable Soap Bubbles.—To obtain soap bubbles that will show the changing colors of the rainbow the directions are as follows: Take half a pint of water that has been boiled and become cold, and put into it a quarter of an ounce of Castile soap, cut up fine. Put this in a pint bottle, and set it in hot water in a saucepan, on the fire; there let it remain an hour or so, now and then give it a good shaking till the soap is disolved. Let the fluid stand quiet for the impurities and coloring matter of the soap to settle; then pour off the fluid and add to it three or four ounces of glycerine, and your soap-bubble solution is ready. In an ordinary way you may blow the bubbles easy with a tobbaco pipe, but if you wish to attain scientific perfection, you had better employ a glass pipe. By adding a larger quantity of glycerine you may make these bubbles so strong that you can play battledore with them.

Making Animal Hair.—A method of treating animal hair for the use of the hatter, which has been kept secret for a long time, is now found to consist in the application of a solution of the nitrate of mercury, for the purpose of preventing the putrefaction of the fibre. This substance, however, is very deleterious, it is said, both to the health of the workmen and to the implements of the trade, and recently carbolic acid or creosote has been used to great advantage as a substitute. This has the property not only of preserving the animal matter, but of causing the hairs to contract, thus rendering them more apt to felt. The subsequent treatment of the fibre is according to the process usually pursued in this industry, and the carbolic acid may be added to the oleaginous or astringent elements used by hat manufacturers.

Casting Ingots.—Mr. Leffler, of Sheffield, iron merchant, has patented some improvements in moulding for casting ingots. The novelty of these improvements consists in forming a central mould, and in surrounding it with moulds in such a manner that each side of the central mould shall form a side or end of one or more of the surrounding moulds by means of hollow iron pieces or iron plate linings, fitted closely into holes or appertures made in the lower parts of the sides of the central mould and covering the surrounding moulds with a stopper, having a hole for the escape of air and gasses, and in forming the moulds by preference open at the bottom, and placing them, during the process of casting, upon a bottom plate.

Your Own Mason.—Small holes in white walls can be easily repaired without sending for the mason. Equal parts of plaster of Paris and white sand—such as is used in most families for scouring purposes—mixed with water to a paste applied immediately, and smoothed with a knife or a flat piece of wood, will make the broken place as good as new. The mixture hardens very quickly, so it is best to prepare but a small quantity at a time.

What Coal Loses by Being Made Into Coke.—From an exchange we learn that Connelsville coal, which may be taken as the standard of coking coals, weighs 80 pounds to the bushel. When properly coked, 100 bushels of coal yield 125 bushels of coke, weighing 40 pounds to the bushel; that is, 8,000 pounds of coal produce 5,000 pounds of coke, or, in other words, the coal gains 25 per cent. in bulk and loses 35½ per cent. in weight.

It is said that a rifle bullet cannot penetrate thirty sheets of paper.

Economic Consumption of Smoke.—The operation, at Glasgow, of a patent self-stoking smokeless furnace, is thus spoken of in the Glasgow *Herald:* It meets the case more thoroughly than any invention of a similar kind that has hitherto come under notice, and is as simple in construction as it is efficient in operation. The coal is placed in a hopper, over the front part of the furnace, into which it drops in small quantities through a couple of apertures. It is not necessary to open the front door of the furnace, except to see how the fire is getting on, for by a simple mechanical readjustment, the man in charge of the furnace may regulate the quantity almost to an ounce. As it is added to from above, the coal sinks down and slides slowly until it reaches the bars from the bottom of the furnace. These bars are acted upon by plungers, which carry them forward together, with their layer of coal on top, and then, an eccentric being applied, every third bar in the series is brought back to receive a fresh supply. In this systematic and continuous way the furnace is fed with coal, which passes right through in slow and easy stages, the same quantity of fuel being at all times in exactly the same state. Combustion is, therefore, perfect.

How to Sharpen Steel Drills.—It is not generally known that steel can be made so hard that it will pierce any known substance but a diamond. Many jewelers and lapidaries have great trouble in getting the points of their drills hard enough to pierce an amethyst. For the benefit of miners and others using drills that require a hard point we recommend the following manner of manipulation. The drills should be held, if small, by hot pinchers or tongs, while tempering. First heat the tool to a white heat and then press it into a stick of sealing wax, leave it but a second there, and then stick it into the wax in another place. This operation is rapidly repeated until the graver is too cool to enter the wax. In turning or drilling the tool is moistened with oil of turpentine.

A Long Continued Fire.—The longest blast of a charcoal furnace yet announced is that of the Shelby Iron company's furnace, at Shelby, Alabama. It has now been working continuously for three years and seven months, and has made an average of 100 tons per week since it blew in. The greater part of the production has been an excellent iron for car wheel purposes, and its quality ranks it among our very best American irons. The ores used are limonites, yielding, when roasted, about 53 to 54 per cent. in the furnace. The consumption of charcoal has been 130 bushels (of 18½ lb.) per ton of pig iron produce. The lining of the furnace is of fire brick, made at the works from clay found in the neighborhood.

Hardening Steel.—Instead of hardening steel by plunging it into cold water and afterward lowering the temper, which is thus made too high, Captain Carson recommends the use of water which is warm enough to produce just the desired hardness. The temperature of the water will depend not only on the temper desired but also on the size of the article, and is easily ascertained by trial. For the springs in the needle gun he used water about 130 degrees F.; for some kinds of steel boiling water is preferable. The effect of cooling in hot water on soft steel containing 0.2 0.4 per cent. carbon is to increase its tenacity and elasticity without much change of hardness.

Formation of Flints.—The following, extracted from a paper read before the Geologists' Association in England, by Mr. Hawkins Johnson, F. G. S., gives in brief the most advanced theories with reference to these formations: "The nodules are found all to agree in possessing a silicified organic structure, which may be described as a network of fibres, or a mass permeated in every direction by anastomozing canals. This structure was subsequently filled in with other material, such as carbonate of lime, silica, bisulphide of iron, phosphate of lime, carbonate of iron, etc.; the particular substance thus filled in depending upon the relative abundance of the substance dissolved in the interstitial water of the surrounding matrix. The singular groups of concentric, silicious circular bands seen upon many fossils, and known as orbicular silics, or Beckite markings, are also explained. The fossils on which they occur were imbedded in a matrix more porous than themselves, and of irregular constitution, so that the evaporation, to which the consolidation of the dissolved silica in their pores was mainly due, occurred at a number of points on the surface of the fossils, at which points a deposit of silicate took place, forming the central tubercles. The cessation of evaporation was followed by a fresh saturation with the solution, to be again evaporated as before. But as the evaporating points were now plugged up by the previous deposits, the silica last consolidated was deposited around their margins, and upon them internally, appearing outwardly as a ring round the tubercle."

A New Fossil Plant.—Prof. Schimper has discovered a fossil plant in protogine, a rock hitherto considered as of igneous origin, and found in the form of erratic blocks in the sides of Mont Blanc. The plant is of aquatic nature, and hence the aqueous nature of the rock is rendered probable.

The New York *Times* cites the fact that 7,000 mechanics and 2,000 laborers have abandoned the Trades Unions during the last year, as evidence of the declining power of such organizations.

The Sum of Tyndall's Life Theory.

The London *Globe* says: "Professor Tyndall's laborious address to the British Association may be readily summed up by the simple restatement of a very old argument. An egg contains all the material necessary to form a chick. It holds also, for a time at least, the force requisite to construct the animal out of its component elements. The only thing needed is to set the formative process in action by the application of another form of force or motion called heat. But this last must be supplied from without. The sum of Professor Tyndall's researches is precisely analogous. He finds in matter 'the promise and potency of every form and quality of life,' just as the naturalist and the organic chemist find the organic materials of a chick, and the promise and potency to form one, within the egg-shell. But neither the philosopher nor the experimentalist can go one step beyond the facts. They are wholly unable to explain the something from without, in whose absence neither an egg ful nor a world of life can be called into palpable existence. This is the point at which philosophy again arrives—the old point at which it has been arriving by various paths ever since the first effort to penetrate an inscrutable mystery. The Egyptians symbolized the difficulty, and their inability to surmount it, by offering the mysterious egg reverently to their gods. They laid the unsolved problem of the finite at the feet of the Infinite. Professor Tyndall and the British Association might learn wisdom, without humiliation, from the ancient idolaters, and emulate their not ignoble submission."

Scientific Ballooning—The Blackness of the Firmament.—The balloon ascent of MM. Croce Spinelli and Sivel has yielded many facts of interest. Among these we may mention the following: The elevation reached was 20,700 feet. They found that the temperature steadily diminished, except when passing through clouds, and finally reached 22° C. At 11,800 feet, crystals of ice were visible floating between them and glistening in the sunshine. The lines in the solar spectrum, indicating the presence of vapor of water, disappeared when they reached the greatest altitude, thus proving that this vapor belongs to our atmosphere, and not to the sun. At 13,100 feet, sensations of discomfort were removed by the respiration of a mixture of 40 parts of oxygen and 60 of nitrogen. At 15,700 feet the oxygen was increased 75 per cent., and in each instance the physical and mental weakness was restored, and the sky, which, previously to the inhalation, was of a dark hue, again became blue. M. Croce Spinelli has thus removed an old error, and has demonstrated that the blackness of the firmament observed at great hights is due solely to the effects of fatigue on the nervous system.

Sudden Stopping of Railroad Trains.—It is claimed that the Westinghouse brake is capable of bringing any ordinary train, moving at from 30 to 35 miles per hour, to a dead halt within the space of 30 feet or in five or six seconds of time; in fact that it is capable of doing anything that is theoretically attainable. The only question is that of inconvenience to passengers from too sudden a stop. It is also asserted that the effects of sudden stops are too much exaggerated, and in proof this is stated that if the feet be placed against the seat in front, with the face to the engine, the train when going 30 miles an hour may be stopped in 30 feet without throwing a greater pressure on our feet than they sustain in walking. Hence, as we may safely trust our knees and boots under double that load, the train might be stopped in 10 or 12 feet, without serious inconvenience. The question then of bringing a train to rest in 10, rather than 20 seconds is perfectly immaterial so far as concerns passengers' comfort, while it may be a vital one so far as their safety is involved.

Measurement of the Chemical Action of Solar Light.—Dr. T. L. Phipson, F. C. S., in a note to the *Chemical News*, says: Many years ago I made some experiments on this subject in Paris, and described a method which I believe capable of giving more accurate results than any hitherto obtained. Having discovered that a colorless solution of molybdate of ammonia in sulphuric acid became greenish blue when exposed to the sun, and colorless again during the night, and that the amount of chemical action exerted to produce this tint may be accurately determined by a dilute solution of permanganate of potash, it suffices to operate always upon the same quantity of substance, and to expose it to the light for the same period of time, in order to possess a perfectly accurate process by means of which the chemical intensity of solar light may some day be solved in a completely satisfactory manner.

The American Electrical Society.—An association to be known under the above name, was recently organized at Chicago, Illinois. The objects are an interchange of knowledge, professional improvement of members, the advancement of electrical and telegraphic science, and the establishment of a central point of reference. General Anson Stager, of Chicago, was elected president, and Mr. C. H. Haskins, of Milwaukee, vice president.

It is said that experiments recently made indicate that wagons are most easily drawn, on all kinds of roads, when the fore and hind wheels are of the same size, and when the pole is lower than the axle.

The Sacramento Beet Sugar Company.

The Board of Directors are H. G. Smith, Philip Scheld, Samuel Lavenson, W. E. Brown, and Julius Wetzlar. The officers are: President and Treasurer, Julius Wetzlar; Secretary, A. J. Wetzlar. The location of the works is two miles from Sacramento, at the intersection of J street and the levee. The land owned by the company comprises about 700 acres, added to which is 600 acres of leased land, making a total of land operated by the company 1,300 acres. The capacity of the works is 80 ton per day, (24 hours); the yield of Beets, per acre, average 12 tons; the varieties of Beets grown are the White, Sicilian and Imperial. The percentage of saccharine matter averages 12¼ per cent, and of first quality Sugar, 5¾ per cent. The capital invested is $300,000. The cost of machinery was $140,000, that of buildings $40,000, and that of teams, tools, etc., $20,000, making a total of $200,000. The buildings consist of a frame factory 100 by 45 feet; a frame Sugar storehouse 30 by 40 feet; a frame Superintendent's dwelling 20 by 35 feet, 2 stories; a frame boading house 35 by 45 feet; eight frame dwellings 24 by 30 feet; one frame Chinese quarters 50 by 30 feet; a blacksmith shop 30 by 20 feet; three frame granaries, the first 85 by 30 feet, the second 20 by 40 feet, and the third 10 by 15 feet; three large frame cattle stables 100 by 40 feet each; one large frame tool and implement storehouse-shed 20 by 30 feet; and four large frame stables, the first 60 by 30, second 30 by 40, third 35 by 20, and the fourth 60 by 25 feet. They raised their own seed this year, at a saving of $4,500. They formerly imported 10,000 pounds. The cash business for 1873 equalled $190,000, and that for 1874, $300,000. Of the land operated, 385 acres are located in Davisville, Yolo County, Cal. The number of white men employed is 150, and that of Chinese, 500. The company owns its own barrel machinery. The works were in operation in 1873 for five months, and in 1874 for nine months. The machinery consists of five steam engines: No. 1—30-horsepower, square beam, and drives eight pumps; water, vacuum and feed pumps for boilers, gas pumps for carbonic acid gas, and hot water pumps. No. 2—15-horsepower, drives Beet washing machine, elevators and Beet cutters. No. 3—8-horsepower, drives the centrifugal machines, Sugar grinders and the Sugar packing machines. No. 4—5-horsepower, and works the washing machines, elevators and drawing machines. The water is obtained from wells, and the fuel used is wood, of which from 11 to 12 cords every 24 hours are consumed. So carefully has these works been managed, that but one small accident has occurred in two years. These engine works require all the steam that can be generated in three tubular boilers, 48 feet in diameter. A diffusion battery is used to extract juice in this establishment. The process of manufacture is as follows: The Beets are taken out of the ground by a two-tined fork, the heads or green part of the Beet is then chopped off with a large cleaver knife, the Beets are loaded on a wagon, transferred to the cars, hauled to the Beet factory storehouse, thrown into a washer, and at the same time assorted (that is, bad or damaged Beets thrown out), passed from there by an an endless belt with cups to the chopper, chopped into ribbon strips and dumped into the batteries, where steam is inserted; the juice is then forced by water and steam into the bottom of the battery and carried through pipes into a steam drum, forced thence through lime and bone coal into the filterers, returned from there purified into the copper boiler, boiled down to a crystalization point, drawn out from there into tanks, allowed to cool and stand, and then introduced into the centrifugals, from which they come out as pure Sugar, leaving a refuse which is again boiled down and worked over. The Sugar is then taken to the crusher room, either ground or crushed, boxed or barrelled; is then loaded on cars and sent to a ready market.—*Journal of Commerce.*

Accidental Discoveries in Science.—Accident has had much to do with chemical discoveries, more perhaps in former times than now, when researches are undertaken with some definite end in view; but how many of the discoveries which have led to the most brilliant and important results, may not be called accidental? We may question if Davy expected to find potassium when acting on potassa with a voltaic battery, although, having already observed the decomposition of other metallic oxides he may have had an inkling of the fact. Bunsen did not expect to find two new metals when examining the residue from the Durckheim waters. Crooks, when looking for selenium, accidentally found thallium. Perkins, when he found that aniline, when acted on by chromic acid, gave a fine color, could scarcely have expected the enormous manufacture of those analogous dyes which is carried on at the present day.

Difference of Temperatures of City and Country.—The temperature in the city is higher than in the country, where in general it is cooler, especially during clear nights, when the difference may amount to 13° Fahr. Then the extreme temperature for heat is higher in the city, while that for cold is lower in the country; but in the average differences between heat and cold the country surpasses the city, which is more moderate.

Planetary Distances.—An Armstrong gun throws shot at the rate of 1100 yards a second, at its initial discharge. If it should continue on at this rate it would take it 13 years to reach the sun. The rate of motion at which the earth travels in space would take our planet to the sun in 125 days.

English Soil.

It is a matter of general knowledge that tile underdraining is much more popular in England than with us. It is not only in the matter of expense, but in the absolute benefits derived from the practice that a great difference exists. The comparative cost of nnderdraining here is much greater in comparison with the cost of the land than in England, and this chiefly because tbe price of labor and tile is so much against us. But even with these, the actual results of underdraining are not generally as they are represented to be in the old world. There is no difference certainly in a wet piece of ground. Where the water lies in winter, aud has to trust to evaporation to dry away, or in a marsh wet at all times, here as there underdraining pays. But tbey have found, at least so we are told, that it pays to underdrain any and all their lands, and it certainly does not do so here. And this paying is not meant wholly in a money sense, but that the same good results represented to follow the underdraiuing of comparatively dry ground in England, has not been seen here. The question arises whether there is not something wholly different in the mechanical structure of English soil. In recent reports from that country we note that frequent reference is made to the summer-cracking of land, and spoken of as if it was a general thing after every dry time. Of course every kind of soil that has clay in it cracks to some extent, but imagine cracks so that "everywhere yonng birds and animals fall into them and are destroyed!" Some are so large, says an English paper, that huge walking-canes have been lost down them! We do not think anywhere in America soil behaves like this, even in the dryest times, and it would seem to indicate that there may be something in the nature of the English soil which accounts for the difference in under-draining resnlts.—*Germantown Telegraph.*

Immense Coinage.—The coining operations at the new mint in this city are going on with great rapidity. On Tuesday of last week, $800,000 in double eagles were turned out as a single day's work; $1,600,000 were turned out during Thursday, Friday and Saturday. Friday's work was probably the largest day's work ever done at any mint in tbe world. The San Franoisco mint is a great institution.

A Rattlesnake with 28 Rattles.—Mr. J. H. Lynch, of the American Exchange saloon, in this city, has the rattles of a snake killed in Shasta county about two years ago, which shows twenty-eight rattles and a button. This snake was 31 years old, and seven and a half feet long. A rattlesnake was killed near Marysville, a short time since, with twenty-seven rattles.

Two queer fishes, resembling a flounder, but without fins, save two appendages resembling hands, as a caudal appendage, were picked up a few days since on the ocean beach near Mendocino City. It was three feet long, two inches wide. had no scales, and the mouth was merely a gristly tube some two inches in length, bent like a parrot's beak.

Danger in Champagne.—A girl in South Carolina, while playing with an empty champagne bottle, fell down, broke the bottle, and cut her throat with the glass. As a gun is dangerous without lock, stock or barrel, so is a champagne bottle dangerous, whether it is loaded or not.

Railway Cars for Australia.—They are building cars for the Australian market at Troy, N. Y. Propositions have also been received for engines and railroad bridges. How is it that our Sau Francisco mechanics allow such business to step by them to the other side of the continent?

An Immense Hammer.—What is said to be the largest trip-hammer in the United States has just been completed at Nashua, N. H., at an expense of $75,000. The weight of iron in this mammoth machine is about two hundred tons. The ram weighs twelve tons; its striking force is about one hundred tons.

"You must have lived here a long time," said a traveling Euglishman to an Oregon pioneer. "Yes, sir; I have. Do you see that mountain? Well, when I came here that mountain was a hole in the ground." The Englishman opened his half-shut eyes.

A traveler stopping over night with a Texan farmer, whose estate was miles upon miles in extent, said to him: "You must have begun life early to accnmulate such an estate as this." "Yes," said the farmer, "I began life when I was a mere baby."

The Tallest Steeple.—Cincinnati is striking out for tbe tallest and finest steeple on this continent. It is to ornament a Catholic chnrch in that city; is to cost, aside from the church edifice, $50,000, and will be 320 feet high.

Narrow Gauge.—Utah has five narrow-gauge railroads, four of which are in operation, and the fifth will be open on the first of November. Salt Lake City is now the greatest narrow-gauge railroad center in the world.

In Memoriam.—A marble slab has been placed upon the house in which Agassiz was born, at Motier, Switzerland, with this inscription: "J. Louis Agassiz, the celebrated naturalist, was born in this house May 28, 1807."

Big Hotel.—One of our German contemporaries has been poking fun at the big Palace hotel enterprise in this city. Perhaps he thinks its mammoth proportions have been overstated. This is substantially the way a German paper puts it: The latest American progress in hotel building is in the shape of a projected mammoth structure at San Francisco with a frontage of 3 miles, a depth of 6, and a hight of 7,000 feet, or 70 stories. The hotel will have no stairs or elevators, balloons will be always in readiness to take guests and visitors to the upper stories. Communication between the office and rooms will be maintained by telegraph, so simple that guests will readily understand its operation at sight. A 24-pounder will be fired to call the guests to meals. A railway will be maintained on each floor, as well as a special telegraph with offices for the use of occupants in communication with each other. The billiard room will contain 100 American, 10 French aud 1 English tables, in the center of which will be placed a spittoon 100 feet in circumference. The roof will be utilized as a public garden and a mile race-track. The hotel is to cost, complete, $80,000,000.

Long Training.—George Hood has in Santa Rosa, two Catawba grape vines seven years old from a graft on a Mission grape stalk; they have been trained upon a trellis work and cover a space of 1,400 square feet. From these vines in the yard of an ordiuary town lot, Mr. Hood took a ton of grapes. He supplied his family, gave away a great quantity and made 100 gallons of wine.

Artesian Well in San Joaquin Valley.—The Kentucky artesian well, fifteen miles south of Merced City, in the San Joaquin valley, throws up a volume of water that forms a creek, which runs across the plains ten miles to the San Joaquin river. In summer this stream affords water to five thousand head of cattle, and nearly an equal number of sbeep. Its cost was only $1,000.

Indiginous Tobacco.—The tobacco plant is said to grow wild in some parts of Nevada, the stalks attaining a hight of three or four feet. The Winnemucca *Silver State* thinks the spontaneous growth of tobacco in that vicinity indicates that its cultivation would be practicable there. Some enterprising farmer there should try the experiment. Tobacco is a profitable crop wherever it can be successfully raised.

Duties on Wines.—A large delegation of California wine dealers, whose offices are in New York, is in Washington, to urge the passage of a tariff of 40 cents per gallon on the importation of still wines in casks, and $1.50 on wiues in cases.

Apples East of the Sierras.—Apples have been raised at Honey Lake of good size and well flavored, notwithstanding the assertion that fine fruit cannot be brought to maturity on the east side of the Sierra Nevada.

General Bidwell has a force at work opening new land on his extensive ranch. He is working a day force of 120 men and a night force of 60. The object is to have the land cleared in time to put in a crop the present season.

Farmers in the valley, says the Auburn *Herald*, though checked in their headlong haste to get in big crops by the heavy rains last week, are now, in most parts, hard at work again.

Sales of Farming Land.—C. H. Phillips and W. L. Beebee have purchased 900 acres of S. W. Foreman, a part of the Laguna Rancho, San Luis Obispo, for $30,000.

A Boy with a Beard.—A family named McKee, recently arrived at Los Angeles, have a boy of fifteen, who weighs 200 pounds, and sports a heavy beard and moustache.

Norman Horses.—The farmers in Illinois are importing Norman horses. The animals are heavily built, and are especially adapted for agricultural purposes.

Alden Fruit Dryers.—There are eighteen Alden evaporators at work in California. Two establishments have five evaporators each, and several three—the others one and two.

Numerous.—Russia has a religious sect known as the "Raskal." That sect has become very numerous in this country of late.

New Bridge.—The new bridge across the Mokelumne river at Cherokee, about one mile from Lodi, is nearly completed.

Tellis Pare, of Tomales, has sold his ranch of 143 acres to Henry Linderman, for $4,700.

Volunteer grain crops are between five and six inches high in the valleys of Marin County.

Eucalyptns trees are being set out around the Marysville public schools

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The San Joaquin Valley Agricultural Society disbursed $13,931 91 during the past year.

An eighty-one pound beet is on exhibition at Lower Lake, Lake County.

The machiuery for a planing mill has arrived at Fresno.

Seven buildings are already up at Lompoc.

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American & Foreign Patent Agents,

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PATENTS obtaiued promptly; Caveats filed expeditiously; Patent reissues takeu out; Assignmeuts made and recorded in legal form; Copies of Patents aud Assignmeuts procured; Examiuations of Patents made here and at Washington; Examinatious made of Assiguments recorded in Washington; Examinations ordered and reported by Telegraph; Rejected cases taken up and Pateuts obtained; Interferences Prosecuted; Opinious rendered regarding the validity of Patents and Assignments; every legitimate branch of Patent Agency Business promptly aud thoroughly conducted.

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In addition to American Patents, we secures with the assistance of co-operative agents, claims iu all foreign countries which graut Pateuts, including Great Britain, France, Belgium, Prussia, Austria, Victoria, Peru, Russia, Spain, British Iudia, Saxony, British Columbia, Canada, Norway, Sweden, Mexico, Victoria, Brazil, Bavaria, Holland, Denmark, Italy, Portugal, Cuba, Roman States, Wurtemberg, New Zealand, New South Wales, Queensland, Tasmania, Brazil, New Grenada, Chile, Argentine Republic, AND EVERY COUNTRY IN THE WORLD where Patents are obtainable.

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Our long experience in obtainiug patents for Inventors on this Coast has familiarized us with the character of most of the inveutions already patented; henco we are frequently able to save our patrons the cost of a fruitless application by pointing them to the same thing already covered by a patent. We are always free to advise applicants of auy knowledge we have of previous applications which will interfere with their obtainiug a patent.

We invite the acquaiutance of all parties connected with inventions and patent right business, believing that the mutual conference of legitimate bnsiness and professional men is mutual gain. Parties in doubt in regard to their rights as assignees of patents, or purchasers of patented articles, cau often receive advice of importance to them from a short call at our office.

Remittances of money, made by individual inventors to the Government, sometimes miscarry, and it has repeatedly happened that applicants have not only lost their money, bnt their inventions also, from this cause and consequent delay. We hold ourselves responsible for all foes entrusted to our agency.

The principal portion of the patent business of this coast has been done, and is still being done, through our agency. We are familiar with, and have full records, of all former cases, and can more directly judge of the value and patentability of inventions discovered hore than any other agents.

Situated so remote from the seat of government, delays are even more dangerous to the inventors of the Pacific Coast than to applicants in the Eastern States. Valuable pateuts may be lost by the extra time consumed in transmitting specifications from Eastern agencies back to this coast for the signature of the inventor.

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Miscellaneous Notices.

POISON! POISON

WAKELEE'S PATENTED

Granulated Squirrel Exterminator.

A NEW AND MOST DESTRUCTIVE POISON FOR THE WORST PEST OF CALIFORNIA.

For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of riddling their grain fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is SURE DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be as economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alamada Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, C. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

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21v2-1y



Hooper's South End Grain Warehouse.

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo. F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rates. Storage taken at lowest current rates. 4v8-ft

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A Boarding School for Boys and Girls, offering all the advantages of a thorough modern education. French, German, Spanish, Latin, Greek, Drawing, the Natural Sciences, Gymnastics and Dancing taught without extra charge. Vocal and Instrumental Music receive particular attention. Pupils furnish *only* a pair of heavy blankets. Next term opens January 6th, 1874.

Write for Catalogue to ELWOOD COOPER,

22v6-1y President Board of Directors.

LOOK!



ALBERT E. BURBANK, Importer and Breeder of Fancy Fowls, Pigeons, Rabbits, etc. Also Eggs for hatching from the finest of imported stock. Eggs and Fowls at reduced prices. Send for Price List.

ALBERT E. BURBANK,

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HOP ROOTS FOR SALE.

I have a lot of choice HOP ROOTS, and also healthy BLACKBERRY SETS for sale at LOWEST RATES. Orders may be addressed through DEWEY & CO., of the Rural Press, San Francisco; ROBT. WILLIAMSON, Capital Nurseries, Sacramento; or to me,

CALVERT T. BIRD,

24v8-3m San Jose, Cal.

FOR SALE OR TO LEASE.

A fine place, well adapted for keeping summer boarders. Two large houses, orchard, vineyards, natural forest and good springs, water brought into the houses. Location and scenery unsurpassed.

A. E. BALL.

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YOSEMITE HOUSE,

STOCKTON, CAL.

JAMES COLE, Proprietor.

This House contains all modern improvements: Saloons, Bath Rooms and Telegraph.

The only first-class Hotel in Stockton.

Agricultural Notes.

BUTTE.

Seeding and Shipping.—Chico *Enterprise*, Dec. 12: The farmers have mostly finished seeding their summer-fallow and are now engaged in plowing and seeding other land, and will continue to do so as long as it is deemed prudent to risk the growth. After this, they will begin in earnest the work of summer-fallowing. Heavy shipments of grain are being made—some upon sales already made and some upon consignments. G. W. Colby shipped last week, upon his own credit and at his risk, 49 cars of wheat, intended for the Liverpool market, and many of the farmers are about to follow the example. The present prospect indicates that in this section there will not be near the amount of the surplus grain on hand at the next harvest that has been anticipated.

CALAVERAS.

The Weather and the Crops.—A correspondent of the Calaveras *Citizen* Dec. 12th, says of the crops and weather: The grainfields are putting forth their assurance of a bountiful harvest, and the peach trees in a number of orchards are covered with buds, which, I doubt not will be in bloom (providing the weather continues as for the last two weeks,) in a short time, another evidence of the remarkable climate of this region. There has been no severe frosts as yet, in fact, everything has the appearance of spring.

COLUSA.

Enterprise.—Colusa *Independent*, Dec. 12: John Boggs, D. W. Rives, Wm. G. Hill, Philips and Chandler have leased the General Beal ranch containing 200,000 acres, for a term of years. The ranch has 45,000 sheep on it and has 40,000 acres of good arable land. The firm are all good business men and first-class farmers, and we know that if that ranch can be run successfully at all they can do it. The Southern Pacific Railroad runs within a short distance of the land. Mr. Boggs, one of the firm, has always identified himself with the interests of Colusa county, has served it with honesty and ability in the legislature, and now deserves at our hands "well done thou good and faithful servant."

Grain Growing.—The valley is putting on its mantle of green. Reports from the country say everything is growing finely. Out near the foothills the grass is growing splendidly, and down in the valley the wheat in some localities is already several inches high.

At Work.—All our farmers are busily engaged in plowing and sowing. There has been a greater number of acres seeded this year than ever before in Colusa county—and next harvest will astonish the natives.

EL DORADO.

Potatoes.—We have repeatedly urged that the people of this county should raise their own potatoes, and thus put a stop to the constant heavy drain of our coin elsewhere for their purchase. That there is money in potato raising here has been practically demonstrated by a few individuals, as has also the fact that in quality they are nowhere excelled in the State. Last spring, N. C. Nelson, at Diamond Springs, planted about two acres, and last week he finished digging and sacking the crop, which amounted to twelve and one-half tons, which he sold on the ground to L. Landecker, of this city, for about $500, and they are the finest potatoes we have ever seen in the market. In size they average very large; the skin is red, and when cooked, the potato is white, dry and entirely free from bad spots; in fact we would prefer them by $1 per sack to most imported potatoes. One of the largest in this lot weighs 3¾ pounds. And not only potatoes alone, but wheat, barley, corn and vegetables of all kinds. When this is done the thrift that will become manifest will be really astonishing to those who do not believe there is money to be made by careful farming.

Oranges in the Foothills.—The Placer *Argus* urges the importance of the cultivation of oranges in the foothills, and states that several fine trees are now in full bearing at Auburn and Ophir. One of which, that has been in bearing only four years, has fully 1,000 good solid oranges upon it at this time. The tree is about 18 feet high.

Japanese Quince.—Placer *Herald*, Auburn. In the garden of Robert Gordon, back of our office, a Japanese quince tree is already beginning to bud. All kinds of vegetation is unusually forward in this part of the country, but the idea of a tree cutting up such capers as above mentioned, in the early part of December, is something that Eastern people may wonder at.

FRESNO.

Farming in Fresno.—Fresno *Expositor*, Dec. 9: "From what information we can gain from the various portions of Fresno county, we feel authorized in saying that there will be fully twice as much land cultivated this season as there was last. In every direction we learn of large tracts of new land being prepared for planting, while the old fields and a large area of summer fallow is being planted. In the vicinity of Fresno we notice there is an increased demand for land by parties who propose engaging in diversified farming or gardening. The facilities afforded for irrigation, in the vicinity of Centerville, on Upper King's river, is making that section a great favorite with new comers and others. The increase in the acreage of cultivated land in that vicinity will probably be greater than in any locality in the county, though every portion shows a marked increase. Should the season prove as good as is now anticipated, it will do more good to Fresno county than anything we know of save a complete system of irrigation. There is much talk among farmers whose lands are situated where they can be irrigated, in favor of growing more cotton and less grain, and it would not surprise us, judging from the present outlook, if there were several thousand acres of cotton planted next season. Upon the whole the outlook for this county is most favorable.

KERN.

Farming Prospects.—*Southern Californian*, Dec. 12: In an article reviewing the prospects of Kern county concludes as follows: "We now find that our land will produce 30 bushels of wheat and 40 bushels of barley to the acre, and farms of 1,000 to 3,000 acres are becoming quite common. Alfalfa, which is to revolutionize the stock growing of the State, is being sown in patches of 100 to 200 acres, and we have 250,000 acres of the best land in the world for its production. The season is specially favorable for planting. The demand for hay and grain promises to be ten times as great as ever before, a contract having been entered into to carry all the freight of Inyo county through Bakersfield."

LOS ANGELES.

Planting and Sowing.—*Express*, Dec. 10: We hear from all parts of the country that the farmers are preparing ground for very extensive planting of grain this season. New ground is being broken everywhere, and we would not be astonished if nearly twice the area heretofore planted will be sown this year. It would be a matter of great interest to have the data of our tree-planting the past year. The increase of orange and lemon trees has been very great, especially in this valley, and from what we learn there has been no inconsiderable quantity laid out in the southern portion of the county. In what is termed the Fruit Belt—and in this we include the Orange Grove Association's land—there has been great activity in tree planting. In the vicinity of the Mission young trees are increasing very rapidly, and a few years will witness a number of bearing orange trees in this county.

No Fences.—A correspondent of the Alpine *Chronicle*, writing from Anaheim, Nov. 17th, says: The "no fence" law leaves the ranches and roads all outdoors, and it seemed strange to drive through miles of cultivated fields of luxurious growth of corn, squashes, pumpkins, melons and new grain, just springing into life for the next harvest; and the luscious fruits, of which you are invited to partake without money and without price. And all this in the middle of a genial climate in winter, similar to your Alpine summer.

NEVADA.

Walnuts vs. Locust Trees.—The Fort Hill *Tidings* makes the following sensible suggestions: If every locust tree in and about this town were a walnut, of the same age, what a harvest of nuts would replace the present ugly and disagreeable crop of pods. Mr. Charles Baker, whose garden and orchard are out near the eastern end of Neal street, has a California walnut tree of just about the age of many of these locust from which he lately harvested plump 200 pounds of these delicious nuts. The tree is very like the black walnut of the West, but the nut is more like the butternut, except that it is nearly round. The meat is two-lobed and joined together at one end, thus making it easy to separate when cracked.

The Nevada *Transcript*, of Dec. 12, states that grapes are still hanging on the vines in that vicinity, in a perfect state of preservation, and pertinently asks how would the same fruit taste in States east of the Rocky Mountains?

SAN DIEGO.

Grain in San Diego.—The young grain in the Cajon and other valleys of San Diego county is coming up finely, growing much faster than it did last year. Farmers say it will not suffer if there is no rain for two months yet.

SONOMA.

The Vintage.—Sonoma *Democrat*, Dec. 12: The vintage at the Buena Vista vinicultural yard this season has been wonderful, not only in quantity but in the quality of the wine. Mr. Auger kindly showed us through the underground tunnel, and the cellar of stone, four stories high. There is not a nook or corner of this great structure unoccupied. Tier upon tier of barrels, story upon story, from ground floor to garret, stored with full casks, containing not less than 400,000 gallons of wine. The wine at this season never promised better. It is lighter than usual, and excellent in color and flavor. Mr. Auger was still making wine, though his cellar was full, and also an adjoining house. There was some loss of grapes from the storm, but the vintage was far in excess of any previous season; it will not be far short of 200,000 gallons.

Something Besides Wheat.—The Petaluma *Argus* of Saturday remarks: The low price of wheat this year has induced many of the farmers of this county to turn their attention to the cultivation of other crops, and we are assured by those competent to judge, that while the area cultivated this year will be greater than ever before, the amount planted to wheat will be proportionately less. There are many fields in the county on which nothing but wheat has been sown for ten or fifteen years. The yield has declined from year to year, and the necessity for a change has become manifest. A greater diversity of crops will undoubtedly be highly advantageous to the interests of our farmers.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, DEWEY & CO., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Dec. 15th, 1874.

For Week Ending Dec. 1st, 1874.*

Step and Bearing For Mill Spindles.—D. Matthew, Portland, Oregon.

Cutting Attachment for Sewing Machines.—Marcellus A. Graham, San Francisco, Cal.

Wagon Brake.—John Grider, Milton, Cal.

Blind Bridle.—Francis Schwalm, Clarksville, Cal.

Standing Irrigator and Revolving Fountain.—Frank J. Shafer, San Francisco, Cal.

Endless Rope Traction Railway—William Eppelshcimer, San Francisco, Cal.

Whip Holder.—John H. Pitts, San Francisco, Cal.

Cesspool Cover and Trap Combined.—John P. Schwartz, San Francisco, Cal.

Trade Mark.

For Sheet and Plate Iron.—Brittan, Holbrooke & Co., San Francisco, Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

Our Agents.

Our Friends can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

Chas. F. Bell—Alameda, Santa Clara and Santa Cruz Counties.

J. W. Anderson—Orange and Santa Ana, in Los Angeles County, Cal.

J. G. Kelley—For Washington Territory.

B. W. Crowell—California.

F. B. Alderson—City agent, San Francisco.

George Decker—Solano County.

J. L. Tharp—Southern California.

C. H. Wheeler—Southern California.

A. C. Champion—Tulare, Fresno and Inyo Counties.

D. J. James—Australian Colonies.

J. C. Ewing—Contra Costa County.

John Rostran—Sonoma County.

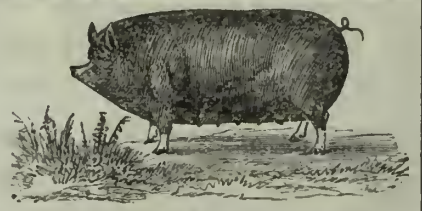
CALIFORNIA PORTRAYED.

The columns of the Pacific Rural Press from January 1, 1870, contain the most complete and reliable information concerning the soil, climate, products and capabilities of the different sections of California, of any publication yet made. Neither new comers or old settlers in the rural districts can well afford to do without this enterprising and leading agricultural weekly. It is a good helper at home and a welcome guest abroad.

Java Coffee Seed.—We have received from the Island of Java a small consignment of the above variety of Coffee, which was saved expressly for seed. Merchantable coffee is thoroughly dried and its color changed before shipping, and is, in consequence, of no value for seed, which accounts for the failure which has attended all efforts to sprout it. Seed-coffee (so-called), which we received from the Department of Agriculture, in Washington, proved worthless with us as has with others. The seed which we offer is emphatically good. We have plants growu from it. The seed may be sprouted in a 'hot-bed," or in any warm, sheltered situation—using a fine, sandy soil, which should be kept moderately moist. There are a few Coffee trees in this State, one of which is about twenty years old, and which began to bear fruit when only five years old from the seed. Price per packet, containing one ounce, fifty cents. Price per pound at reduced rates. Address R. J. TRUMBULL, 427 Sansome St., S. F.
25v8-1am-2t

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CALLONS, LUMPS,
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Peaches, Apricots and Prunes are specialties at the Vacaville Nursery, Solano County, California. Alexander's Early, Thurber and Peento in bud, 50 cents each. Beatrice, Louise, Rivers' Early, Lord Palmerston, Lady Palmerston, Prince of Wales, Princess of Wales, Picquet's Late, Lady Parham, Italian Dwarf, Golden Dwarf, Bloodleaved and many other varieties of new Peaches in bud, at 25 cents each; Trees of Alexander's Early, $1 each; Beatrice, Plowden, Freemason and a general assortment of the leading varieties, 25 cents each; Apricots, Plums, Apples, Pears, Cherries, Almonds, Figs, Olives, Pomegranates and including most of the leading varieties of fruit for sale at low prices. D. E. Hough, Vacaville, Solano Co., Cal.

Orders Wanted at the National Employment office, 608 Market street, room 9; office crowded daily with good men and women, seeking employment; particular attention paid to country orders.
25v8-3m A. BRANDT & CO., Prop's.

S. F. Market Report.

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Dec. 16th, 1874.

The week has been an active one in the leading staples of Domestic Produce. Grain has kept up well, particularly Wheat and Barley, receipts of these and most articles of Produce having fallen off. Wheat receipts foot up 240,280 ctls., and exports 218,715 ctls. Both receipts and exports of Flour heve been large—the exports reaching 17,590 bbls. Oats has continued dull as usual.

Hides being lower in New Xork, are quoted here at 18½@19c for dry—extra, 20@20½c. Salt do, 9c. The Vegetable market is pretty bare. Alfalfa seed is higher —18 to 20c being the quotations. The Eastern market for Wool is better, according to telegraphic dispatches, both from New York and Bostou, though the wool movement is not large here yet. Receipts for the week but 436½ bbls.

Bags and Bagging — The market rules very quiet, and there are no changes to report in values.

Barley has remained firm. Sales were noted yesterday of 1500 sks Coast at $1.30, and of 1800 sacks do at $1.17½; and the market had then recovered from its temporary depression. On Monday the demand for overland shipment was less active. Yesterday it was firm, aud the market closes with no materia! advance, but showing firmness at our quotations.

Butter, and Dairy Produce generally, are coming in ahundantly, and quotations are lower, with a downward tendency. We quote butter 5c ℔ lb lower all round.

Corn receipts have been large the past week, and quotations are a trifle lower. Small sales are noted daily of Southern yellow at $1.32 to $1.35 per ctl.

Cotton sold to the extent of a few bales at 15 to 15½c this week.

Eggs have commenced coming in pretty freely, and are lower and falling, though in good demand at 32½c to 40c, wbich brings them up quite out of all reason to the consumer who buys at retail.

Flour has continued steady in price, with good receipts (1600 bbls. by Oregon steamer), and a good jobbing trade at quotations, or about $4.75 to $5.12½ per ctl. Receipts continue liberal from the interior, and considerable quantities go aboard ship, while millers are busy supplying the local trade.

Freight to Liverpool ranges about £3 to £3.2s.6d the difference heing between wooden and iron vessels.

Fruit is in good supply. Receipts of excellent Apples from Oregon have been had, which sell at $3 per box. California Apples are in large supply and slow sale. The first California Orangcs for the season arrived Tuesday from Los Angeles, selling immediately at the highly remunerative rate of $45. Lorita Oranges, in large quantities, and of better quality, because riper, are on the markot at about the same price.

Game is cheaper, but still high—ducks $1@1.50 for small ones, aud Wild Geese $2@4; Venison 6 to 8c.

Hops—The Eastern market is better for Hops, and several car loads havo been shipped thithor.

Honey is no lower, but the market is overstocked. Prices always remain about the same—white, in frames, 18@22½c, dark, 8@12½c, and strained 7@12c per lb.

Leather is unchanged, and the trade excessively dull as usual at this season of the year.

Onions have sold iu a small way at 75@$1 per ctl. for fair to choice. Receipts for the week, 1,120 sacks.

Oranges commenced arriving yesterday from Los Angeles, the first consignment of 5,000 to Littlefield, Webb & Co., selling imuediately at $45 per 1,000. We give quotations at $40 to $45 for Los Angeles, and $30 to $40 for Lorita. The Mexicau steamer of Monday brought 250,000 of these latter, and they are consequently in good supply.

Potatoes are showing some activity. When giving no evideuce of rot, they bring a good price; when otherwise, their price is low down. The crop of good potatoes is evidently short; and the price would at once advance, but dealers fear to buy on speculation lest their purchases rot on their hands. Farmers, fearing the same thing, are shoving their stocks to market, which keeps the price down. It is the first time California has been troubled with the potato rot. The wholesale range is about $1.35 to $1.55.

Poultry is doing better than last week. It is not only selling at good prices and rapidly, but it is likely to advauce during the holidays unless the market becomes more overstocked tban at present. None has yet come from the East to affect the market and lower it. Dressed Turkeys are now coming in, and bring 15 to 19c per lb. while live heus bring 14 to 16c.

Wheat, above all other grains, which are steady, shows firmuess, aud the general opinion now is that it will improve. We advance the rauge on coast $1.40 to $1.50. Shipping $1.50 to $1.55. But there are unusually large quantities of wheat accumulated at the Atlantic seaboard—the stock in New York being 600,000 bushels ou the 12th iust.—and the price in New York was unsettled and a shade lower on the 12th, wbile dispatches from Liverpool continue to show an uuchanged market. To-day's (16th) Liverpool dispatch quotes average California wheat, 9s 1½d @ 10s 2d; Club 10s 4d @ 10s 7d For the past two days there has been an active demand for shipping.

RETAIL GROCERIES, ETC.

WEDNESDAY M., Dec. 16, 1874.

Butter, Cal. ch'ice	—	@	60
do common	40	@	50
Cheese, Cal., ℔	15	@	25
Lard. Cal., ℔	15	@	17
Flour, ex. fam. bbl	4 75	@	5 00
Corn Meal, ℔	3½	@	5
Sugar, wn. crab'd	—	@	11½
do lt. brown, ℔	7	@	10
Coffee, green, ℔	22½	@	26½
Tea, fine blk, 50, 65, 75		@	1 00
Tea, finet Jap, 55, 75, 90		@	1 00
Candles, Adamant'e	15	@	20
Soap, Cal., ℔	6	@	10
Rice, ℔	8	@	10
Yeast Powders, doz	1 50	@	2 00
Can'd Oysters, dz. 200		@	3 00
Syrup, S. F. Co'n.	—	@	75
Dried Apples	6	@	7
Dr'd Ger. Prunes	14	@	16
Dr'd Figs, Cal	9	@	10
Dr'd Peaches	10	@	12½
Pile. Kerosene	28	@	33
Wines. Old Port	3 50	@	5 00
do Fr. Claret	1 00	@	2 50
do Cal. dz. bot	3 00	@	4 50
Whisky, C.B, gal	3 50	@	5 00
Fr. Brandy	4 00	@	10 00

DOMESTIC PRODUCE.

WEDNESDAY M., Dec. 16, 1874.

BEANS.			
Beans, sm'l wh. ℔	3	@	4
do. butter	3½	@	5
do, bayo	2	@	—
do, pink	2¼	@	—
do, pea	4	@	4½
BROOM CORN.			
Per ℔	5	@	8
COTTON.			
Cal. 1874, ℔ lb	15	@	15½
DAIRY PRODUCE			
Butter, Cal. choice			
℔	40	@	45
do, good	35	@	40
do, inferior	30	@	35
do, firkin	30	@	35
do, pickled	35	@	40
Cheese, Cal	12½	@	17
do, Eastern	15	@	20
EGGS.			
Eggs, Cal. fresh	37½	@	40
do, Oregon	30	@	35
do, Eastern	23	@	30
do, Ducks'	—	@	—
FEED.			
Bran, per ton	—	@	19 00
Middlings	—	@	28 50
Hay	12 00	@	17 00
Straw, ℔ bale	—	@	—
Oil cake meal	—	@	30 00
Corn Meal	31 00	@	32 00
FLOUR.			
Extra	4 75	@	5 12½
Superfine	4 00	@	4 75
FRESH MEAT.			
Beef, fr quality, ℔	7	@	
do, second do	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed	6½	@	6½
do, dressed	8½	@	8¾
GRAIN, ETC.			
Wheat, coast	1 40	@	1 50
do shipping	1 50	@	1 55
do milling	1 55	@	1 57½
Barley, coast	1 20	@	1 30
do brewing	1 40	@	1 50
Oats, ch ice	1 40	@	1 65
do common	1 20	@	1 40
Corn, White	1 35	@	1 40
do, Yellow	1 35	@	1 40
Buckwheat	2 00	@	2 25
Rye	1 12½	@	—
HOPS.			
California, 1874	35	@	37½
East'rn, '74, ch'ice	50	@	—
MISCELLANEOUS.			
Beeswax, per lb	25	@	27½
Honey in comb	18	@	22½
do Strained	5	@	10
Pulu		@	8½@9
Onions	65	@	1 00
NUTS—JOBBING.			
Cal. Walnute	10	@	11
Peanute per lb	6	@	7
Chile Walnute	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'ds h'd sbell	8	@	10
do, soft	15	@	22
Filberts	17	@	18
Cocoanuts, 1000	60 00	@	—
POTATOES.			
Sweet, per cwt	1 60	@	1 75
Cuffee Covel	—	@	—
H. M. Bav.	1 30	@	1 50
Pigeon Pt	1 30	@	1 55
Humboldt	1 50	@	1 60
Tomales	1 40	@	1 45
Mission	—	@	—
Salinas	—	@	—
Bodega	1 40	@	1 55
St Barbara	—	@	—
Sac. River	—	@	—
POULTRY & GAME.			
Live Turkeys, bens per ℔	14	@	16
do gobblers	12	@	14
do dressed	15	@	19
Hens, per dz	5 75	@	7 00
Roosters, young, large	5 50	@	6 50
Broilers, small	2 50	@	4 00
do large	4 00	@	5 00
Ducks, tame, doz	7 00	@	8 00
Geese, per pair	2 25	@	2 75
Hare, per doz	3 00	@	3 50
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	1 75
Mallard Ducks	4 00	@	4 50
do small	1 00	@	1 50
Wild Geese, gray	—	@	—
do white	2 00	@	4 00
Doves, per dozen	50	@	75
Prairie Chickens	—	@	—
Rabbits	1 25	@	1 50
do tame	5 00	@	6 00
Venison, per lb	6	@	8
PROVISIONS.			
Cal. Bacon, Light	—	@	17
do Medium	—	@	16½
do Heavy	14	@	15
Eastern do	—	@	16
Hams, Cal	14	@	14½
do Whittakere	17½	@	18½
do Duffield, ch	17½	@	18½
do Plankton & Arm ur	—	@	18
do Boyd's	—	@	—
do Stewart's	—	@	16
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	14½	@	17
SEEDS.			
Alfalfa, Chili	15	@	16
do California	18	@	20
Canary	8	@	10
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	8	@	10
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustard, white	1¾	@	2¾
do. Brown	1¾	@	2
Italian Rye	30	@	40
Perennial do	30	@	40
Rape	11	@	12
Timothy	11	@	12
Sweet V Grass	1 00	@	1 50
Orchard do	30	@	35
Red Top do	25	@	30
Hungarian do	10	@	13
Lawn do	50	@	60
Mesquit do	15	@	20
Clover Red	—	@	20
do White	65	@	75
WOOL, ETC.			
FALL—			
Good to choice	18	@	20
Fair grade	16	@	18
Heavy free	14	@	16
Defective	12	@	15
Hlidce, dry	18½	@	20
do wet salted	8½	@	9
Tallow, Crude	5	@	6
do Refined	6	@	7

FRUITS AND VEGETABLES.

WEDNESDAY M., Dec. 16, 1874.

FRUIT MARKET.			
Tabati, Or. ℔ M	—	@	—
Lorita, do	30 00	@	40 00
Cal. do	40 00	@	45 00
Limee, ℔ M	—	@	15 00
Cal. Lemons, ℔ M	—	@	25 00
Australian do	—	@	40 00
do Sicily ℔ b'x	—	@	—
Bananas, ℔ bnch	3 00	@	4 00
Cocoanuts, ℔ 1000	—	@	60 00
Pineapples, ℔ dz	—	@	—
Apples, ℔ box	50	@	1 25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries ℔ lb	—	@	25
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plume	—	@	—
Peaches, bskt	—	@	—
do, ℔ box	—	@	—
do ext Mountain, ℔	—	@	—
Pears, Bart'l, bx	—	@	—
do Cooking	75	@	1 00
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel's ℔ 100	—	@	—
Muskm'l's ℔ 100	—	@	—
Pomegran's ℔ 100	—	@	—
Figs	—	@	—
Grapes, Bl'k H'g	1 00	@	1 50
do Muscat	2 50	@	4 00
do Malavo'e	—	@	—
do Sweetw'r	—	@	—
do Mission	2 00	@	3 00
do Rose of Peru	1 00	@	1 50
do Tokay	—	@	3 00
do Morocco	1 50	@	2 00
do St. Peter	—	@	—
DRIED FRUIT.			
Apples, ℔ lb	5½	@	6½
Pears, ℔ lb	9	@	11
Peaches, ℔ lb	8	@	9
Apricots, ℔ lb	14	@	15
Plums, ℔ lb	5	@	6
Pitted, do ℔ lb	14	@	16
do Extra, ℔ lb	—	@	—
Raisins, ℔ lb	5½	@	12½
Black Figs, ℔ lb	5	@	
White, do	10	@	15
Prunes	8	@	13
do German	14	@	—
Citron	@	35	37½
Zante Currants	8	@	—
Dates	12½	@	
VEGETABLES.			
Asparagus	—	@	—
Beets	—	@	1
Cabbage, ℔ 100 lbs	50	@	75
Carrots, per ton	6 00	@	10 00
Cauliflower, doz	—	@	—
Celery, doz	—	@	—
Garlic, ℔ lb	12	@	15
Green Peas	6	@	10
Green Corn ℔ doz	—	@	—
Sum'rSquash per ton	—	@	—
Marro'fat Sq'sh, tn	8 30	@	10 00
Artichokes, ℔ doz	40	@	75
String Beans, ℔ lb	5	@	—
Lima Beans	5	@	—
Parsnips	12½	@	15
Shell Beans	7	@	10
Peppers, green, box	75	@	1 25
Okra, Green	5	@	6
Cucumbers, box	—	@	2 50
Tomatoes, box	—	@	—
Egg Plant, box	—	@	—
Rhubarb	—	@	—
Lettuce	10	@	—
Turnips, ton	10 00	@	—

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ℔ lb*	35		
do unpared, ℔ lb†	32		
Peaches, do, ℔ lb†	16		
do pared, ℔ lb*	33½		
do do ℔ lb†	30		
Bartlett Pears, pared, lb*	45		
Pears, pared (sliced) lb*	30		
Pears, 10-lb boxes, family use, extra	35		
Currants, steamed, lb*	30		
Royal Ann Cherries, pitted, ℔ lb*	25		
Kentish Cherries, pitted, ℔ lb	55		
Apples, pared (ring) lb†	12½		
do do (whole,) ℔ lb†	12½		
Apples, 10-lb boxes family use, extra	18		
Plums, pitted, ℔ lb†	25		
do do ℔ lb*	40		
Rbubarb, ℔ lb†	35		
Corn, ℔ lb†	32½		
Beans, ℔ lb†	60		
Potatoes, ℔ lb†	14		
Sweet Potatoes, ℔ lb†	15		
Onions, ℔ lb†	40		
Beef, ℔ lb†	40		
Tomatoes, ℔ lb†	75		
Squash, ℔ lb†	20		

*In caddies. †In bulk.

LUMBER.

WEDNESDAY M., Dec. 16, 1874.

CARGO PRICES OF PUGET SOUND PINE REDWOOD.

Rough, ℔ M	$16	00	
Rough refuse, ℔ M	12	00	
Rough clear, ℔ M	32	50	
Rough clear refuse, M	22	50	
Rustic, ℔ M	30	00	
Rustic, refuse, ℔ M	24	00	
Surfaced, ℔ M	26	00	
Surfaced refuse, ℔ M	16	00	
Flooring, ℔ M	30	00	
Flooring, refuse, ℔ M	20	00	
Beaded flooring, ℔ M	32	50	
Beaded floor, refuse, M	22	50	
Half-inch Siding, M	22	50	
Half-inch siding, ref, M	16	00	
Half-inch, Surfaced, M	25	00	
Half-inch Surf. ref., M	18	00	
Half-inch Battens, M	22	50	
Pickets, rough, ℔ M	13	00	
Pickets, rough, p'ntd	16	00	
Pickets, fancy, p'ntd	25	00	
Shingles, ℔ M	2	25	

Retail Price.

Rough, ℔ M	—		
Fencing and Stepping, M	—		
Fencing, 2d quality, ℔ M	—		
Fencing, ℔ lineal foot	1c		
Flooring and Step, ℔ M	30	00	
Flooring, narrow, ℔ M	32	50	
Flooring, 2d quality, M	25	00	
Laths, ℔ M	3	25	
Furring, ℔ lineal ft	¾		
RED WOOD—Retail.			
Rough, ℔ M	20	00	
Rough refuse, ℔ M	16	00	
Rough Pickets, ℔ M	18	00	
Rough Pickets, p'd, M	20	00	
Fancy Pickets, ℔ M	30	00	
Siding, ℔ M	25	00	
Tongued and Grooved, surfaced, ℔ M	32	50	
Do do refuse, ℔ M	22	50	
Half-inch surfaced, M	40	00	
Rustic, ℔ M	35	00	
Battens, ℔ lineal foot	¾		
Shingles ℔ M	2	75	

GENERAL MERCHANDISE.

WEDNESDAY M., Dec. 16, 1874.

BAGS.			
Eng. Stand Wht	—	@12	
Detrick's Machine Sewed, 22x36 E	12	@12¼	
do 22x36, do E W	—	@13¼	
do 20x40, do A	—	@13½	
Flour Sacks ½s	9½	@11½	
" " ¼s	6	@ 7	
Stand. Gunnies, double seam	13	@14	
single seam	13¾	@14	
" Wool Sacks	60	@67½	
Barley Bags 24x36	13	@14	
do 23x40	—	@14½	
do 23x40	—	@15	
do 23x36	—	@16	
Oat Bags, 24x40	16	@16½	
do 28x36	—	@17	
Hessian 40-in. gde	9½	@ 9¾	
do 45	10½	@11	
do 60	—	@16	
CANNED GOODS.			
Asst'd Pie Fruite in 2½ ℔ cans	2 50	@ 2 75	
do Table do	3 50	@ 4 00	
Jams & Jellies	3 75	@ 4 00	
Pickles ½ gl		@ 3 50	
Sardines, qr hoxl	80	@—	
do hf boxes, 3	20	@—	
COAL—Jobbing.			
Anetralian, ℔ ton	10 50	@12 50	
Coos Bay	—	@10 00	
Bellingham Bay	—	@ 8 50	
Seattle	—	@11—	
Cumberl'd, cks	—	@18 00	
do hulk	16 00	@17 50	
Mt. Diablo	6 25	@8 50	
Lehigh	—	@17 00	
Liverpool	10 50	@11 50	
West Hartley	—	@14 00	
Scotch	10 00	@11 00	
Scranton	—	@13 50	
Vancouver'e Isl	11 00	@11 50	
Charcoal, ℔ sk	75	@ —	
Coke, ℔ bbl	—	@ 60	
COFFEE.			
Sandwich Island	—	@ 22	
Central America n	20	@ 22	
Costa Rica per lb	23	24	
Gnatemala	20	@ 22	
Java	—	@ 26½	
Manilla	19	@ 20	
Ground in ce	—	@ 27	
Chicory	9	@ 10	
FISH.			
Pac. Dry Cod, new	5	@ 6	
cases	6	@ 7¾	
do bonelees	11	@ 12	
Eastern Cod	8	@ 8½	
Salmon in bble	9 00	@9 50	
do ½ bbls	4 50	@5 50	
do 2½ ℔ cans		@2 80	
do 2 ℔ cans	2 65	@2 75	
do 1 ℔ cans	1 75	@ —	
Do Col. R. ½ lb	—	@ —	
Pick. Cod, bbls	22 00	@ —	
do ½ bbls	11 00	@ —	
Bos. Sm'k'd Her'g	40	@ 50	
Mack'l, No. 1, ½ bls	9 00	@11 00	
" Extra	—	@12 00	
" in kite	2 00	@2 50	
" Ex mess	3 00	@3 50	
" Ex mess. ½ bs	—	@13 00	
Pic'd Herr'g, bx	3 00	@ 3 50	
NAILS.			
Assorted size, ℔ lb	5 37½	@7 50	
OILS.			
Pacific Glue Co. Neat F't No. 1	—	@ 90	
Pure	—	@ —	
Castor Oil, No. 1	—	@1 25	
do do No. 2	—	@1 12½	
Cocoanut	1 47½	@1 50	
Olive Plagniol	—	@ —	
do Possel	—	@ —	
Palm lb	9	@ —	
Linseed, raw	—	@1 05	
do boiled	—	@1 10	
China nut in cs	77½	@ 82½	
Sperm, crude	—	@1 40	
do bleached	1 90	@2 25	
Coast Whales	45	@ —	
Polar, refined	50	@ 52½	
Lard	1 15	@1 30	
Coal, refined Pet	37½	@ —	
Oleophine	21	@ 24	
Devoe's Bril't	25	@ 28	
Long Island	21	@ 24	
Enreka	—	@ —	
Devoe's Petro'm	21	@ 24	
Barrel kerosene	21	@ 24	
Olive	4 20	@9 25	
Downer Kerose'e	—	@ 37	
Gae Light Oil	—	@ 26	
PAINTS.			
Atlan. W. Lead	6	@ 10	
Whiting	—	@ 2	
Putty	4	@ 5¾	
Chalk	—	@ 2½	
Parie White	2¾	@ —	
Ochre	2	@ 5	
Venetian Red	3½	@ 5	
Red Lead	7	@ 11	
Litbarge	10	@ 11	
Eng. Vermillion	2 00	@2 10	
RICE.			
China No. 1, ℔ lb	6½	@ 6¾	
do 2, do	5¾	@ 6	
Japan	6	@ 7	
Siam Cleaned	7	@ —	
Patna	6	@ 6½	
Hawaiian	7¼	@ 8	
Carolina	10	@ 10½	
SALT.			
Cal. Bay, per ton	10 00	@14 00	
do Common	5 00	@ 7 00	
Carmen Island	11 00	@13 00	
Liverpool fine	—	@24 00	
do coarse	6 00	@—	
SOAP.			
Castile ℔ lb	10	@ 11	
Local brands	5	@ 8	
SPICES.			
Olovee	50	@ 55	
Cassia	26	@ 27	
Citron	33	@ 35	
Nutmeg	1 20	@1 30	
Whole Pepper	21	@ 23	
Pimento	—	@ 15½	
Gr'nd Allsp'rd	—	@1 12½	
do Cassia do	—	@1 50	
do Cloves do	—	@1 50	
do Mustard do	—	@1 20	
do Ginger do	—	@1 00	
do Pepper do	—	@1 00	
do Mace do	—	@2 00	
SUGAR, ETC.			
Cal. Cube per lb	11½	@ —	
Partz' Pro. Cube bbl or 100 ℔ bxs	—	@ 11¾	
do in 50 ℔ bxs	—	@ 12	
do in 25 lb bxs	—	@ 12¼	
Circle A crusbed	—	@ 11½	
Powdered	—	@ 11¾	
Fine crushed	—	@ 11½	
Granulated	—	@ 11	
Golden C	—	@ 10¾	
Hawaiian	8	@ 11¼	
California Beet	10¾	@ 11½	
Cal. Syrup in bls	—	@ 67½	
do in ½ bls	—	@ 70	
do in kegs	—	@ 75	
Hawaiian Molasses	25	@ 30	
TEA.			
Oolong, Canton, ℔ lb	19	@ 25	
do Amoy	28	@ 50	
do Formosa	40	@ 80	
Imperial, Canton	25	@ 40	
do Pingeuey	45	@ 80	
do Moyune	60	@1 00	
Gunpo'der, Cant	30	@ 42½	
do Pingsuey	50	@ 90	
do Moyune	65	@1 25	
Yng Hy., Canton	28	@ 40	
do Pingeuey	40	@ 70	
do Moyune	65	@ 85	
Japan, ½ cheste, bulk	30	@ 75	
Japan, lacquered hxs, 1½ and 5 lbs	45	@ 67	
Japan do, 3 ℔ bxs	45	@ 90	
do pl'n bx, 4½ lb	35	@ 65	
do ½ & 1 ℔ paper	30	@ 55	
TOBACCO—Jobbing.			
Bright Navye	50	@ 60	
Dark do	50	@ 55	
Dwa f Twist	70	@ 72½	
12 inch do	60	@ 70	
Light Pressed	70	@ 80	
Hard do	50	@ 60	
Conn. Wrap'r	35	@ 40	
Penn. Wrapper	20	@ 45	
Virgi'a Smok'g	45	@ 75	
Fine cut chew'g, gr	8 50	@9 25	
Fine cut chewing, buc'ts ℔ lb	75	@ 90	
Banner fine cut	9 00	@ 9 25	
Eureka Cala	—	@9 00	
TURPENTINE.			
Eastern	55	@ 60	

METALS.

WEDNESDAY M., Dec. 16, 1874.

American Pig Iron, ℔ ton	—	@	46 00
Scotch Pig Iron, ℔ ton	42 00	@	46 00
White Pig, ℔ ton	—	@	46 00
Oregon Pig, ℔ ton	—	@	46 00
Refined Bar, bad assortment, ℔ lb	—	@	— 3½
Refined Bar, good assortment, ℔ lb	—	@	— 4
Boiler, No. 1 to 4	—	@	— 5½
Plate, No. 5 to 9	—	@	— 5½
Sheet, No. 10 to 13	—	@	— 5¾
Sheet, No. 14 to 20	—	@	— 5¾
Sheet, No. 24 to 27	—	08	@ — 09
Horse Shoes, per keg	7	50	@ 8 00
Nail Rod	—	9½	@ —
Norway Iron	—	8	@ —
Rolled Iron	—	6	@ —
Other Irons for Blacksmithe, Miners, etc.	—	—	@ — 4½
COPPER.—			
Braziers'	—	31	@ — 32
Copper Tin'd	—	45	@ — —
O'Niel's Pat	—	50	@ — —
Sheatbing, ℔ lb	—	—	@ — 24
Sheatbing, Yellow	—	—	@ — 25
Sheatbing, Old Yellow	—	—	@ — 12½
Composition Naile	—	24	@ — —
Composition Bolts	—	24	@ — —
TIN PLATES.—			
Plates, Charcoal, 1X ℔ hox	13	00	@ 15 00
Platee, I O Obarcoal	13	00	@ 14 50
Roofing Plates	12	50	@ 15 00
Banca Tin, Slabs, ℔ lb	—	32½	@ — 33
STEEL.—English Cast, ℔ lb	—	20	@ — 25
Anderson & Woode' American Cast	—	—	@ — 16½
Drill	—	—	@ — 16½
Flat Ber	—	18	@ — 22
Plough Steel	—	8	50 @ 10 00
ZINC	—	—	@ — 11
Zinc, Sheet	—	—	@ — 11½
NAILS—Assorted sizes	4	25	@ 8 00
QUICKSILVER, per lb	—	—	@ 1 55

LEATHER.

WEDNESDAY M., Dec. 16, 1874.

City Tanned Leather, ℔ lb	26@29
Santa Cruz Leather, ℔ lb	26@29
Country Leather, ℔ lb	24@28
Stockton Leather, ℔ lb	25@28
Jodot, 8 Kil., per doz	$50 00@ 54 00
Jodot, 11 to 14 Kil., per doz	66 00@ 90 00
Jodot, second choice, 11 to 16 Kil. ℔ doz.	55 00@ 72 00
Cornellian, 12 to 16 Ko	57 00@ 67 00
Cornellian Females, 12 to 13	63 00@ 67 00
Cornellian Females, 14 to 16 Kil	71 00@ 76 50
Simon Ullmo Females, 12 to 13, Kil	60 00@ 63 00
Simon Ullmo Females, 14 to 15, Kil	70 00@ 72 00
Simon Ullmo Females, 16 to 17, Kil	73 00@ 75 00
Simon, 18 Kil., ℔ doz	61 00@ 63 00
Simon, 20 Kil. ℔ doz	65 00@ 67 00
Simon, 24 Kil. ℔ doz	72 00@ 74 00
Robert Calf, 7 and 9 Kil	35 00@ 40 00
French Kipe, ℔ lb	1 00@ 1 65
Calif'nia Kip, ℔ doz	40 00@ 60 00
French Sheep, all colors, ℔ doz	8 00@ 15 00
Eastern Calf for Backe, ℔ lb	1 00@ 1 25
Sheep Roans for Topping, all colors, ℔ doz	9 00@ 13 00
Sheep Roans for Linings, ℔ doz	5 50@ 10 50
California Russett Sheep Linings	1 75@ 4 50
Best Jodot Calf Boot Legs, ℔ pair	5 00@ 5 25
Good French Calf Boot Legs, ℔ pair	4 00@ 4 75
French Calf Boot Legs, ℔ pair	4 00@ — —
Harnese Leather, ℔ lb	30@ 37½
Fair Bridle Leather, ℔ doz	48 00@ 72 00
Skirting Leather, ℔ lb	33@ 37½
Welt Leather, ℔ doz	30 00@ 50 00
Bnff Leather, ℔ foot	17@ —
Wax Sids Leather, ℔ foot	17@ —
Eastern Wax Leather	—@— —

S. F. RETAIL MARKET RATES.

WEDNESDAY M., Dec. 16.

POULTRY, GAME,			
Spring Chickens	50	@	75
Hens	75	@1	00
Eggs Cal	55	@	60
do Eastern	30	@	40
do Ducks'	—	@	—
do Farallonee	—	@	—
Turkeys, ℔ lb	20	@	25
Ducks, large, pr	1 00	@2	00
do small, pr	37½	@	50
Tame, do	1 50	@2	00
Teal, ea	25	@	—
Geese, wild, p

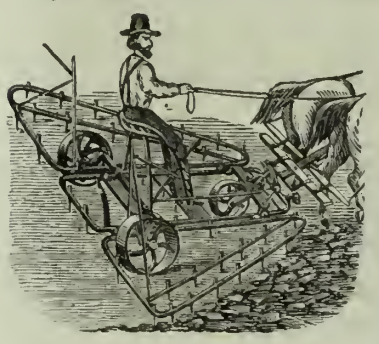
Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car. and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

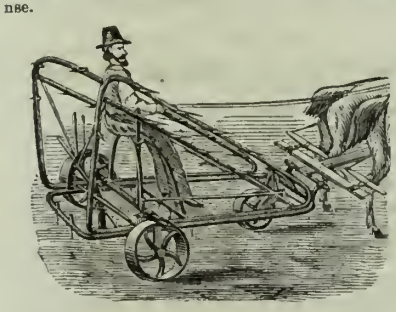
FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

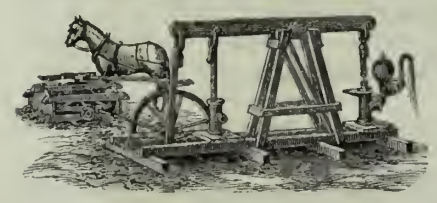
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 6-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour.

WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

v7-2m-3m Cor. J and 10th Sts., Sacramento.

Farmers and Threshers

WISHING TO HAVE

STRAW BURNING ENGINES

For next season must engage them soon, as most of those now building are already sold. Threshing Engines for Repairs should be sent in now. A number of Second-hand Engines—taken in exchange for "Straw Burners"—for sale cheap. For particulars and prices, address: H. W. RIOE,

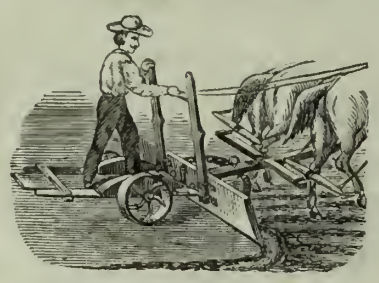
23v8-3m Haywood, Alameda County.

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

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CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,

No. 9 Merchants' Exchange, California street,

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THE TREADWELL SULKY



GANG PLOW.

Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50; old style, $25. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

18v8-tf San Francisco

MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

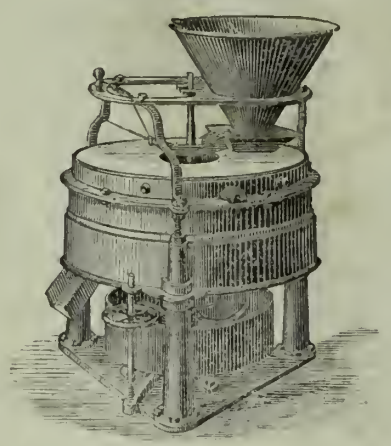
14v2-3m MATTESON & WILLIAMSON,

Stockton, Cal.

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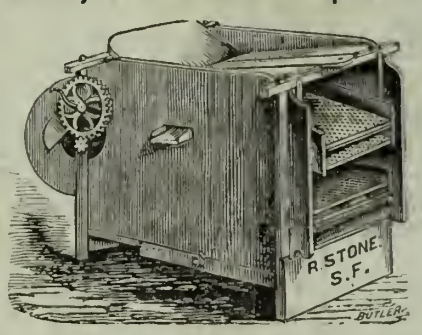
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General Mill Furnishing. Portable Mills specially adapted for Farmers' use. 113 and 115 Mission street, San Francisco. 13v7-3m-2am

THE PATENT

Novelty Mill and Grain Separator



Is one of the greatest improvements of the age for cleaning and separating grain, while it combines all the essential qualities of a first-class Fanning Mill. It also far excels anything that has been invented for the separation of grain. It has been thoroughly tested on all the different kinds of mixed grain. It takes out Mustard, Grass Seeds, Barley and Oats, and makes two distinct qualities of Wheat if desired.

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Notice—To Tule Land Owners.

I am manufacturing a Gang Plow specially adapted to ploughing Tule Lands. Address

Vallejo Foundry, J. L. Heald, Prop.,

18v29-3m VALLEJO, CAL

Grange Notices.

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

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J. D. BLANCHAR, Pres't. W. H. BAXTER, Sec'y.

This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a922-tf

Wheat for Cattle and Sheep Feed.

Some authorities urge that it is positively sinful to use as food for beasts the staff of life, which in their wisdom they regard was meant for man alone; but when wheat is abundant and cheap, it is absurd and illogical to object to its conversion into butcher meat or dairy produce. The important practical question is, How can it be profitably and safely used for feeding the animals of the farm?

Given whole and uncooked, as is done with oats or beans, wheat for most animals is difficult of digestion. Horses eating a feed of wheat instead of oats, usually become uncomfortable, flatulent, and pained. From a full meal of wheat we have frequently seen horses suffer from enteritis and caminitis. The grain swells up and resists digestion, nor does gradual use appear to render raw wheat very suitable fare for hard-worked horses.

For cattle, sheep and pigs, it answers better than for horses, but requires to be given with some judgment. It cannot profitably be used whole. Roughly ground into meal, it may be advantageously mixed with cut roots, chaff cake, and other such food. Richer in alhuminoids than most other articles of cattle food, excepting beans, peas, or lentils, it may very fitlingly be conjoined with more starchy food, such as Indian corn, or with such purely saccharine food as treacle. We have repeatedly seen both cattle and sheep thrive, grow, and feed on six pounds or eight pounds of a mixture of equal quantities of wheat and maize meals, used as adjuncts with roots and straw, and in England with roots and hay. At present prices treacle is a palatable and convenient addition to these meals. About a pound may be given daily to an adult cow or ox, and even double that quantity does not unduly relax the bowels when it is given, as it should be, mixed with cut straw and other such dry food. It facilitates distribution to mix it with water, brewers' grain, or even with bruised cake or meal. Where there are facilities for cooking, wheat may be advantageously boiled into a gruel, mixed with treacle, and poured over the straw chaff, which, when thus sweetened, is eaten freely by most descriptions of stock.

By intelligently carrying out such a system, fresh, sound straw may be largely and profitably consumed; the mixture is not very costly. Roots and hay, scarce this year in many districts, may be greatly economised; a large head of stock may be kept healthily growing throughout the winter, and an increased weight of beef and mutton may generally be produced. Even where roots are comparatively plentiful, farmers having abundance of straw will find that at present prices of the raw material, namely, the lean stock and the feeding stuffs, it will generally answer to use wheat meal, maize and treacle tolerably liberally, and thus carry on increased numbers of good young stock, or even feed out well-selected animals for the butcher.

An ingenious friend was wont some years ago when wheat was cheap, to grind it roughly with maize, oats, barley, or pulse, and bake the mixed meals into cakes or bread. This was used for every description of farm stock, for horses, pigs, and poultry, as well as for cattle and sheep, and for store as well as for feeding animals. The plan is, doubtless, theoretically correct. The baking cracks the starch granules, increases digestibility, and thus saves the animal some expenditure of vital force. The baked food is particularly palatable, is eminently suitable for young and weaklier subjects, and for those being forced for showing; but the process is troublesome, requires a goodly amount of space and appliances, and for ordinary purposes the cost out-does the profit.—*N. B. Agriculturist.*

DARWINISM.—There is one objection to Darwinism, says a late writer, to which little, if any attention has been given: For example, the nearest creatures to man in form are not the nearest in intellect. The elephant, and dog and horse, which have no affinity to man, have a far closer intellectual affinity than those pets of Darwinism, the gorilla and chimpanzee. Again, man is omniverous—the stronger races of men, from the Greeks before Troy to the English of to-day, are primarily carniverous. But no monkeys or apes are carniverous. If a man is to be developed from a lower creature, he is nearer to the monkey in form, but to his faithful friend the dog in mind.

BROOM CORN LOSSES.—The Sutter *Banner* says: The farmers who have had bright prospects of an abundant harvest of broomcorn, a short time ago, instances had their hopes blasted and their corn ruined by the late rains. In some localities turning it black and musty, so that it was deemed unsalable. Mr. N Y. Ream

DON'T BELIEVE IT.—An incredulous Eastern man who received a 3½ pound pear from Santa Barbara, wrote to the sender as follows: "I saw the big pear you sent. Don't believe it ever grew. It was made on purpose to send out here to advertise California."

SAGEBRUSH is the great item of fuel at the Humboldt Reduction Works, and at Kemler's flouring mill. It is cheap and is more desirable for making steam than wood; besides, there is but little trouble in keeping the boilers clean when sagebrush is used.

C. G. Goodrich, of Plumas county, has sold his band of 1,800 fine graded cotswold and merino sheep to Messrs. Kinney & Perkins, of Chico.

Photography in the Science and the Arts.

One of tbe most important applications of cbemistry to tbe arts is seen in pbotography. Chemistry not only contributes to our physical comforts, but also gratifies onr æsthetic nature, when it enables us to fix on glass or paper the shadows hy every conceivable form of beauty. Photograpby and pboto-lithography have rendered familiar many of the rarest works of art otherwise inaccessihle to the vulgar gaze. On tbe other hand, photography has spread among us the most perfect delineations of such works as Krupp's, at Essen, as well as of apparatus and machinery. What is more instructive than the photographic pictures whicb the lecturer is now able, by the aid of a magic lantern, to tbrow on the screen before his audience. Animalculæ and infusoria too small to be seen with tbe naked eye, as well as the great sun, the planets and stars, all come within the range of the photographic camera.

Until chemistry had become a science, photography could not exist, and many of the greatest improvements in the latter have sprung from new discoveries in chemistry. The importance of this hranch of applied chemistry has induced us to devote a portion of our space to a record of the improvements reported in photography.

New Photographic Spectroscopical Observations.

Dr. Vogel has observed that not only pure bromide but also iodide and chloride of silver are hy far more sensitive to the blue, green, yellow and red rays than hitherto alleged.

If the slit of the spectroscope he opened to 0.25 or 0.3 millimeter, and if the exposure is long enough, tbe three hodies are indeed sensitive to nearly all the rays of the spectrum, the least to the extreme red rays, and most to the indigo rays.

Pure dry iodide of silver is only slightly sensitive, but under nitrate is more sensitive to ultra violet and indigo than the iodide. Tbe sensitiveness increases from violet to indigo, hut near the —G— of Fraunbofer it diminishes suddenly, and the other colors act very forcibly.

Chloride of silver, colored with napbthalin red, gives a curious result. It becomes most sensitive for yellow rays, less for red, and least for blue. If it were possible to make chloride of silver more sensitive, the colored salt would be the very body for taking pictures in colors.

Curious Properties of Sand and Its Possible Application.—It is said that if a quantity of dry sand be placed in a hox of thin sheet iron or even in a canvas bag and subjected to a slight compression, it forms a mass capable of resisting a pressure of fully 60 tons without breaking or even straining the envelope. The sand, however, remains perfectly divisihle, so that if a small bole be made in the hox or bag it will flow slowly and witb such little force that even a small piece of paper pasted over the opening will check the flow, even with the 60 tons weight upon it. M. Beaudemoulin, a Frenchman who discovered this singular fact several years ago, has recently suggested several possible applications to which he thinks it may he put; the practicability of which, however, may he considered quite problematical. He thinks it might he applied for building purposes, since the filled hags or hoxes need merely he held in place by a framework; while heing very thick they would form a protection, in case of being used for dwellings, against variations of temperature. Such walls, heside, would he fireproof. It is also suggested that for lowering heavy weights or even entire buildings, which, by a change of street levels, have become located too higb above the roadway, the sand bags could be placed beneath and their contents allowed gradually to escape, tbus letting the load slowly settle down.

Steam Navigation.—Wben steam navigation began, the wildest speculations were indulged in as to speed; but all of them were dooined to he falsified by the results. Witb the host of improvements yearly adopted, the origiual speed of eight miles per hour has scarcely heen doubled. On the average it has not; the fastest ocean-going steamers only accomplisb fifteen miles. In smooth rivers and in narrow channels much higber rates of speed have been obtained; but the average of all kinds of steamers, river and ocean, is from twelve to sixteen miles an bour, and the problem that still vexes engineers is how to obtain a much higher rate of speed. When that will he solved no one can tell; the ocean is a mighty monster, and will not readily be subdued.

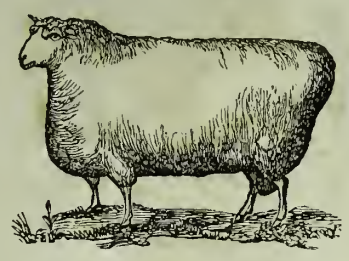
Paper From Peat.—M. Bertmeyer has recently exhibited, in the Polytechnic Society of Berlin, specimens of paper and pasteboard obtained from the products of the peat beds about Konigsberg, the quality of which is said to he excellent. The pastehoard was 2.4 inches thick, and sufficiently hard and solid to admit of planing and polishing. The paper made from peat alone was brittle, like that manufactured from straw; but the addition of fifteen per cent. of rags produced the requisite toughness.

It is stated that there are 300 coal mines in Russia, of which about twenty bave really some title to he called serious undertakings, and hut three irou works, one of which belongs to the Crown.

The steel trade in Austria is making great progress; the production during the past two years has heen 135,000 tons and 150,000 tons respectively, wbereas, in 1863 it did not exceed 7,000 tons.

Live Stock Notices.

B. W. Owens, San Francisco. | E. Moore, Stockton, Cal



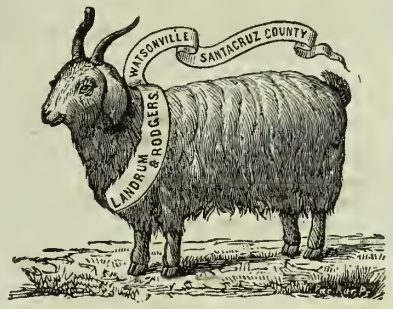
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COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m



We respectfully invite the attention of wool growers to our fine stock of Cotswool Sheep and Angora Goats. We have 200 head of Pure Breed Angoras to select from; we have some of the finest Goats in America; we guarantee everything we sell to be as represented; our prices are as low as any in America for the same grade of stock. Call and see, or address,

LANDRUM & RODGERS,

13v7-eow-tf Watsonville, Cal.

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts., SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

Thoroughbred Jersey Bull Calves for Sale.

I have now on hand twelve Thoroughbred Jersey Bull Calves, bred by me from my last importation to California, and will sell them cheaper than they could be brought from the East.

A. MAILLIARD,

San Rafael, Marin Co., Cal.,

Breeder of Jerseys and Alderneys. 7v8-3m

FARMERS' LINE.

THE SPLENDID IRON SHIP,

CITY OF YORK,

1255 Tons. A 1.



AULD.....Master

This fine vessel has the greater portion of its cargo engaged, and is now receiving freight, and will have quick dispatch. Freights taken in lots to suit Shippers. Will be followed by the splendid iron ship

GLENGARRY,

1769 Tons,

Now due here, and by other first-class vessels.

Liberal advances made on shipments of produce consigned to our house in Liverpool, Messrs. Robert Rodgers & Co.

RODGERS, MEYER & CO.,

aug15-tf 212 Battery stree

THE ALDEN

Fruit Preserving Company

OF CALIFORNIA,

Is now prepared to sell rights and furnish the necessary machinery for using the "ALDEN PROCESS," acknowledged to be the best method known for preserving Fruits, Vegetables, Meats, etc.

For full particulars call at the company's

Office, 426 Montgomery St., S. F.

G. W. DEITZLER, President.
W. M. WHERRY, Vice-President.
FRANK PYLE, Sec'y and Sup't.
BANK OF CALIFORNIA, Treasurer.

11v7-6m

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St.,

4v17-3m bet. Montgomery and Kearny Sts., S F

Nurseries and Seedsmen.

Established 1853.

Stocks for Nurserymen.

Plum Seedlings, Mirobolan, the best French stock, does not suckcr	$50 per 1000
Apple Seedlings	10 per 1000
Pear Seedlings	10 per 1000
Cherry Seedlings, Mazzard	12 per 1000
Cherry Seedlings, Mahaleb	20 per 1000
Walnuts, English, 4 to 6 feet	15 per 100
Cork Elm, best Elm, 4 to 6 feet	15 per 100
Blue Gum or Eucalyptus, in variety	5 to 10 per 100
Msgnolia Grandiflora, Magnolia Acuminata, Magnolia Tripetela, Golden Arborvitæ, Cratsgus Arhoria, Swedish Juniper, Irish Juniper, Heath-leaved Arborvitæ	LARGE STOCK
Heath, Mediterranean	$2 50 per doz.
Lauristinus, 6 to 12 in	2 50 per doz.

Making the growth of Oranges and Lemons a specialty, I have imported from all sources the best known varieties, and now offer five thousand Grafted Trees properly worked and twice transplanted at $18 per dozen. Grafted oranges by the 100 or 1,000 at prices on application. The amateur in want of large PALMS, large AURICARIAS, large CAMELIAS and large TREE FERNS, a good stock on hand; also the usual large stock of fruit and ornamental trees.

BERNARD S. FOX,

San Jose, Cal.

THOS. MEHERIN, Agent, 516 Battery Street, San Francocis. 24v83m.

SEEDS. SEEDS.

Encourage home industry and make a saving of at least 30 per cent.

If you want Seed that you can depend upon as to variety and freshness, why not send your orders direct to the grower and make a saving of at least thirty per cent. on the prices of other seedsmen. Send for catalogue, free, post-paid, and compare with prices of other dealers. Just received,

Grasses, Clover, Alfalfa and Field Seeds, Fruit and Evergreen Trees, Shrubs, Flowering Shrubs, and Greenhouse Plants. Cabbage, Onion and Cauliflower Plants.

Large assortment of **Bulbs** from Holland. Address all orders or letters of inquiry, to

SEVIN VINCENT,

607 Sansome street, San Francisco, Cal.

22v8-3m

SHINN'S NURSERIES,

NILES' JUNCTION,

Alameda County, - - California.

The attention of persons intending to set out Trees is requested to the well grown and large variety offered for sale by the undersigned at the above Nurseries. An examination of our stock will satisfy any one of the quality, being all that can be asked, and when the low prices we have fixed are taken into consideration, we believe we are offering the very best inducements for buyers to deal with us. For full particulars we refer to our circular for the approaching season, which will be sent, as requested, on application to either of the undersigned.

SHINN & CO.,

Proprietors.

Address James Shinn, Niles, Alameda County, Cal., or, Dr. J. W. Clark, 418 California street. San Francisco, Cal. 8v17-4mo.

ALMOND TREES.

35,000 Brier's Languedoc Almond Trees, one and two years old from the bud. This is the only Almond planted on a large scale, being hardy, late blooming, beautiful tree. It bears the second year from planting. The Almond is large and sweet with soft shell. Also, two year old Peach and English Walnut trees. Liberal terms to the trade and persons planting large orchards. Send orders to

W. W. BRIER,

21v8-3m Centerville, Alameda Co., Cal.

PEPPER'S NURSERIES.

(Established in 1858.) PETALUMA, CAL.

Green Houses and Tree Depot corner Washington and Liberty streets.

4 Green Houses. 3,000 feet of Glass. Fruit Trees a Specialty.

We offer for sale at lowest market rates a general assortment of Fruit and Shade trees, small Fruits, Vines, etc. Evergreen trees and Shrubs in great variety. Green House, Conservatory and Bedding Plants, Roses, etc.

We are now ready, Nov. 1st, to fill orders for trees and plants. Catalogue and price-list furnished on application.

Address, W. H. & G. B. PEPPER,

19v8-tf Petaluma, Sonoma Co., Cal.

80,000

AUSTRALIAN GUM TREES,

FOR SALE AT THE CELEBRATED

GUM TREE FOREST NURSERY,

Haywards, Alameda Co.

Address

JAMES T. STRATTON,

No. 306 Pine street, over Pacific Bank, S. F.

22v8-tf

The Aughinbaugh Blackberry



This new and excellent variety of Blackberries, which begin to ripen from the first to the fifteenth of May, and continue to produce berries until the middle of July, about the time other varieties begin to ripen.

Plants are now ready for transplanting and for sale at my residence on Washington Avenue, west of Euclid Street, Alameda, and at Geo. F. Silvester's, 317 Washington Street, San Francisco. Price, $25 per hundred plants.

G. AUGHINBAUGH.

23v8-tf

J. ROCK'S NURSERIES,

San Jose, California.

We offer this season a Complete Stock of

FRUIT AND ORNAMENTAL TREES,

SMALL FRUITS AND PLANTS.

The attention of Dealers, Nurserymen and Planters is invited to our Large Stock of **Fruit Trees.**

All Leading Market Varieties are grown in large quantities To all those purchasing largely we will make a Liberal Discount.

Catalogues FREE on application.

23-v8-tf JOHN ROCK, San Jose, Cal.

SUPERIOR FRUIT TREES

TRUE TO NAME.

A fine collection of **Evergreen and Deciduous Trees. Australian Gum Trees** in variety, by the hundred or thousand. **Monterey Cypress** in quantities and sizes to suit all. **Orange and Lemon Trees** at reduced prices. A general variety of Nursery stock.

Also, Rhubarb and Asparagus roots.

T. CORLEY,

18v29-tf 315 Washington Street, S. F.

THOS. A. GAREY'S

Semi-Tropical Nurseries.

LOS ANGELOS, CAL.

Forty varieties of the Citrus family of semi-tropical trees, including many rare and beautiful, as well as useful and profitable kinds.

Grafted and Budded Orange Trees a specialty. Trees packed to arrive in good order. Priced Catalogue sent free. Address me P. O. Box, 528, Los Angelos city, Cal.

23v8-6m THOS. A. GAREY.

Commission Merchants.

JOHN H. HEGLER,

Nos. 412 AND 414 SANSOME STREET, S. F.

Grangers' Dairy Produce

—AND—

COMMISSION HOUSE,

HAS EVERY FACILITY FOR SELLING

BUTTER, CHEESE,

EGGS,

POULTRY,
LARD,
HAMS,
HIDES,
BACON,
WOOL,
PELTS,
POTATOES,

Smoked and Salt Fish,

DRIED & CANNED FRUIT, HONEY, ETC.

H. K. CUMMINGS. 1858. H. H. RALSTON. 1874.

HENRY K. CUMMINGS & CO.,

Wholesale Fruit and Produce Commission House,

ESTABLISHED 1858.

No. 424 Battery street, southeast corner of Washington, San Francisco.

Our business being exclusively Commission, we have o interests that will conflict with those of the producer.

4v23-1y

Davis & Sutton, Commission Merchants,

For California Fruits; also for the sale of Butter, Eggs Cheese, Hops, Green and Dried Fruits, etc., 75 Warren street, New York. Refer to Anthony Halsey, Cashier, Tradesmen's National Bank, N. Y.; Ellwanger & Barry, Rochester, N. Y.; C. W. Reed, Sacramento, Cal.; A Lusk & Co., Pacific Fruit Market, San Francisco, Cal.

3v3-1y

CENTINELA COLONY

LOS ANGELES CO., CAL.

SIX MILES WEST OF LOS ANGELES, CAL.

The unparalleled success of the

LOMPOC COLONY,

SANTA BARBARA COUNTY,

Has induced the "Centincla Land Company of Los Angeles" to subdivide and place in market for sale and settlement, under the direction and management of the "California Immigrant Union," of San Francisco, the "Centinela and Sausal Redondo" Ranchos, containing Twenty-five Thousand Acres of Beautiful Valley Land, located seven miles west of the city of Los Angeles, and extending to and frontinv on the Pacific Ocean. There is now on the tract an orchard of about three hundred acres, containing Orange, Lemon, Lime, Fig, Walnut, Almond and Olive trees, and a nursery of young Orange and Lime Trees. Some of the Orange and Lime trees are in bearing. The tract will be subdivided in twenty, forty, eighty, one hundred and sixty-acre farms, and sold upon easy terms and long credits.

Auction Sale of Town Lots

—AND—

5, 10, 20 and 40 ACRE FARMS,

WILL COMMENCE ON

Monday, Jan. 18, 1875, at 12 o'clock, M.

And continue Five Days. The sale will take place on the Rancho. Parties desiring to purchase should be on the ground a few days prior to the sale, in order to examine the property. Title—United States patent.

SITUATION.

"Centinela," with the addition of the "Sausal Redondo," contains 25,000 acres. The boundary of the Rancho commences three and a half miles from the city limits of Los Angeles, and extends to the Pacific Ocean.

TOPOGRAPHY.

"Centinela" is made up of one broad, level, fertile valley, of over twenty thousand acres, and beautiful fertile rolling hills near the ocean.

SOIL.

The soil is an exceedingly fertile loam, and is, without exception, the richest and most productive in Southern California. Its vicinity to the ocean insures a crop without irrigation. Excellent wheat has been raised for the last two years upon the hills adjoining the ocean. This wheat field contains 1,000 acres, and covers the lightest soil upon the Rancho. There is no alkali or barren land.

SEMI-TROICAL FRUITS.

There are a few bearing orange and lime trees upon the Centinela, and the fruit they produce is of the largest and finest quality. There is an orchard containing 6,000 orange trees three years old, and 1,700 almond, lime and lemon trees. The almond, lime and lemon trees will bear fruit in 1875. The orange trees will bear in five years. There are 7,000 three-year-old orange trees in the nursery near the orchard. Fig, pepper and gum trees grow without irrigation. The entire orchard can be taken care of by three men with six horses. The orchard will be kept undivided by the company, to save the expense of each shareholder having a few trees to take care of. Each share will entitle the owner to about 15 trees in the orchard and about the same number in the nursery. The almond, lime and lemon trees will yield an immediate return. In five years each orange tree will produce $20 per annum, or $300 per share for those now planted. There are flowers in the garden in bloom every day in the year.

SHEEP.

A flock of about 14,000 sheep will be kept undivided, to save expense to the shareholders. This will give about 30 sheep to each share. The sheep will produce in increase and wool over $2 each, yearly, over expenses. They will be grazed upon outlying and unsold lands of the company. The "No-fence" Law is in force in Los Angeles County.

CLIMATE.

The climate of the "Centincla" is without exception the finest and most equable in the world. It varies but little throughout the year. The mean temperature is about 60 degrees. The mercury falls but little below 60 in winter and rises but little above 60 in summer. You sleep under one pair of blankets and with your bed-room window open every night in the year.

AGRICULTURE.

The soil of the "Centinela" is admirably adapted for all kinds of grain, vegetables and fruit.

WATER.

The Centinela creek rises upon the Rancho and runs through the northern portion of the tract. It affords an abundance of clear spring water. The source of the Centincla creek consists of several natural artesian springs, showing that artesian water can be obtained by boring.

THE TOWN.

A square mile is laid off at an eligible point on the tract, with lots 31x135; avenue 100 feet, and streets 80 feet wide. A stream of water can be brought in so as to supply every lot with crystal, cool, sweet water. One of the forty-acre tracts is set apart for a College and Farm School, and there will be a Ten-acre Park on each of the four sides of the town, and Four Blocks in the center of the town for Public Buildings, Schools, etc. A large lot will also be set apart for each Religious Denomination, and a block given for the erection of a large hall by the different Fraternal, Grange and Temperance Societies.

FARE.

Parties desiring to visit the Rancho can take the 8:10 A. M. train of the Southern Pacific Railroad to Soledad, thence by Coast Line Stage to Los Angeles; by 4 P. M. train to Bakersfield, thence by stage to Los Angeles; or by Pacific Mail Co.'s and Goodall, Nelson & Perkins' steamships direct to Los Angeles, where conveyance can be had to go to the Rancho free of charge.

RAILROADS AND WHARF.

The Company intend building a wharf to enable Steamships from San Francisco and other places to land passengers on the tract. A narrow-gauge railroad will be built from Los Angeles to the wharf, a distance of about 12 miles. The Main Street and Agricultural Park Railway will soon be built to the park, about — miles from the tract. This railway will be extended to the tract as soon as the settlement will justify it

Apply to W. H. MARTIN

General Agent California Immigrant Union, 534 California street, between Montgomery and Kearny streets, San Francisco, to TEMPLE & WORKMAN, Bankers, or Gen. SHIELDS, Los Angeles, or O. L. ABBOTT, Corresponding Secretary State Grange Immigrant Aid Association, Santa Barbara.

P. S.—A second sale will take place on the Rancho, commencing on Monday, the 8th of March, 1875.

Further particulars will be furnished by the officers and directors of the Centinela Land Company, of Los Angeles, who are: F. P. F. Temple, President; F. P. Howard, Vice-President; J. S. Slauson, Los Angeles County Bank, Treasurer; J. M. Griffith, of Griffith, Lynch & Co.; Gen. J. H. Shields; O. W. Childs; D. Freeman, on the Rancho; W. H. J. Brooks, Secretary.

NEW CROP OF

BLUE GUM SEED.

GRASS AND CLOVER SEEDS.

FLOWER AND VEGETABLE SEEDS.

TREE AND FRUIT SEEDS.

OF EVERY DESIRABLE VARIETY AND OF THE BEST QUALITY; OFFERED AT WHOLESALE OR RETAIL, BY

GEO. F. SILVESTER,

SEEDSMAN,

No. 317 Washington Street,

24v8 tf SAN FRANCISCO.

1874. GUIDE AND CATALOGUE 1875 FREE.

To persons contemplating purchasing I will send my ILLUSTRATED, DESCRIPTIVE CATALOGUE and GUIDE to the VEGETABLE and FLOWER GARDEN WITHOUT CHARGE. It contains the most extensive and valuable list of



Flowering Bulbs, Roots and Plants, Semi-Tropical Trees, Ornamental Shrubs, Fruit and Shade Trees, etc., ever offered in this market. It tells how to successfully grow the Australian Blue Gum, the Monterey Cypress, Pine, etc., and the proper method of Cultivating Tobacco on this Coast.

☞ My stock of seeds is in part my own raising and in part direct importations from the best European and Eastern growers, and is unsurpassed in all respects by that offered by any other establishment.

100,000 Australian Blue Gums and Monterey Cypress in boxes at from $30 to $50 per 1,000, raised at my own Nursery at San Rafael.

R. J. TRUMBULL,

Grower, Importer, Wholesale and Retail Dealer in Seeds, Shrubs, Trees, etc.

20v8-6m-16p 427 Sansome street, S. F.

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PACIFIC RURAL PRESS

Volume VIII.] SAN FRANCISCO, SATURDAY, DECEMBER 26, 1874. [Number 26.

Shell Mound, Oakland.

EDITORS PRESS.—Some two miles northwest of Oakland city hall, a few rods from the shore of the bay, on the farm of Mr. Wiard, stands an aboriginal mound. Well-grown willow trees effectually conceal it from view until you arrive quite near it. The accompanying sketch was taken when the tops of many of the trees on the south side were cut away. These have now so luxuriantly grown as to embower the *tumulus*, and shut out the view on the side of approach. It is called the "Shell Mound," from the fact of its being composed chiefly of marine shells and some gravel. It rises a sharply defined pile from the surface of a uniformly level plain of rich, alluvial soil. Without exact measurement it is estimated to be near thirty-five feet high. It is a circular, conical pyramid, with a truncated or flat summit, which measures 150 feet in diameter, and 300 feet at the base. Bones, skulls, stone mortars and charcoal, have been found in and about it.

Whence this heap of unsolidified earthy matter? How came it there—a lonely monument upon the plain—a solitary beacon upon the shore? Is it the product of winds, floods, glaciers, earth upheavals, or is it the work of human hands? If the latter, for what object? These questions inevitably arise as you stand in profound contemplation upon its imposing, silent summit.

That it owes its existence to the barbarous energy of human beings is self-evident. Abbe Domenick, speaking of Indian mounds on the Pacific coast, says they are often made from the adjacent soil, and hence near them is observed wells or pits from which the earth has been taken to erect them. Such an explanation does not apply to the Oakland mound, for there are no pit holes in its vicinity, and if there had been, which by the agency of the elements and time became filled up, that alluvial soil could not furnish the shells of which the mound is mainly composed.

Shell mounds are numerous on the Pacific coast, and they abound in profusion in Denmark. Danish archæologists call them "kjockenmoddings," or "kitchenmiddens;" and regard them as the accumulated remains of the repasts of by-gone inhabitants. We know not how the people slept, but these crumbs tell us what they ate and where. Such mounds have grown into existence by accident and without object. A like "kitchenmidden" keeps subordinate company with the subject of our sketch, only a few rods east of it. This is a beautiful, round topped knoll, some 12 feet high and 400 feet basic diameter. On this most reliable spot of always moist, mellow mould, Mr. W.'s dwelling-house stands surrounded with choice shrubbery.

Since the builders are all gone and no descendant remains to give information, we are left to satisfy our enquiry into the probable origin and use of the mound—as best we may—from analogous objects of antiquity, and from ancient usage. These crowd the conviction upon us that the tumulus in question, like many in Mexico and the United States, answered as an essential feature in religious observances. Hence they are sometimes called oratories, and places of religious sacrifice.

If we consult an ancient record, we find a reasonable clue that may help to unravel the mound story, and connect ancient history in our hands, with ancient work at our feet.

Note the following from 2d Kings xxiii, 5:

"Josiah put down idolatrous priests, whom the kings of Judah had ordained to burn incense in high places round about Jerusalem; them also that burned incense unto Baal, and to the sun, and to the moon, and to the planets, and to all the host of heaven."*

Is not "shell mound" one of those "high places?" says Mr. Dunlop (*Spirit History of Man.*) "Among the American aborigines sun worship and fire worship are found everywhere as well as traditions of an ancient worship of the sun in the United States. Mounds were erected for sun worship as "high places."

In the University Museum at Berkeley, there is an aboriginal stone image of the crescent moon, which was taken from a shell mound in Alameda. Here is an apurtenance of the shrine "to the host of heaven."

By force of gravity water and drift, by wind or wave, seek low places on the earth's surface; but animals and birds, when not in quest of food, delight in hights, and high places become natural resorts. Mankind prefer their dwellings, their places of worship, their sepulchres in high places. The masons originally convened their lodges on hill tops, which were high places.

So earthly altitude seems to have been the forerunner of later and better aspirations among living beings from the brute to man the world over.

A. S. HUDSON, M. D.

The Farm Women of California.

The benefits derived from woman's presence are duly appreciated in nearly every condition and phase of social life; but in the steady onward march of progressive agriculture, the efficiency of her services has not been recognized. Her efforts in this direction have been crowned with the best results; not only indoors and outdoors on the farm, but in furnishing a goodly proportion of the suggestive ideas and practical knowledge contained in agricultural journalism. Some of the soundest and most profitable agricultural correspondence that comes to the PRESS is from the ladies. Perhaps we are particularly favored in this respect for some unaccountable reason—at any rate we would like to have our Eastern readers compare this feature of the PRESS with that of their own agricultural papers and see if any of them can show a corps of female contributors equal to ours.



SHELL MOUND, OAKLAND.

It would really seem as though the dull and silly men and women of the cities who patronizingly favor the "wives and daughters of the California farmers," with spoon-victual literature and diluted "useful information" would be able to discern in the correspondence of these same wives and daughters, evidence of a condition of culture far above that for which their writing is adapted. If the wives and daughters of California farmers were in need of a champion, and we were allowed to assume that position, we would point to the columns of the RURAL PRESS as affording proof that they are fully up to the requirements of their position in regard to intellectual culture; and from our personal acquaintance with them we are certain that, as a class, they do not lack in the social and domestic qualities.

The West has conceded altogether too much to the East in regard to the claims of the women of the two sections to usefulness, especially in farm life. Although we cannot justly accuse any parties worthy of notice, of giving a downright comparison in this respect between the women of the East and those of the West, still we do not hesitate to declare that in the public acknowledgments of the high position which woman holds in American farm life, the Eastern type is generally chosen; and although nothing really disparaging is said of the woman of the West, they are approached in a manner which is offensively patronizing and allowances are made that are entirely uncalled for.

The efficiency of the Western farm woman in wielding the axe or hoe, or in managing the reaper, has been admitted in many a newspaper item. Such acknowledgments are not to be considered as "damning with faint praise;" on the contrary, it should be looked upon as a particularly bright feather in woman's bonnet, for in the new portion of this country the American woman has proved herself an angel in the field as well as in the house. Still this kind of praise is not entirely satisfactory. The scenes in which these agricultural Amazons figure so conspicuously may be true to the life, that is to that brief stage of American pioneer life which they represent. But this soon passes among the things that were, though the people of European countries, and even in the older portion of our own country, retain the impressions of such scenes as forming a representative picture of Western life. But in California, as in other Western States, those who desire a correct estimate of the position of the women of the country, should view them in the new country farm house, at the church, the Grange and other social gatherings, and see if they are not as much at home in the duties and refinements of these places as are the women of the East, to whom so much praise is justly given.

It is with extreme pride that we exhibit in the columns of our paper contributions from the representative women of California farm life. We repeat the acknowledgment that we have been particularly favored in this respect; still we are not satisfied, and propose to lay out more work for them during the coming year. There is one branch, especially, which we desire our fair correspondent to take in hand, we mean dairying. Since the adoption of the factory system in cheese and butter making, people seem to be possessed with the idea that woman's mission in the dairy is at an end. But this is far from being the case, even where the factory system prevails most; while in California, where it has merely secured a footing here and there, woman is still the presiding genius of the dairy.

Let us hear from the dairy women of the coast. Inform us of the present needs of this department, and we will do all in our power to have them supplied. An interchange of ideas through the columns of the PRESS will be of mutual benefit among the dairy women, and will effectually assist this department in its steady progression.

Holiday Greetings.

The date of our paper, December 26, places us "one day after the fair," in wishing the friends and patrons of the RURAL PRESS a merry Christmas; but it does not deprive us of the satisfaction of offering our friendly, hearty, holiday greetings. And though our date is a day after Christmas, the PRESS was printed, and our greetings put in type in ample time for us to send the wish for a merry Christmas in its appropriate time; for, as in connection with Thanksgiving day, we managed to "steal a march" on time sufficient to enable all hands to keep the holiday. We shall do the same with the PRESS of New Year's week; and will take this occasion to bespeak for all a happy New Year. The idea that the presence of winter clothed in a massive blanket of snow, his venerable beard adorned with icicles, in order to make these wintry holidays duly appreciated, is a mere fancy. They are really creations of the heart, and not mere ordinations of religious or political bodies, or matters of social custom. People seem resolved to be merrier on the first of these and happier on the latter, than on other days of the year; and we all know that the extra amount of happiness thus secured is not purchased with the good wishes that are expended in our behalf, but arises from that condition of our hearts which in all sincerity wishes good to others. It is a mighty achievment for human nature to attain this position, even once or twice a year. It is good evidence of the nature of the soil of the social heart; and although it would be unreasonable for us to expect to have it keep up to this standard, it will be well for us to look to it that it does not fall below it. We therefore contribute our mite in this holy service by sending a hearty holiday greeting to all our friends.

Agriculture in the State University.

The Regents of the State University have received a letter from Professor Hilgard by which it appears that he may be expected to begin his work as Professor and his residence at Berkeley, early in the next college term, which begins January 13th.

The Regents have also received a letter from Professor Bessie of the Agricultural College of Iowa, accepting an invitation to deliver some lectures before the students in agriculture. He will give several short courses on the relation of the sciences to agriculture, on the improvement of varieties, and a third on the practice of agriculture. These lectures will commence at the beginning of the next term, January 13th.

The work of the nursery and propagating house has been carried forward with great vigor during the last few months. Many thousands of plants have been started and as the wet season advances will be transferred to their appropriate places. The beginning of an orchard, a nursery, an arboretum, and a botanic garden has thus been secured. We are also informed that certain agricultural experiments, in addition to these in horticulture and arboriculture, are also to be instituted—so far as the very limited means at command will permit.

WILL WORK ON WITH US.—We are happy to say that our readers may expect the sharp and cheery pens of our old correspondents to continue with the RURAL for 1875. Some 6,000 subscribers and probably over 20,000 readers—among the noblest of the noble on this coast—will be glad to know that Mary Mountain, Mrs. Nichols, Jennie C. Carr, Eliza Anthony, Sister C. A. C., W. A. Sanders, Mr. Berwick, Felix Gillett, and other old correspondents, equally worthy in their sphere, will "write on" for the RURAL—not only through the seventy's we hope, but beyond the eighty's. And we will try and do our part so well that correspondents may continue to feel "it is well to write for the RURAL," and subscribers say, "it is well to take the RURAL."

CORRESPONDENCE.

[The RURAL PRESS, in opening the columns of this department to its correspondents, does not desire to lay before its readers anything which is not in keeping with its character and position as an agricultural and family paper. Facts are always thankfully received; and suggestions and matters of opinion on subjects connected with agriculture are also acceptable; though correspondents are to be understood as speaking for themselves and not for the PRESS.]

Home Hunting Still.

EDITORS PRESS:—In writing up my notes of travel—"Home Hunting"—I left off near Ft. Tejon. After two days journey along the foothills bordering on the Mojave desert, we suddenly turned westward, through a mountain pass, and bade adieu to the region where the cactus flourishes, even in the tree form, with a trunk oftentimes fifteen inches in diameter, and eight feet of body to the first limb. I will leave the naming of the tree to some one else. I would suggest to some ingenious Yankee to try the manufacturing of a covering for trunks of these cactus logs, as the texture of the timber—if timber it is—resembles a mixture of old leather and horsehair. A Yankee that can make a sheepskin imitation out of rye straw ought to be able to make buckskin out of this material. Stanford & Co's engineers have just been making another survey on this and other mountain passes in this region. An easy job to get a railroad through this pass, though rumor has it that the engineers are finding a better pass north a few miles, that is called the "Vasquez Pass," the route of the bandit from the Tejon mountains to Los Angeles.

Francis Quita valley is rather unimportant. Twenty thousand acres. Oil and asphaltum are found here; some good soil, though much cactus, willows and cottonwood, cover the valley. On the foothills of the southern part of the valley wild walnut trees are plenty. Bushels of nuts under the trees, of a flavor equal to any nut of the walnut family. Here in these little nooks and glens is the place to try for the early fruits and vegetables for the San Francisco and the Los Angeles markets. Possibly the breath of the desert visits here at times, or it may be that the breath of Old Ocean is too strong; but here is a natural hothouse, and it ought to be good for something. The southern railroad will split the valley; this is a cersainty; and there is no certainty but the first cherries and vegetables for San Francisco will come from here.

Pleasant valley, of Solano, that has borne off the palm for being able to dodge frosts that sweep other fruit blooms of early spring, is in an eddy of breezes from the coast and of the Sacramento valley; and somehow or other these breezes are always eddying when other localities are frosting. That's what's the matter with Pleasant valley.

Now, there ought to be a valley in here, some place where the Mojave and the coast winds eddy, and a northern mountain wall to reflect a forcing ray, similar to those favored sunny glens of Solano's fame.

Well, time and the railroad will tell. Three miles over to San Fernando valley. Fifty thousand acres of a beautiful valley—walled in "mountains high." Here I met my old friend from my schoolboy days, Charley Maclay, of Santa Clara, who is now one of the owners of this land, where used to be thousands of busy hands and hundreds of busy plowmen. There is no need of a trip to Europe or Asia to see stupendous ruins.

Seldom, or in fact never, did I spend an afternoon and an evening to suit me better than at Old Mission, San Fernando. The old orchard enclosed by massive earthen walls is doing well yet. But where are the hands that made them? Go to the annals of San Francisco and read the history of this, the richest mission of this coast. Then come and see the ruins, aqueducts, reservoirs and orchards. And if you have a "familiar spirit," go up in the old sanctum where the old monk who built these mighty structures, used to spend his devoted hours, and commune with Father Monk.

Rumor around the Mission has it that the spirit of the father monk who built San Fernando dwells, and is to be consulted in this sanctum on any night. Having never visited this chamber I am not at liberty to say that the monk can't be consulted there; but I intend to visit it one of these nights, and see if the old gentleman will call on me; and if he tells me anything pertaining to agriculture, I will give it publicity. Our Editors PRESS, think likely our "Plain Spoken Friend" a little given to giving too hard a rub on some of the neighbors of San Joaquin, as he passed by. That may be so, but in passing by San Fernando and pitching my tent in Los Nietos I think more of returning to Fernando, than of going toward Texas, (the place I started for). San Fernando has as good soil as Bakersfield; or anywhere else. The climate, I think, is preferable to the Los Angeles valley. Water, is better, though not so abundant, and if a man is on the work at all, he can get something to do, at good remunerative rates. Hundreds of tons of freight are to be hauled from here to Cerro Gordo, Panamint and other mines of the desert.

Stages connect the two ends of California's railroad, and an immense business this staging and teaming business is. Right here is a market for every farm product, and, in general, at San Francisco rates, with freight added, which is quite an item of itself, aside from the first value. Maclay & Co. will give a farmer almost any reasonable "lay" asked. Many energetic farmers from the northern counties are here and at work. Some have bought, others have leased. Boring for artesian water has just been begun. I can't see why artesian wells shall not be a success here. "Adios."

GEO. KAY MILLER.

Los Nietos, Nov. 30th, 1874.

Cotton in Arizona.

EDITORS PRESS:—In compliance with your request, I send information of the result of my experiment in raising cotton in the valley of Salt river, in Arizona. You will remember that I had considerable difficulty in getting seed, as the first forwarded to me was lost by the overturning of the express wagon in Salt river. I received the twenty pounds you forwarded to me, on the first of May, and on the eleventh of May I planted it. I received about forty pounds more about the 15th of May and planted that also. I planted in drills four feet apart, pulting in the seed very thick. When the plants were about a foot high, it was thinned, leaving a stalk about every 18 inches. Owing to the breaking of the dams on the river no water could be procured for irrigating and my cotton was never irrigated. We had some good rains in July, however, which brought out the summer crops somewhat. The cotton was picked in November, and yielded about 1,300 pounds of seed cotton to the acre. (I mean the cotton with the seed in it weighed that much). I am satisfied that if water had been plenty so that it could have been well irrigated and cultivated, the crop could have been increased 30 per cent. at least. Quite a number of gentlemen who are experienced in cotton culture have examined my cotton patch, and all agree in saying that there can be no doubt but cotton can be made a paying crop in this country.

The extremely low price of grain will compel our farmers to change their crops, and I think that cotton will be tried by a number this coming year. There is but one difficulty in the crop here that I can see, and that is in the gathering of the crop. But our very long season will be in our favor, and I think the labor of Indians can be procured here by proper measures being taken. I will send you a sample of my cotton. J. T. ALSAP.

Phœnix, A. T., Dec. 5, 1874.

Wool Growing in Sonoma.

EDITORS PRESS:—Wool growing is something that, heretofore, has received but little attention in Sonoma county; but I am pleased to see that nearly every farmer has a small flock of sheep now; and all will agree with me in saying that this is one of the most important as well as money-making branches of industry. One farmer here, who three years ago, purchased 100 ewes, has netted a profit of nearly $1,600 and still has more sheep than he had at first. Although it has cost him something to keep them he has made big interest on the money invested. Why our stock raisers and farmers do not enter more largely into this business is truly a mystery to me. If wool growing should receive a little more attention woolen and cloth factories would spring up all over the country, which would greatly add to its financial and commercial prosperity. I was talking to a gentleman a few days ago on this subject who owns a splendid farm of 400 acres. He has about 100 acres of rich valley land and 300 acres of grazing and pasture land. During the conversation he informed me of his intention to sow his whole farm in alfalfa and give his undivided attention to wool growing. By this means he can keep from 500 to 800 sheep the whole year. I think this is a good idea and worthy the imitation of our friends who find farming on a small scale, a poor and slow way of making money.

Since the rain storm we have had several pleasant, sunshiny days. The young grass and other vegetation is growing rapidly, and if not checked in its growth by "Old Jack Frost," feed for stock will soon be good. This is a beautiful day; the sun is shining in all his golden glory; little birds perched high up among the branches of huge old oaks, are singing merry songs, and all nature seems to be welcoming the warm sunshine.

EUGENE ORRILLUS.

Healdsburg, Dec. 7, 1874.

LICK OBSERVATORY.—A Washington depatch says Professor Simon Newcomb has been requested by the Trustees of the Lick Fund, to determine where and for what price the great equatorial telescope may be constructed which is to be the pride of the new California observatory. He will sail for Europe in a few days on duty for the National Observatory, and will visit Lord Rosse's Observatory in Ireland, and Paris, Berlin and other noted observatories.

THE HORSE.

Trotting at Fairs.

Let me premise by saying that I am not the owner of a trotter, never was, and never design to be. Never have I met any one that did not prefer to drive or ride after a horse free and fast, rather than one which was slow and sure. Never have I met man or woman that did not admire the fleetest horse, no matter where or how the speed of the horse was put to the test. Then, wherein are the objections to trotting—horse racing, if one choose to call it—as an element in our annual fairs? Is not much of the objection founded on falsely-assumed premises? It is assumed that trials of speed are a species of gambling, and therefore have a demoralizing tendency. But, seriously, do trials of speed incite any keener competition, or provoke any sharper spirit of rivalry than are to be found in cattle rings? These behind the curtain know full well that as often in the one class as in the other, the premiums won are not evidences of superior merit, but of which has played the most adroit hand.

The design of trials of speed is to show the degree of excellence attained by one class of farm stock. The design of such exhibitions may be perverted to base ends, and so may any competition in business life. Instead of condemning it in toto, the aim and effort ought to be to rid it of what is objectionable, and elevate it to a standard which deserves and shall command moral respect.

With the present code of laws for the government of trotting races, administered by judges honest and fearless, there can be no more of jockeyism than in any other department of a fair where there are contestants. Pool selling is said to be an adjunct of trotting. So is whiskey drinking an adjunct of corn and wheat growing; and beer drinking of hop and barley growing; and snuffing, chewing and smoking, of tobacco growing.—*Cor. Maine Farmer.*

The foregoing are sensible views on the much-mooted subject of trotting horses at agricultural fairs, such as we held and put forth at the legislative agricultural meeting at the Capitol, in Boston, nearly twenty years ago. The horse is a noble animal, and it is chiefly valuable for two purposes, to-wit—for work and travel; and if it be lawful and right to exhibit a draft horse at a fair, with his training and the results thereof, why not his speed as a trotter? We saw no objection then, we see none now; any more than the foregoing correspondent, who like ourselves, has no trotting horse to exhibit, as he states. Trained horses, whether for draft or trotting, should have fair play at agricultural fairs.—*Boston Cultivator.*

Best Feed for Horses.

John Stanton Gould says: "I have found great difference of opinion with regard to feeding, and the amount of food necessary for keeping animals, and I resolved to go to headquarters. I spent considerable time in the city of New York, visiting the horse-railroad stables, in that city and in Brooklyn, and the omnibus horse stables, in order to learn their experience. I found those in charge very courteous. They opened their books and gave me every information desired. To sum up the results, looking over the record of their experience for several years, I found that they had all settled down, each company for itself, as the result of careful and repeated experiments, the details of which I was privileged to observe, upon one uniform rule for horse-railroad horses, and that was, 12 pounds of hay and 10 pounds of Indian meal per day. In that way a railroad horse was kept up to his highest condition, and they were enabled to do their work more satisfactorily than under any other system that had been tried. Oats had been repeatedly used as an article of food, and their cost was carefully compared with that of Indian meal. It was found at the time that during the hot weather the feeding of this amount of meal would be found injurious; but the result of their experience was, that Indian meal, on the whole, for a railroad or omnibus horse, was the true thing. But they have one very curious practice, the reason of which I am unable to fathom, which I ought to state in connection with this, as possibly bearing upon the subject under discussion. They invariably water all their horses at one o'clock at night. They have an idea, how true it is I do not know, that watering their horses at night adds greatly to their power of digesting food, and prevents injurious consequences."

HOW TO DESTROY WARTS IN HORSES.—When the growth of the wart proves of the fixed cartilaginous kind, no time should be lost in its removal. The excrescence should be thoroughly excised, being sundered at the base. Some bleeding will follow; this may be readily promoted by having at hand a saucepan of water boiling on a small fire. Into the heated liquid a budding-iron should be placed, by which means sufficient heat is obtained to stimulate the open months of the vessels when the instrument is applied to the bleeding surface, without any danger being incurred of destroying the living flesh. The next best remedy is the use of caustic. Strong acetic acid, only to be obtained as aromatic vinegar, is the mildest cautery; the next in strength is butter of antimony; after that ranks nitrate of silver, or lunar caustic; and last is sulphuric acid, made into a paste with powdered sulphur, and applied by means of a flat piece of wood. Any remedy used will require time, in proportion to the mildness or strength of the means employed. Ligatures are objectionable because the process is slow, the pain continuous, and the ligatures become filthy. The wart, when large, is liable to turn putrid before it falls off; when small, the slight projection and breadth of base renders a ligature impossible.—*Turf.*

FAST WALKING HORSES.—One of the editors of the *National Live Stock Journal* says he once owned a pair of horses which would walk five miles in an hour without urging. He rode a stallion thirty two miles in six hours and ten minutes, over a rough road, the horse not leaving a square walk any of the time. A friend owned a mare that "could always walk right away from this stallion." He thinks that if as much pains were taken to develop fast walking as there is to develop fast trotting, walking six miles an hour would not be considered more wonderful than trotting in 2:25.

POULTRY YARD.

Pekin Ducks.

EDITORS PRESS.—Having just received a pair of fine Pekin ducks, from the celebrated poultry fancier, William Clift, of Connecticut, I thought I would mention it through your columns. They are beautiful large, white ducks, and I think the only pair in this State. They will be a great improvement, as I think they are larger than any other variety. I have tried buying eggs to hatch, but never was successful, so I advise any one to buy the fowls as the cheapest way in the end. I think Mr. Clift a reliable breeder.

I would like to know if there are others of the same variety in the State as they are said to have been first imported from Pekin in 1873. MRS. F. E. RUSSELL,

Dixon, Dec. 17, 1874.

[We have not been able to learn of any other ducks of this breed in this State. A gentleman informs us that he has fowls answering to this description, but which are known as South American wood ducks. They have some peculiar characteristics, one of which is they never "quack," their only cry being a faint "peep."—EDS. PRESS.[

Cramming Poultry.

It is altogether a vitiated taste that creates a demand for over-fattened meat. There is no nutriment in fat, and with the large consumption of sugar, syrup, and starchy food, that is common among us, the necessities of the system for carbonaceous food are fully, if not over supplied. The use of excessively fat food then is a waste of material, and it probably induces some of the bilious disorders which are so common. With regard to poultry these remarks are especially applicable. The markets of the cities are filled with fowls that are lined with fat, a useless addition that is a loss to the consumer, and its production has been at the expense of a waste of food to the feeder. Besides, housekeepers complain of these over fat fowls, that they are deficient in delicacy of flavor, and are coarse and greasy, thus losing in quality as well as in weight. This matter is in the hands of farmers themselves to remedy. They alone decide as to what degree of fatness their fowls shall be brought, or rather, not knowing exactly how fat they are, they continue to feed them much too long for their own profit. A very thin fowl can be brought into good condition for the table by three weeks' feeding. Generally a fowl from a grain-stubble or a barn-yard at a time when waste grain is scattered about liberally, as well as at other times, when the housewife undertakes the feeding of the poultry, is sufficiently fat for the market, without extra feed. If poultry is marketed at the age of two years, and none older than that kept, the quality of the flesh will be all that can be desired, without any cramming or extra feed, and the extra fat that is laid upon an old fowl, is no addition to its goodness, but rather adds to its bad qualities. A good judge of poultry looks to the age of a fowl, and passes by the old birds that have been crammed to fit them for market.—*American Agriculturist.*

KEEP BUT ONE BREED.—There is hardly an enthusiast of poultry who does not at first endeavor to keep several varieties. He visits an exhibition, or the yards of some extensive dealer, and, admiring various breeds, purchases some of each, without considering whether his accommodations are sufficient for all, and under estimating the amount of time required to manage them perfectly. We would say to all beginners do not attempt to keep more than one breed unless you have plenty of time to spend, and, in addition, inexhaustible patience, and that tact possessed by the horn naturalist, that is by one who has an ingrained fondness for animals. The interest in thoroughbred fowls is so great and increasing, that thousands of novices set out every year in the pursuit of rearing them. There is little satisfaction, however, in the long run, in keeping fowls, unless they are well managed and thrifty. Keep only one variety, therefore, in order to succeed as an amateur.—*Live Stock Journal.*

Good Health.

Effects Of Imagination.

At a late meeting of the Paris Académie des Sciences a letter was read from M. Volpicelli, of Rome, to M. Chevreul, in which the writer related that, if a magnet were brought near a nervous patient magnetism had the effect of disturbing him in various ways, and notably in his condition of health. M. Volpicelli goes on to state that being invited to experimeut on a nervous subject, at the San Spirito hospital, he practiced a little ruse, and instead of taking with him a magnet provided himself with a piece of unmagnetised iron. The patient scarcely saw the piece of iron before he fell into convulsions; his imagination became so highly excited that nervous disturbances of the most extreme character supervened. M. Volpicelli then made a second experiment. A magnet was placed in the hands of another person suffering from nervous disorder, who, when a few minutes had elapsed was so extremely excited that it was necessary to take the magnet from him. M. Volpicilli, however, was convinced that the nervous disturbance was brought on by the sight of the magnet and not by magnetic action, and he was suhsequently able to assure himself of the fact. The same person had to preside over a scientific meeting, and M. Volpicelli contrived to surround him with very powerful magnets, which were introduced into his chair, into the drawer of the table before him, and even under his feet, without his having the slightest suspicion of the trap lald for him. During the meeting, which lasted more that two hours, his nerves were not in the least affected; and when the meeting was over he declared, in answer to a question put to him by M. Volpicelli, that he was perfectly well; but when it came to his knowledge that he had been surrounded by powerful magnets he was extremely surprised and alarmed, and began to have the idea that he could not have heen so well as he thought.

Let Blisters Alone.

One of the most generally diffused erroneous notions is that it is good and beneficial to break a blister, whether it is caused by a burn or the heating of a part of the body by continued friction under pressure, to which the feet especially are exposed after long walks in illy fitting shoes or boots. Such blisters are always found filled with a clear liquid, which must be retained and not drawn off by lancing them; and also those blisters often caused by a part of the skin being forcibly pinched and squeezed, and which contains blood, must be left alone. This water or blood in blisters is a healing substance, of a kind most appropriate for the parts where the skin is destroyed, and if the blister is allowed to dry out by itself, the new skin forms much more rapidly under it, and much pain is avoided. If the blister contains blood, it must be treated in the same way, as blood is the best healing salve. And, by the way, while using the word "healing salve," it may be well to state that there are no healing salves or healing plasters. All salves and plasters retard healing, and many wounds which heal uotwithstanding the salves and plasters applied, would heal in half the time if left alone.

It is only in exceptional cases that a blister may be punctured, namely, when very full of fluid so as to cause much pain by its tension, a prick of a fine needle may be given so as to allow the excess of fluid a chance of escape. Instead of breaking a blister and destroying the loose skin over it, it should be protected so as to guard against any such destruction by accident.

Burning at a White Heat Painless.—Dr. J. S. Camden publishes in the *Medical Times and Gazette* information very important to surgeons who are not cognizant of the fact, that the application of a white-hot iron to the body is absolutely painless, while when only red-hot it is an extremely painful operation. When operating with a red-hot iron on men the screeching was fearful, while when the iron was white-hot not a murmur was heard; and when he operated so on a horse the animal appeared to be scarcely aware of what was being done. He proposes to use for actual cautery a large spirit blow-pipe, hut we can hardly thiuk that this would do, as only in the center of the flame great heat is generated, while all around lesser degrees prevail, which would certainly be painful. We would recommend the more extensive use of the platinum wire, kept white-hot by the current of an electric battery; this has thus far been less used than it deserves. It may be too troublesome for private practice, but should be resorted to in all public medical institutions.

Lime Vapor in Membranous Croup.—Dr. John Bartlett, in the Chicago *Medical Examiner*, recommends the following method of using lime vapor: The patient is placed in a tent extemporized with bedclothes and clotheshorse. In this is placed a tub and in the tub a bucket filled with hot water. Patient being seated in the tent with nurse, unslacked lime is dropped into the water. From time to time the physician estimates the state of the vapor, increasing the steam and lime by dropping into the water pieces of lime. The quantity of lime required is large. The doctor's experience in the use of this bath has been a happy one. The onward march of the disease seemed checked at once and a real improvement to take place.

Treatment of Felons.

We recently gave the following item under this head from the London *Lancet:* "As soou as the disease is felt, put directly over the spot a fly blister, about the size of your thumb nail and let it remain for six hours, at the expiration of which time, directly under the surface of the blister, may be seen the felon, which can instautly be taken out with the point of a needle or a lancet."

We uow reproduce it in order to give the following remarks upon this item by a medical correspondent in Vineland, N. J.:

"I have noticed the *Lancet's* cure for bone felon several times in the current medical journals during the past three years, aud I think the notice too brief to be understood.

"I have employed this treatment for the past seven years and with results that lead me to adopt it altogether. A piece of adhesive plaster, an inch or more in width, and long enough to go once and a half around the finger, should have spread upon it a surface of cantharidal plaster, the size of a three cent piece.

"This surface should be applied to the tender part and the adhesive plaster carried around the finger and lapped.

"It should remain for tweuty-four hours at least, and then if vesication has occurred, the cuticle may be raised and beneath it will be found a small opening not exceeding a line in diameter, which penetrates the deep tissue and discharges pus. If the blister is applied dnring the first three days this is all sufficient for a cure; and if the disease has run longer than this, its course is shortened and the cure remarkably quick.

"The plaster should remain 48 hours when applied to the palm of laboring men, a fresh one being furnished at the end of 24 hours in these cases the opening may be enlarged as the quantity of pus is greater. The pain is greatly diminished during the action of the blister.

"Those who have experienced disappointment at finding no matter after laying a delicate finger open to the bone, and who have seen patients resort to all sorts of means to avoid the inevitable knife, will be most pleasantly surprised at the efficacy of the blister."

Useful Information.

A Very Useful Table.

The following table, computed from actual experience, will be found very useful in calculating the weight of loads, etc.—or the weight of any of the articles mentioned, in bulk. It shows the weight per cubic foot. All that is necessary, therefore, is to measure the bulk; ascertain the number of cubic feet in it; multiply this by the weight per foot, and divide by 2,000, when you have the weight per ton:

SUBSTANCE.	WEIGHT PER CUBIC FOOT.
Cast Iron	450 lbs.
Water	62½ "
White pine, seasoned, about	30 "
White Oak, " "	52 "
Loose earth	95 "
Common soil, compact	124 "
Clay, about	135 "
Clay, with stones	160 "
Brick	125 "

The following shows the bulk of a ton of different substances:

	CUBIC FEET.
Sand	28
Earth, compact	18
" loose	32
Clay	17
Half rotted manure, solid	36
" " " " if coarse, about	50
Timothy hay, moderately pressed	500
Clover, about	750

All that is necessary, therefore, in order to ascertain the quantity you have on hand in tons is to take the measurements as above, and if hay, divide by 500 or 750, as the case may be; if manure, by 36, etc.

The Pottery Tree.—Among the many vegetable products of Brazil the pottery tree of Para is not the least worthy of note. This tree, the *Moquilea utilis* of botanists, attains a hight of 100 feet up to the lowest branches. The stem is very slender, seldom much exceeding one foot in diameter at the base. The wood is very hard and contains a very large amount of silica—not so much, however, as the bark, which is largely employed as a source of silica in the manufacture of pottery. In preparing the bark for the potter's use it is first burned, and the residue is then pulverized and mixed with clay in varying proportions. With an equal quantity of the two ingredients a superior quality of ware is produced. It is very durable, and will bear almost any amount of heat. The natives employ it for all manner of culinary purposes. When fresh the bark cuts like soft sandstone, and the preseueo of the silex may be readily ascertained by grinding a piece of the bark betweeu the teeth. When dry it is generally brittle, though sometimes hard to break. After being burned, if of good quality, it cannot be broken up between the fingers, a pestle and mortar being required to crush it.

A Tall Chimney.—A furnace stack or chimney has just been built at the Meier furnaces-St. Louis, which is 203 feet high, 25 feet square at the base and 10 and a half feet at the top. The inside of the stack for the first 75 feet is lined with fire brick.

The Cause of Change of Color in the Chameleon.—The London *Medical Record* gives some interesting facts relative to the cause of change of color in the chameleon, which have been gathered from remarks made on this subject by M. Paul Bert, at a late meeting of the Société de Biologie of Paris. This animal, whose natural color is dark green, has the power of changing to pale green, and very pale yellow, this change of color being entirely due to the nervous system. The explanation of this phenomenon is thus given: "Under the skin, and communicating with it, are vessels filled with pigment, coursing through little canals which intersect, cross, and interlace each other in all directions at the back of the epidermis itself. This pigment is afterwards drawn back into the vesicles by the volition of the animal, and the chameleon then takes on a pale tint produced by a pale-yellow tissue, visible by its transparency." It has been discovered that the color of the animal is affected by light, and that if disturbed at night the side on which a light is thrown becomes pale, the other side remaining unchanged. So far no explanation of this curious fact has been suggested, and it offers a field for research and observation which may lead to very important results.

Soldering.—Every housekeeper may not know of what they are capable in the line of keeping their tinware in order. For the benefit of such, I will say that it is easier to solder such things than to pay a traveling tinker two prices for mending them. Take a sharp knife and scrape the tin around the leak until it is bright, so that the solder will stick. Theu sprinkle on a little powdered resin; (they have liquid solder to sell, but resin will do as well;) lay your solder on the hole and with your soldering iron melt it on. Do not have the iron too hot or the solder will adhere to that. After two or three trials you can do a job that you will be proud of. If you do not own a soldering iron, procure one by all means; but when hard pressed, I have used the knob on the end of the fire shovel or a smoothe piece of iron, or held a candle under the spot to be mended. Anything is better than stopping leaking pans with beeswax or rags. Try it, young housekeepers, and see how independent you will feel. Your pans should be dry when you take them in hand.

Fresco Painting.—Fresco painting is so called because executed with water colors upon fresh plaster. This plaster is made of slacked lime and fine sand, and is applied upon a coating rough enough to make it adhere to it. The fresco needs a wall from materials tinctured with saltpetre, and the colors must be such as the lime does not change. When the artist has polished and made very smooth the surface to he painted, he traces upon it the previously prepared composition. The designs, of the size of the picture, are called cartoons, because prepared upon large sheets of paper glued together. Upon the wall the drawing is traced with a point of ivory or wood, or the contour of the drawing is pricked with a pin and a tampon dipped in charcoal passed along the lines of the holes, which fixes the design on the plaster. Afterward the artist follows the tracing with a sharp pointed pencil or stylus, and this indelible contour is called the uail of the fresco.

Gas-Metres.—A Common belief. If there is one thing more than another in which we have little or no faith at all, it is as to the correctness of gas-meters. Their principle may be a good one, (good for the gas companies,) but, like "white men" that are "very uncertain." A journal open before us, the *American Manufacturer*, published at Pittsburg, Pa., has some rather startling exposures relative to the humbug played upon the consumers, not unfrequently, by these little machines. It is bad enough to pay exorbitant prices for illuminating gas, and to be supplied with a very poor article, but to be cheated in the measurement, and to he overcharged for the miserable stuff as to the quantity supplied, is aggravating to the last degree.—*Boston Globe.*

Size of Barrels.—A president of an agricultural society calls attention to the fact that there are, in a standard legal barrel, only one hundred quarts, while the ordinary flour barrel most in use among farmers in the sale of potatoes and apples, contains nearly one-eighth more. Farmers sell their produce in flour barrels, and merchants transfer the samo to standard barrels, making a profit on quantity as well as on the price. In the sales of eight hundred barrels of potatoes from a farm, the proprietor loses one hundred barrels, worth $250, for which he might as well be paid. The middleman, not the consumer, profits by this. Farmers, see to it that you employ the oue hundred-quart barrels hereafter.

Polishing Brass.—Youug engiueers will find the following recipe a good one for polishing the brass work of their engines. Rub the surface of the metal with rottenstone and sweet oil, theu rub off with a piece of cotton flannel and polish with soft leather. A solution of oxalic acid rubbed over tarnished brass soon removes the tarnish, rendering the metal bright. The acid must be washed off with water, and the brass rubbed with whiting and soft leather. A mixture of muriatic acid and alum dissolved in water imparts a golden color to brass articles that are steeped in it for a few seconds.

The School Ship.

Now that a school training ship for this port has become a thing of certainty in the early future, it is desirable that no mistake should be made in the inception of the enterprise or in the mode of its management. We presume that it is understood that the main object shall be to give to street boys, otherwise unprovided for, au education that will fit them for the sea, and make of them respectable and useful members of society. In selecting candidates for the school we further presume that such persons will be selected as may be considered more or less in need of reformatory training. It is intended not only to educate them as sailors, but to correct any evil habits they may have contracted or tendeucy to crime they may have exhibited. Of course confirmed criminals or notoriously bad persous should not be received. This, we believe is substantially the course pursued in selecting candidates for school ships at the ports of New York and Boston. The school ship enterprise, we believe, has proven decidedly successful in both the cities named.

At New York over 2,000 boys have entered the ship, the greater portion of whom were entirely destitute of homes or friends, and more or less incorrigihle—so much so that without such intervention, the most of them would, in all probability, have eventually found their way to the house of correction or the states prison. A large portion of them have passed from the school ship into honorable positions in life. Some 500 of the 2,000 have shipped as a superior class of sailors, and have done credit to themselves and their training. Many have been fully reclaimed and taken back hy their parents to enter upon other avocations than those connected with the sea. The New York *Herald*, from which we glean these facts, says that 90 per cent. of all those discharged have turned from their evil habits and become steady, useful men. The schoolship has saved the boys from vagabondism, and society from the cost of the crimes and punishment inseperable from such lite.

It is to be hoped that a similar course may be pursued in the case of the San Francisco school ship, and that the work may be attended with equally good results. We have a class of boys here, naturally good enough, and as smart and capable as any set of boys in Christendom. They are goiug to the bad more from the force of circumstances than from any innate desire to lead a life of vagabondism. Let a helping hand be extended towards them; let there be some honorable occupation devised upon which these boys can enter, and the question of "What shall we do with our hoys?" will be fully settled, at least for the great majority of them. We trust that the schoolship will be held for the benefit of just that class of boys which we have pointed out.

Commander Glass has prepared a plan by which the training ship may be regulated and maintained, which appears to be wise and judicious, and we see no reason why it would not be applicable to the particular class of boys to which we have alluded. The ship must be principally maintained at the expense of the city; and if so the city should have the benefit of it—not a few parents and boys merely who are abundantly able to take care of themselves and what belongs to them.

Handling Sugar Beets.—It is well known, beets, when taken from the ground for the manufacture of sugar, undergo a rapid deterioration in their saccharine properties. As soon as they are removed from the earth they begin to give off carbonic acid and take up oxygen. The carbonic acid is a product of the oxidation of the sugar contained in the beets, According to calculation 1,000 cwt. beets would lose 10 cwt. sugar in 30 days. The air contained in the beets consists mainly of nitrogen and carbonic acid, aud very little oxygen.

How long will Soils Retain Effluvia?—At the late meeting of the American Medical Association, Dr. Bell, of Brooklyn, to show the unlimited time in which saturated alluvial soils retain their deleterious influences, related a circumstance of the digging up of the mastodon at Cohoes, New York, some years ago, the effect of which was to make the workmen sick from the stench arisiug, notwithstanding the fact that it was but a young mammoth, and had been buried only about 40,000 years.

Working Green Wood.—A correspondent of the *Scientific American* says: Some of my brother wood-workers may not know that the difficulty of finishing a small piece of green wood, as is sometimes uecessary, may be overcome by scorching the piece after it is shaped out. A few lighted shavings will do, and you can then file and sandpaper without trouble.

A Freak of Nature.—It is said that in a recent gale on Lake Superior, an island two acres in extent, on which the pine trees were three feet in diameter, was displaced by the waves, and floated a distance of three miles into the harbor of Duluth.

In Memoriam.—A marble slab has been placed upon the house in which Agassiz was horn, at Motier, Switzerland, with this inscription: "J. Louis Agassiz, the celebrated naturalist, was born in this house May 28, 1807."

Patrons of Husbandry.

STATE GRANGE HEADQUARTERS.

I. G. Gardner, State Agent; Executive Committee Rooms; Fruit Growers' Associations, and Farmers' Mutual Life Insurance Company, all at No. 6 Liedesdorf street. W. H. Baxter, State Secretary, at Grangers' Bank, 415 California street, S. F.

Grange Clubs for the Rural.

The Secretary (or some other Patron) is invited to act as club agent for the Pacific Rural Press in every Grange. Circular and sample copies sent free. Five or more names will constitute a club, at the rate of $3 a year. No new subscriptions will be taken without payment in advance. We will pay the postage after Jan. 1st, 1875. All club subscriptions in Granges should end on the last day of the month. Old subscribers may join the club by paying the Secretary up to club dates. Every Patron farmer should read a reliable agricultural paper. We need the support of all on this coast. Help the Secretary (or club agent) to make up a large list in your neighborhood. Don't delay.

NOTICE.

From and after this date, all moneys due to the State Grange by Subordinate Granges should be forwarded to the Grangers' Bank of California, No. 415 California street, San Francisco, together with reports appertaining thereto, addressed to me.

JOHN B. CARRINGTON,
Treasurer State Grange.

November 4th, 1874. 19-v8-tf

Installation of Officers.

Any member of the State Grange is empowered to instal the officers of any Subordinate Grange.

J. M. HAMILTON,
W. M. State Grange of Cal.

Extra Copies of the Pacific Rural Press

Containing Grange addresses, resolutions, obituaries, etc., will be furnished post-paid at ten cents per copy. Grangers wishing numerous copies should send the order for them with the MS.

Secretaries will be supplied with a printed list of suscribers for this paper upon sending a list of post offices within the range of their Grange. Also with blank reports, etc., for clubs.

Grange Directory.—A full list of officers of the State Grange, Deputies, names of Councils, Subordinate Granges, Masters and Secretaries will appear in this department on the first Saturday of each month.

A Grange Sociable.

The Stockton *Leader* reports the holding of a Grange sociable at Red Cross Hall, Stockton, on Friday of last week, which was an exceedingly pleasant affair. There was a large attendance of resident Grangers, a goodly delegation from the country, and many persons not connected with the Order. The evening was spent in animated social converse, interspersed with music and literary exercises. This part of the pleasures of the evening was under the direction of Mrs. George West, who displayed talent, taste and judgment in the discharge of her duties. The literary performances consisted of a sparkling dialogue, "Matrimonial Sweets," sustained by Mr. Waterman and Miss Disco; an original and well written paper by Miss Alice Ashley; declamation, "The Hindoo's Dream," by Frank Wolf; and reading "The Beautiful Snow," by Miss Clara Steer. All executed the parts undertaken by them exceedingly well, and received the plaudits of the auditors. The music was good, and the whole affair was replete with rational and refined enjoyment.

We should be pleased to report such "sociables" oftener. We believe that such gatherings will do much good in the way of keeping up the social and literary character of the Grange. Let outsiders, as in the above instance, come in occasionally, to see what we are doing, and how much good we can do to all who come in with us. It is not necessary that all our meetings should be devoted to the routine of the ritual business, or to the discussion of matters relating exclusively to form work. Let us take time to be sociable now and then. It will enable us to attend to the regular business of the Grange and of the farm with better cheer and increased zest, when we devote ourselves exclusively to those duties.

Study to Make the Grange Useful.—In what manner can over 20,000 organized societies be made more useful than they now are? This is an important consideration for every Grange and every Patron. That which is not useful or beneficial lives not—or at least continues but a sickly existence. On the contrary, that which is useful soon becomes a necessity to men. Let us then strive to make the Grange a necessity to the men and women of the nation. We may like to see it a business necessity, but if we depend on that feature alone, the time may come when its necessity will fail to be apparent—for business finally comes to run in grooves, out of which it is moved only with the greatest difficulty. Let us rather strive to make the social feature of the Grange the great necessity of the age, for then it will become indeed perpetual, and "a thing of beauty and joy forever." It won't pay men and women to combine together for mere show, any more than it will pay to fritter away one's life for the sake of mere accumulation, without considering what we may do with it. Then let each brother and each sister, who has the perpetuity of the Order at heart study what they can do to make it more and still more useful.

From the Granges.

Linn's Valley.

Editors Press:—Your circular of December 1st is at hand. I have presented the Rural Press to the Grange several times and solicited subscriptions of the members, but have not met with that success your paper deserves. I have received more than my money back every year that I have paid for the Rural Press, in the farm and household departments, beside the advantage of knowing where to get the cheapest and best seeds the market affords at reasonable rates. I cannot get along without the Rural, and if you fail to receive my remittance when due, please don't stop the paper. You shall have your money. Remember we have no post-offices here, and no express, so that our mail is rather irregular.

Enclosed you will find a list of officers elect in our Grange, not having seen them in either the Press or *Granger* up to this date. Our Grange had a joyful meeting at its last gathering—a harvest feast—a feast of good things indeed, and all enjoyed it. A class of four men and one woman was passed into the mysteries and benefits of the fourth degree on that day, and more coming. I will do all I can for the Press. Sam. E. Reed, Sec'y.

Linn's valley, Dec. 4th, 1874.

[Many thanks to our kind friend. We shall endeavor to retain his confidence in the reliability of the Rural Press. The notice of election sent us will be found in appropriate place.—Eds. Press.]

Fourth Anniversary of Pomo Grange.

Editors Press.—Pomo Grange celebrated anniversary day with a will. The day was fine, the dinner excellent, and everybody—which means Grangers and invited guests and those who came on seeing the "latch-string out"—evidently enjoyed themselves. The festivities wound up with a dance in the evening, the sweet tones of the new organ, accompanied by violin and flute, beguiling the dancers into the small hours of the night. Our organ, by the way, was purchased at San Francisco Grange Agency and gives much satisfaction. Our Grange numbers something over 60 and several are reported for membership by card and invitation. Farm work presses, but the Grange meetings are kept up.

Potter Valley Grange warmed their new hall on the occasion, and we learn had a fine dinner and dance, and sent everybody home the happier for the occasion. C. I. H. N.

Farmington Grange, Tehama Co.

Editors Press:—In consequence of an early winter and an unpleasant place for holding our meetings, our Grange has been very poorly attended for the last four months. In consequence of early rains our members got far behind with their work; but having caught up, and having also enlarged our school-house, which gives us ample room, I am in hopes our Patrons will attend more regularly. Our Grange is 10 months old and there has never been an article written by any member of this Grange to the Rural, and why I can't say. It is not because we have no members that are competent. Granger.

[We fear there are many other Granges that are delinquent in regard to informing the Order at large as to their condition and prospects.—Eds. Press.]

Notes of Grange Travel---No. 6.

[Written for the Rural Press by J. W. A. Wright.]

Editors Press:—The round of official visits in our southern counties, winding up with Ventura, Santa Barbara, San Luis Obispo and Santa Cruz counties has been completed and ends this part of our work for the year. The result of these conferences has been, in the main highly satisfactory.

The whole of our southern sea coast in these counties is certainly a most attractive portion of California. In future numbers of the Rural, I hope to give a more detailed account of this long and pleasant trip. Allow me here to call attention to a serious error which has crept into several of our newspapers and even into one or two official copies of our "Declaration of Purposes." It is so important a mistake as to require a special correction, which I hope will be made in all future copies issued.

The true copy reads: "We are opposed to excessive salaries, high rates of interest and exorbitant per cent. profits in trade."

The faulty copy reads: "We are opposed to excessive salaries, high rates of interest and exorbitant per cent. profits of producers."

As is seen at a glance the change in the latter clause totally alters the meaning intended.

San Francisco, Dec. 22, 1874.

Christmas at Capay.—The members of Capay Grange propose to have a good time on Christmas eve, and will provide presents for the little ones to be placed upon two magnificent trees. They anticipate a good time.

From a Nevada Grange.

Editors Press:—Merritt Grange, No. 7, is located in Esmeralda county, Nev., with 29 charter members; 3 initiated members, and some half dozen members ready and anxious to ride the traditional Angora, etc. We held our festival December 4th, with feast and dance, in grand style. About one hundred and fifty persons were present. It was conducted on temperance principles, and in that as in every other feature it was an improvement on parties as conducted hitherto with us. Our valley is thinly settled, and principally by persons who have chosen the "golden casket" and found the grinning skeleton therein, and, at last, after lost years and wrecked hopes they turn to the "leaden" one of agriculture, resolved to pursue the slow and sure but noble occupation of rural life. Our valley is generally known as Mason valley—though I believe the original and proper name was Walker valley, and is on Walker river, a stream about as big as the Tuolumne, of California, and reaches far up into the Sierras, meeting the Tuolumne half way and locking fingers with that dashing stream, each river rushing madly on in opposite directions from each other, and each to water its own beautiful valley.

Our valley is situated east of Virginia City some forty miles. The principal crops are barley, wheat, oats, all the cereals, and, I think, a third larger yield than in California, or at least we consider 35 bushels only an average crop. In vegetables the soil produces an excellent quality, though hardly as much to the acre as some of your valleys; but from this you may except beets, whether stock or sugar beets. All our farming is by irrigation, and we have no failure of crops, as there is not likely to be any scarcity of water for irrigation. The valley produces about seventy-five thousand bushels a year of the different grains. Any amount of hay could be cut here or vegetables raised. There are about ten thousand head of cattle and horses in the valley, and a similar number of sheep, which of course get their living on the range. The valley is about 25 miles long, north by south, and from 10 to 15 miles in width, east to west, containing about fifty thousand acres of firstrate farming land, and three times that amount of an inferior quality. Probably one-half of the best quality is taken either as homesteads, or by purchase from the State. About 2,000 acres are cultivated in grain, and one-third of that amount in other products. There are about one hundred voters in the valley, though in the last election, through colonization, we polled about one hundred and fifty votes.

Living on the border of civilization, with Piutes on one side and a mining community on the other, and neither very conducive to a high moral tone of society, we are struggling to develop the great mine and source of all wealth—the soil. Our mines, though the richest in the world, are not unadulterated good. The trail of the serpent is over all.

Well, we must wait. There is a better day for Nevada, but nothing short of a thorough organization of Granges in this State can bring it. Yours respectfully, Butterfly.

Mason valley, Nev., Dec. 12, 1874.

Warehouse Committee.

The Grange warehouse committee appears to be looking after the matter intrusted to their charge. The Antioch *Ledger*, Dec. 19th, says that on the Saturday previous "the committee appointed to examine locations and receive propositions for the Grange warehouse, visited Antioch and were received by members of the Antioch, Point of Timber, Sherman Island and Collinsville Granges. John G. Chase, who is ever alive to the interests of our town, brought out his finest barouche and took the committee to the Marsh Landing and intervening points on the river. On their return to the hall dinner was served in the lower room of the building and it was a feast such as farmers' wives and daughters know well how to prepare. There was an abundance of everything, and all of the very best. The committee made a thorough examination of the Grange property at this place, consisting of the wharf, three hundred and sixty feet in length, a two story building now used as a hall and eighteen lots fifty by a hundred feet each. The committee expressed themselves as highly pleased with the location."

We believe that the committee had previously visited Vallejo and vicinity on the same business. This committee, it will be recollected, is to report the result of their engineering to the Grange Business Association of this city as soon as that body is fully organized under the laws of the State.

Santa Rosa Grangers will hold a harvest feast Saturday, Dec. 26th. Bro. Cressey, Manager of the Grangers' Bank, and other visiting members will be present, and no doubt offer interesting and important information. We hope to receive a proper report of the good time our Santa Rosa friends are bound to have. Reports from other Granges also desired.

Election of Officers.

Merritt Grange, Mason Valley, Nevada.—Kimber Cleaver, M.; David Cooper, O.; J. J. Fox, S.; G. Waldo, L.; C. H. Martin, A. S.; T. Sheddon, C.; W. B. Sanders, T.; Clark Cleaver, See'y; J. Lancaster, G. K.; Mrs. R. A. Cleaver, Ceres; Mrs. M. Hernleben, Pomona; Mrs. W. B. Sanders, Flora; Miss Alice Sprsgg, L. A. S.

Farmington Grange, No. 167, Tehama Co.—C. F. Fosler, M; Wm. Jewett, O; A. J. Loomis, L.; J. Mullin, S.; A. J. Chittenden, A. S.; S. P. Gsroutte, C.; C. C. Chittenden, T.; S. H. Loomis, Sec'y; J. Speeks, G. K; Miss M. E. Speeks, Ceres; Mrs. M J. Mullen, Pomona; Mrs. D. Foster, Flora; Mrs. V. Jewett, L. A. S.

Linn's Valley Grange, Kern Co.—S. W. Woody, M.; J. F. Lewis, O.; H. Pascal L.; J. Pascal, S.; J. Wicker, A. S.; T. Waller, C.; David Lavers, T.; S. E. Reed, Sec'y; T. E. Wilks, G. K.; Mrs. Morrison, Ceres; Mrs. E. Wilks, Pomona; Miss M. Earley, Flora; Mrs. Julia Morrill, L. A. S. Trustees—James Prenett, 3 years; H. Pascoel, 2 years; D. Lavers, 1 year.

Princeton Grange.—From R. A. Rush, Sec'y, Dec. 14th—R. R. Rush, M.; A. S. Hemstreet, O.; M. P. Fergueson, L.; L. H. Helpinston, C.; A. Calden, S.; Charles High, A. S.; H. Jameson, T.; P. H. Scott, S.; C. H. Merrill, G. K.; Miss Alice Cartmel, L. A. S.; Mrs. A. Calden, Ceres; Mrs. P. H. Scott, Pomona; Mrs. R. R. Rush, Flora.

Millville Grange, Shasta Co.—John P. Webb, M.; J. L. Nichols, O.; J. F. Winsell, L.; T. L. Goult, S.; S. T. Benton, A. S.; P. B. Sanglois, C.; E. Wagoner, T.; Geo. W. Welch, Sec'y; Johnson Fender, G. K.; Mrs. J. F. Winsell, Pomona; Mrs. Keeney, Ceres; Mrs. J. Goult, Flora; Mrs. J. L. Nichols, L. A. S. Trustees—T. L. Goult, J. P. Webb, and J. F. Winsell.

Woodbridge Grange. No. 84.—Ezra Fiske, M.; Geo. H. Ashley, O.; W. B. White, S.; J. L. Hutson, L.; H. C. Gillingham, A. S.; E. J. McIntosh, C.; G. W. Bessler, T.; A. S. Thomas, Sec'y; S. Woodruff, G. K.; Mrs. G. H. Ashley, Ceres; Mrs. W. B. White, Pomona; Miss Ella Moore, Flora; Mrs. R. Gillingham, L. A. S. J.; D. Huffman, Trustee,

Berryessa Grange, Napa County.—J. W. Smittle, M.; C. Gosling, O.; J. C. Owens, L.; L. H. Switzer, S.; Charles Seawell, A. S.; R. C. Gillaspy, C.; A. M. Jackson, T.; S. H. Buford, Sec'y; P. Laflech, G. K.; Miss May Stafford, Ceres; Mrs. Mollie Stafford, Pomona; Miss Sallie Gillaspy, Flora; Miss Nellie Gillaspy, L. A. S.

Liberty Grange, No. 69.—J. N. Woods, M.; Theodore M. Tracy, O.; N. A. Knight, L.; Victor Jshant, S.; J. Schomp, A. S.; William Carter, C.; J. Garner, T.; Charles C. Paulk, S.; Albert Woods, G. K.; Mrs. Annie V. Woods, Ceres; Maggie Carter, Flora; Hattie Schooler, L. A. S.; Mrs. Eva Woods, Pomona; Charles C. Garner, Sec'y.

Oakdale Grange, No. 160, Oakdale, Stanislaus county.—A. S. Emery, M.; C. R. Callender, O.; T. G. Murphy, L.; C. A. Adie, S.; Wm. Litt, A. S.; F. G. Whitby, C.; Robert Lovell, T.; C. B. Ingalls, Sec.; S. B. Callender, G. K.; Mrs. Francis Murphy, Ceres; Mrs. E. V. Ingalls; Pomona; Mrs. A. M. Emery, Flora; Mrs. Eliza Lovell, L. A. S.; C. R. Callender, Trustee for the ensuing three years.

Roseville Grange.—W. F. Davis, M.; W. H. Murray, O.; A. N. Moore, L.; Robert Ward, Sec'y; J. F. Cross, S.; George Williams, A. S.; J. B. McClung, T.; James Scott, C.; Mrs. Cross, Ceres; Mrs. Mertes, Pomona; Mrs. Nehr, Flora; Mrs. Lucy Murray, L. A. S.; Trustees, Nicholas Mertes for three years; George Cole for two years.

Jackson Valley Grange.—J. C. Hamrick, M.; Wm. Prouty, O; C. S. Black, L.; J. Dooley, Sec'y; James Parkinson, S.; J. P. Martin, A. S.; James Violet, C.; F. A. McMurray, T.; H. Dillian, G. K.; Mrs. Wm. Prouty, Ceres; Mrs. J. C. Hamrick, Pomona; Mrs. H. Dillian, Flora; Mrs. C. S. Black, L. A. S.

In Memoriam.

Editors Press:—By order I send to you the inclosed resolutions as delivered to me for publication, and by so doing you will oblige Liberty Grange, No. 69, P. of H.

Whereas, Brother Schooler has been called, through the relentless hand of death, by the Great Master of all assemblies, to leave our Councils here, as we believe, to enter that "rest that remains for the people of God." Therefore,

Resolved, That while we miss him in our Councils, and deeply sympathize with his bereaved children in their loss of a loving father, we recommend them to His care "who doth all things well," and who has said, "there is not not a sparrow falls to the ground without His notice." But that we "sorrow not as those who have no hope," for we believe that in this dispensation of Providence, our loss is Brother Schooler's eternal gain.

J. N. Woods, N. A. Knight, A. Woods. } Committee.

Chas. C. Garner, Sec'y.

Acampo, December 18, 1874.

Open Grange Meeting.—We believe that if the Patrons would hold once a month, an open meeting, inviting all farmers and their families to join in discussion for the good of agriculture, it would prove beneficial to the Order and the community. Will some of our leading Granges take the lead in this matter.

Making the Grange Useful.

The American people are intensely practical, and all those who come to this country from foreign parts become imbued with the same utilitarian spirit. This is probably a result of the condition of the country as well as of the people.

The country is new and much of it unsubdued, presenting the very greatest incentive to ambition and calling out all the forces that kind nature affords, and that a wise inventive skill can combine, and yet leaving untold work to be done. The people are generally in moderate circumstances, dependent upon their wits and their labor for the necessaries and comforts of life. With this condition of things it is not to be wondered at that the people seek that which is useful. Since utility is necessary to success, it is well to make a virtue of necessity, and make the Grange intensely practical. This is being done in a general way by combining for the building of mills and manufactories and for other purposes.

By these combinations and enterprises the wealth of the country is being increased and a general good accomplished, but these enterprises do very little toward keeping up the desired interest in the individual Granges.

Every member of each Grange should feel that his particular Grange is a practical benefit to him; a benefit, too, greater than he could, by the outlay of time and money in any other way obtain. This is being done by some Grangers and can be done by all.

We have lately read that Tecumseh Grange, which is situated in one of the finest wheat growing districts of southern Michigan, proposes to utilize the machinery of the Grange for the comparison of samples of seed wheat of home cultivation, and the adoption of that variety which a lengthened and thorough trial proves unquestionably the best.

Another plan of making the Grange immediately beneficial has been adopted in some of the Eastern Granges. A blackboard is always kept in readiness at their meeting, on which are entered by the members as they come in, stock and other property for sale and exchange, stock strayed or stolen, and such other information as they desire to bring before the members.

The Patrons of Goodhue county have made the Grange practical by discussing the cost of raising wheat, and other questions; and there are a thousand ways in which each meeting may be made not only a time of interest and pleasure, but also of profit.

The Grange is the outgrowth of necessity, and should be made a necessity to each member.—*Grange Advance.*

Harvest Feast at Oakland.—Temescal Grange, on Saturday last, received three Matrons and four Husbandmen into full membership. By invitation of Worthy Master Carr, Bro. W. H. Baxter officiated in his stead, in his usual happy manner. Bro. J. C. Cressey made a forcible speech, containing important facts and figures, among other things proofs of the great number and continued growth of the Order throughout the Union. Bros. Abbott, Gardner and Baxter also addressed the meeting with earnest and interesting remarks, which more members should have been present to listen to. Sisters Baxter and Gardner, of the State Grange, and other visiting members from abroad were present. The special committee of arrangements, well seconded by the committee of the whole, provided handsomely, amply furnished tables. The installation of officers is expected at the next regular meeting, January 2d; also, further work in the fourth degree. Regular meetings of the Grange are held on the first and third Saturdays of each month, at one o'clock.

Afternoon or Night Meetings.—Some of the eastern Granges are discussing the propriety of changing the times of meetings from the evening to afternoon. The change is urged "because of the opportunity it would afford the older members for attending; also the many sisters, who, however desirous they may be of taking part in the proceedings of the Grange, are not able to leave the children in the evening." The suggestion is certainly a very good one—where it is needed. The Granges of California, we believe, almost or quite universally hold their meetings on Saturday afternoons. The practice is a good one, and we advise our eastern brethren to lose no time in adopting it. The farmer will lose nothing by taking one, or even two half days in the month, for rest, recreation, amusement or instruction. He can do more work in the month by devoting one or two Saturday afternoons to meeting and conferring with his brother farmers on matters of mutual and practical interest. Looking at the matter in a pecuniary interest alone, he will be largely the gainer. In a social point of view the gain will be still greater and more important.

Installation Notice.—An official notice will be found in another column from Worthy Master Hamilton to the effect that any member of the State Grange is empowered to instal the officers of a subordinate Grange. It must be inferred from that decision that lady members of the State Grange are also empowered to instal, as the Grange places the sexes on a perfect equality. It will be borne in mind that officers should be installed on the first meeting of the Grange after January 1st.

Secrecy.

The secret feature of the Order should be no objection, for these only pertain to the mere workings of the Grange. It cannot properly be called a secret society, for its principles, objects and aims are published broadly, and all men are invited to examine them. A favorite text with opposers of secret societies is, "Let your light shine."

Does not the light of the Order shine clear all over the land? Those who use this text forget the frequent injunction of the great Lawgiver on this very subject:

"Let not thy left hand know what thy right hand doeth," and:

"When thou prayest, enter into thy closet," etc.

If a lamp gives good light, is it necessary that it should be made of glass, so that all can see the oil and wick? We are well aware that many are opposed to secret societies on conscientious principles and we respect their sentiments while we believe they are mistaken. If secret societies are wrong because they are secret, then any transaction conducted privately is wrong for the same reason. Are you ready to accept the conclusion, and always act upon it?—*Ex.*

Experience is the Best Teacher. — Can co-operative purchasiug be made a permaneut success? Are farmers not stepping out of their legitimate sphere and undertaking to do that which they cannot do for themselves, as well as other men, experts, could do for them? We answer by saying the farmers are experimenting. When they discover that they have made mistakes, they will retrieve their losses. Eveu if in the end they conclude to change their tactics, a little feeling into how other men do business will not do them any harm. But we are inclined to think that they will find co-operation in many things so valuable in its results, as to warrant its retention.—*Ex.*

Roseville Grange.—The enterprising farmers around Roseville, says the *Placer Argus* not only find time to put in large quantities of wheat and raise flocks of turkies, but they also manage to keep a live Grange ruuning—an institution that has been of great benefit to the agricultural and social interests of that section. The Grange is in a flourishing condition, and is constantly receiving fresh accessions. The last class admitted numbered twenty-three members, and another one of six is being initiated into the mysteries of the Order. The Grange now numbers ninety-three members. With its present list of officers and large number of active members, Roseville Grange will continue to be one of the living institutions of Placer county.

Tomales Grange held quite a gala day on Friday of last week. An open Grange was held, to which all friends of the Order were invited. The hall was beautifully decorated with evergreens, grasses and flowers, symbolical of the Order. Granger songs were sung, speeches made, and toasts given, in all of which the fair sex participated, for the Grange is a leveler of sex as well as color. A table bountifully spread and decorated with flowers occupied the center of the hall, to which every one was cordially invited. The festivities closed with a dance.

The New Officers.—In our Grange Directory for next week we shall give the new officers as elected for the ensuing year, so far as they have been received—whether installed or not. Secretaries who may notice and inacaracies in our lists of new officers as published will confer a favor by notifying us of the same at once, so that they may appear correct in the directory; also of any changes that may have occurred since.

Colusa Grange.—The Colusa Grange is to hold a harvest feast to-day. The *Sun* suggests that this, the last feast of the year, should be made the occasion of infusing new life into the body—preparing for the work of a new year. The *Sun* very properly adds: "The Grange at the county seat should be a model in all its appointments."

Imitation of Lace on Silk by Photography—A new and beautiful application of photography has lately appeared in England, by the aid of which any lace design can be transferred to silk, so that the latter material appears to be covered with the delicate and costly fabric. The lace to be copied is secured in a frame in contact with sensitive albumerized paper, and exposed to the light until a very deep impression is obtained. This is then fixed, and the paper washed and dried, forms a perfect negative. And the piece of paper is then sensitized with bicromate of potash and gelatin, and exposed under the negative. Inking with lithographic transfer ink follows, and the paper is placed in water and lightly sapped with a sponge. This throws out every detail of the inked spaces, the rest remaining white or free from ink. The impression is lastly transferred to a lithographic stone, and thence printed upon the silks by the usual process.

Large Bullock.—John Robl, of the California market has exhibited at his stalls the past week, what is said to have been the largest bullock's carcass ever exhibited. It was the Durham bullock, "William Sharon," fattened by Miller & Lux, until he weighed 3,600 pounds, and was sold for Christmas beef. The animal, as dressed for meat, weighed 2,700 pounds.

Farmers, Don't!

[Written for the Rural Press by P. H. Murphy.]

Don't leave your implements where you last used them, in the middle of the field or the fence corner, after the season is over for their use, to bleach and rust, with the expectation of finding them in good order the next year when needed.

Don't leave your horses hitched to your implements if you are going away from them, if only a short distance drop the traces; don't fasten them by winding the lines around the hub, or to the side of the wagon. Should they back the wagon the lines would draw the tighter.

Don't let your wagons or other wheeled implements call on you for oil or grease. Use castor oil for iron axles; it is the best lubricator and the cheapest in the end.

Don't give horses, when hot, cold water to drink; a few mouthfuls of hay first will prevent founder.

Don't let your horses, when heated, stand without cover; never let them stand in a draft of cold wind.

Don't feed your horses much grain immediately before a hard drive; give a full feed 12 hours before starting, and then give them time to digest the food.

Don't beat horses about the head, or think it a brave act to knock one down; you are only a step above the brute, and should receive the same treatment.

Don't, when on your way to market, or otherwise, drive at 2:40 gait and get your horses hot, nor stop at every whisky shed and let them cool off. While you may be eugaged in cards, and have your horses hitched to a post, cold and hungry, perhaps somebody may be watching at the gate anxiously for your return home.

Don't drink alcohol; at least if you have horses in charge, for you may receive fatal injuries should you do so.

Don't let colts, or even old horses, drag ropes around the yards where your farming tools are; they may get fast in them; nor turn them into the field with rope or halters on; they may get the hind leg fast therein.

Don't smoke or allow smoking in your barns, or carry matches into the fields in the summer time. Fires occur from these causes, often doing great damage.

Don't sell off your hay and grain in the fall and buy in the spring.

Don't try to farm without orchard, garden, and vineyard, for supplying the vicinities.

Don't set out trees and vines too close; eight feet square is best for grape vines.

Don't get into debt and pay interest, thinking you will surely make it pay. It's doubtful business, and often ruins the brightest hopes.

Don't neglect to keep a correct account of your business transactions for the farm and household; what you sell, the price, what you purchase, and from whom, and what you paid for it; the sales and expenses of each branch, such as fowls, hogs, cattle, horses, grain, fruit, etc.; also keep a diary, note down what has been done each day, the weather, where you were, and what you received and paid out, and any other matter of interest. I have kept them for 16 years, and have them now to look over. They are valuable to me; yours will be to you. Try it for one year.

Industrial Items.

The Oldest Piece of Iron.—Mr. Hauks lately exhibited a piece of iron, used to fasten together the stones composing the Servian wall, built arouud Rome 475 years B. C., more or less, and which was taken from a deep cut for a modern railroad, by Mr. Levi Goodrich, architect, of San Francisco. The face of the fragment was polished and acted upon by nitric acid, showing unusually large crystals, and for the purpose of comparison a piece of modern iron was exhibited. Is not this the oldest piece of iron in the world? and if iron improves by resting, as seems to be showu by the evident improvement in old razors, case knives, etc., this must be a very superior piece of metal. What did the microscope reveal when it was placed in comparison with "a piece of modern iron?"

Something New in Estimates.—It is stated that the total cost of building the north wing of the female department of the State Iusane Asylum was $88,511.83. The Legislature appropriated $113,000 for this purpose—a sum considered a fair estimate of its cost. Coming within an engineer's estimate is something new—in California at least.

Peat Manufactory.—The Stockton *Herald* states that a peat manufacturing company to manufacture that article for fuel is shortly to be started at Head Reach, on the San Joaquiu river.

Eight vessels are in course of construction at Humboldt Bay.

The San Joaquin Irrigating Canal.—H. M. Brereton, the engineer, is still submitting to the farmers of the San Joaquin valley a proposition for the construction of a large canal from Tulare lake to tide-water, to be also used for the purpose of irrigation.

Under Draining.—John Adams is laying drainage tile on his farm in Sonoma county. He will thoroughly drain about twelve acres as an experiment.

General News Items.

The Irwin examination at Washington appears to be attracting much interest—almost as much as did that of Von Arnim at Berlin. Irwin claims to have disbursed over half a million dollars for the company to obtain a subsidy from Congress for the China Mail service. He is now called before Congress to testify as to where this money was paid. The position of Irwin may be imagined from the circumstance that it will not do to admit that the money was paid to corrupt members of Congress, and in the event he cannot show where it was paid, he will be liable to return it to the company. Mr. Irwin's illness has thus far prevented any extended examination. He appears disposed at first to make a pretty clear breast of it, and much interest was manifested to hear his story; but he since manifested a disposition to withhold the names of the parties to whom he paid the money.

The Katie King Fraud.—There appears to be no doubt now that the pretended spirit manifestations connected with the name of Katie King were an unmitigated fraud. Robert Dale Owen and Dr. Childs, two leading Spiritualists of Philadelphia, publish and repudiate the swindle. Is it not astonishing that so many otherwise sensible people can be deceived and carried away with the follies and frauds of Spiritualism, as exhibited in its various sensational forms? That there are many important facts connected with psychology and mind reading, the philosophy of which is not yet fuliy understood, there can be no doubt. And that they will eventually be referred to natural causes and brought into subjection by natural laws, there need be as little doubt.

A Good Result.—The success of the "Farmers' Road," so called in Monterey county, has induced quite a general desire for local intercommunication by short lines of railroad owned and controlled by those immediately interested in their construction. A mass meeting was held at Hollister on the 17th instant to take measures to build a local narrow gauge road from Hollister to San Juan, with very satisfactory results. There is also a movement to construct a narrow gauge road from the town of Sonoma to Popper's landing.

Kansas Sufferers.—Gov. Osborn, of Kansas telegraphs that he estimates the number of people in Western Kansas that will require assistance during the winter at 20,000. Many of these are now in a state of actual want. The prospect for the wheat crop is good, and the winter so far has been mild and favorable. Donations may be sent to Lieutenant-Governor Stover, Chairman of the Central Relief Committee, Topeka. The things most needed are food and clothing for women and children.

Another Pacific Mail Disaster.—The Pacific Mail steamship "Japan" was burned on Thursday last, when within eighty miles of her destination; but only twelve miles from Swatow. It is supposed that the passengers and crew were all landed safely in the boats. A large portion of them have already been heard from. The ship, together with the mails, treasure ($375,000), cargo and baggage is a total loss.

Another Dam Break.—The Haydenville dam in Massachusetts, which was destroyed at the time of the great Mill Creek disaster in May last, broke again a few days since, causing great damages but no loss of life. After the terrible warning received it would seem that sufficient skill would have been shown to have rendered the new one periectly secure, but it appears that few can appreciate the great power of water.

Building a Wing Dam.—W. A. Dewey has commenced operations in the construction of a wing dam, for the protection of the ranches on the Yolo side of the river, at the first bend below Sacramento, and will push the work as rapidly as possible, hoping to complete it before another extensive rise in the river shall take place.

The War of Races.—It is now said that there were about 71 colored persous killed and a large number wounded in the late affair at Vicksburg. The affair seems to have been a massacre, as only two whites are reported killed.

Bradlaugh, the great English workingman's advocate is coming to Californuia—so it is said. Bradlaugh is no doubt doing a great and good work, albeit it he is reported to be, as Tom Paine was, a very profane man in religion.

Von Arnim has been sentenced to three months' imprisonment and cost of prosecution—a very light penalty, if any whatever is inflicted; but he is not inclined to submit, as report says he is moving for a new trial.

Snow Storm at the East.—Eight or ten iuches of snow fell in New York on Sunday, and a fall of twenty inches is reported in Patterson N. J. The storm is severe, and extends through the Eastern and Middle States.

King Kalakaua's visit, it is thought by many, will result in reciprocity and a loan to the Island government of one million dollars. Perhaps so—we shall see.

Hotel Burned.—Cloudman's hotel, eight miles below Chinese Camp, on the Knight's Ferry road, was burned on Tuesday; loss, $1,500.

Refuses the Reward.—Dick Shafer, to whom Granice applied for shelter from the fog, has refused to accept the $800 reward.

The shortest day for the year has passed, and from Tuesday last to the 21st of June the days will lengthen.



Mother's Way.

By Nannie A. Hepworth.

Oft within our little cottage,
As the shadows gently fall,
While the sunlight touches softly
One sweet face upon the wall,
Do we gather close together,
And in hushed and tender tone
Ask each other's full forgiveness
For the wrong that each hath done.
Should you wonder why this custom
At the ending of the day,
Eye and voice would quickly answer,
"It was once our mother's way!"

If our home be bright and cheery,
If it hold a welcome true,
Opening wide its door of greeting
To the many, not the few;
If we share our Father's bounty
With the needy, day by day,
'Tis because our hearts remember
This was ever mother's way.

Sometimes, when our hands grow weary,
Or our tasks seem very long;
When our burdens look too heavy,
And we deem the right all wrong;
Then we gain a new, fresh courage
As we rise to proudly say:
"Let us do our duty bravely,
This was our dear mother's way."

Thus we keep her memory precious.
While we never cease to pray
That, at last, when lengthening shadows
Mark the evening of life's day,
They may find us waiting calmly,
To go home our mother's way!

What a Bottle Did---A Christmas Story.

[Written for the Press by Mercury Penwiper.]

A dark, cold room. Bare, black walls, from which half of the plastering had fallen, a fireless grate, an old cresky table; and there you have the furniture of the topmost room of a tumble-down, cheerless house, in the dirty, narrow streets of London. It was bitter cold outside, snow was falling in quick steady masses, and eddying here and there, driven by the bitter, cruel, pitiless wind. On the table in this dark, cold room, through the broken windows of which the wintry blast came freely in, was a large black bottle, whose sides were filled with clustered tallow, the drippings of the half-consumed candle stuck in its mouth. It was a peculiar bottle. You would have noticed it wherever you saw it. I know I would. Three rings, half hid by the grease, ran round its mouth, a large, triangular chip was out of the second rim, and a large good-natured crack extended from its shoulder in a diagonal direction across the letter B of the word *brandy*, which was blown in the glass. A jolly old spool and a wrinkled, sour work-box, stood on the table near by. Now it may seem green but this bottle was attempting to speak. There is no use in denying the fact, for I will maintain it to the last. And this was a *peculiar bottle* you know. If it wasn't for the candle it would have spoken; but in the name of goodness how could any bottle speak with a greasy candle in its mouth. So it only grumbled and growled, and tried very hard to speak. The jolly old spool nearly split its sides laughing at the queer noise, and the wrinkled, sour work box frowned as hard as it could frown. A half hour passed by with this grumbling and growling, and laughing and frowning; when, suddenly the candle fell, as if the bottle had spit it out. The spool gave quite a start at the noise, and the work-box frowned more than ever. "Wait till I clear this horrid grease out of my mouth," spoke the bottle, "and I will tell you what happened to me six years ago last month. I was aboard the "Foamy Wave," and Captain Blake thought a great deal of me. I was always full of good old brandy then; but now I never see a drop. We were in the China sea. One night some one cried 'Pirates! pirates! The devils are upon us!' Then the noise of our guns was loud and frequent. There was an awful row on deck. Guns and pistols rattling, words clashing, feet scuffling, heavy bodies falling, and Captain Blake bravely calling on his men. Suddenly the noise ceased, and I heard a heavy, hurried step descending the companion-way. Captain Blake burst into the cabin all covered with soot and blood, and wounded slightly in the arm. He threw his broken sword fiercely from him, and grabbing me up pressed me long and earnestly to his lips, nearly draining me dry. Quickly emptying the rest, he grabbed a pencil and paper and wrote, '*Pirates—vanquished—no hope—God bless you and help us.*' He then signed his name and that of the ship. Jamming the paper in my mouth, he hastily corked me, and jumped through the cabin window, bearing me with him. All was confusion outside. The pirates were yelling and jabbering to one another. Chinese junks loomed up in the inky darkness. The Captain struck out manfully for escape, and setting me lose said, 'this may bear the news of my death to my dear, dear family.' I would like to have told him, I'd try, but I could not speak with the cork in my mouth.

I floated about for two weeks, when I was picked up by a homeward bound ship, the captain of which knew Captain Blake's wife, and brought me safely home. How they cried, and felt so bad, for old Captain Blake was mighty good to them. And then we commenced to get poor—the Captain's brother gambled the money away—and they sank lower and lower. They lost everything; but never would part with me. And now poor Mrs. Blake is sick, so sick, and poor Nelly has no work, the uncle is always drunk, and I tell you they are starving, starving."

A step on the stair interrupted him, and the next moment a pale, wan girl entered. She could not have been over eighteen years of age; but sorrow and starvation had set their deep marks upon her features, which even now held something which might be called beauty. Her face and hands were blue with cold. Her threadbare shawl was small protection to her shoulders. She carried a small bundle. A voice in the next room called, and, brushing the snow from her dress, she went quickly in. The little parcel contained some scanty food, for the sick woman who lay on the bed within. The poor mother pressed the daughter to take some; but she told her she had dinner outside and would prefer to eat it in the next room. And coming out she sat hopelessly down and cried in muffled sobs, as if her heart would break. She was starving, poor girl, and this joyous Christmas Eve brought no hope, no work, no bread to her and her sick mother. Drying her tears, she rose, and taking the old bottle, commenced to clean the grease off, and soon its fat old sides were as sleek and shining as could be. "Uncle will persist in using this for a candlestick," she muttered. "Poor old bottle; it is all we have of father, good, dear father. I think so much of it, and we have had it now six years—a sad, sad six years. But I'll keep it, I'll never——"

A step on the stairs interrupted her; and a drunken voice called out "Nelly! Nelly! where the devil are you?" Hurriedly placing the bottle on the table, she went into her mother's room, and turned the key. A look of aversion and horror was on her face. The next moment the door from the stairs was thrown open with a bang, and a besotted, ugly looking man staggered into the room. "That lazy, good-for-nothing girl; where the devil is she? She never waits on her poor, old uncle." With difficulty he struck a match and attempted to light the top of the bottle. "Dang that girl! she never will leave the candlestick alone. Dang her old bottle! I'll pitch it out of the window." The girl's door opens. "Oh! uncle, don't break the bottle, please don't. Let me have it, please do." She laid her hand upon the drunken man's arm, the brute drew back his hand, and the next moment the starving girl sank senseless, helpless to the floor, from a heavy blow. Singing a snatch of some drunken song, he threw the bottle through the window pane, and went staggering, reeling, shouting from the room.

* * * * * *

It was Christmas morning. The bells were ringing and banging, and clanging away in a merry style. The snow was falling very slightly, only a stray snowflake now and then. Crowds of men and women, and boys and girls filled the jolly street. Merry, laughing boys and girls they were; shouting and calling, and blowing horns, and snapping whips, and riding imaginary horses, and occasionally shying a good-natured snow-ball at papa, who always laughed and took it all in fun. Handsome, smiling girls in bands of threes and fours, and muffled in the prettiest and most bewitching kinds of hoods you ever saw, walked along quite smart. Everybody knew this was Christmas, everybody accordingly was happy, everybody was joyous, everybody was delighted to see everybody else, and you never could imagine a time when everybody was so jolly and gay. There was one person, however, who was not. A tall, heavily-whiskered man, closely muffled in a large scarf and wrapped in a heavy pea-jacket, with his head bent toward the pavement, walked sorrowfully, sadly along. His black beard with its long silver threads told of past sorrow, and his face showed present grief. Now and then a tear trickled down his cheeks; but he tried to blame it on the innocent snowflakes, as if they would forget themselves so much as to go flying into a person's eyes on Christmas, when there wasn't a capful of wind to drive them. You could see at once that he was a sea faring man. He was a captain. He had arrived the day before. He had rushed joyfully to his old home, only to find strangers in possession, and his wife and child gone—God knows where. Perhaps miles away; perhaps dead. They had sold all four years ago; he had been gone six. All the people knew, was that his wife and child were poor, very poor. He groaned with the weight of his heavy feelings.

A beggar at the corner was delighted half to death by the twinkle of a bright gold piece that fell into his outstreached palm, from the Captain's fingers. Perhaps his wife and child were begging. How could he tell? On he walked, his eyes still bent downwards and looking out of the large crowded street into the narrow, deserted lanes. Here he saw poverty and dirt, on every side, squalid, dying poverty and dirt. He passed into many houses, with perhaps a thought to see his wife and daughter. Many a family that day blessed the Captain and their Maker, for a merrier Christmas than they had seen for years. Passing along, a dark, narrow, dirty street, suddenly he caught sight of a tall, dark bottle, half hidden by the snow. He gazed at it a little while, passed on, hesitated, and returned. Visions of a dark night, an awful night, the cry of "pirates!" a hard pressed fight, the defeat, the message in the bottle, his escape, thrown on an island, discovery of the pirates' treasure, captured by the villains, five years in bondage, escape at last, carrying off the treasure, two weeks afloat in an open boat, seen by a ship, picked up thank Heaven! and arrived safe in England, chase each other with the rapidity of lightning through his mind. He uncovers the bottle. Heaven! it is the same! The three rings around the mouth, the triangular chip from the second, the crack across the "B," there it all was; how many times he had seen it all before. Had his wife got his message then? If so, here was a clue, and he might find her. But how impossible it was that the bottle had come safe to her. Dare he hope? He might be successful, he might find them. Yes, he would try. Rushing like an insane man, into a provision store opposite, he flourished the bottle and nervously inquired if they had seen that bottle before. Thinking him to be some detective, they earnestly assured him they hadn't. He treated every house for three blocks in the same manner. He asked at every door, but without the least success. He gave it up in despair. To be thus thrown down after hoping so much, was awful. He never was to find them, never to press them again in his arms. What misery was his.

Slowly, sadly he walked on. Somehow or other the bottle felt fidgety in his pocket. He took it out, and looked at it attentively; it awakened old memories. And right here now, I wont say for certain, mind you, but whether it was the bottle speaking, or the bells chiming, or the Captain's heated imagination, or the wind whistling in the bottle mouth, certain it is that something seemed to sing, "Six hundred and nine, six hundred and nine! Up in the attic! Up in the attic! Go back! Go back! Six hundred and nine!" It made such an impression on the Captain's, mind, that jamming the bottle in the jacket, back he dashed, down the street, overturning two men in the snow, and knocking right up against every second man he met. He gained six hundred and nine. He banged the door open. He dashed up the stairs. You wouldn't have thought those stairs could have stood it. Bang! dash! stumbling up. No man ever went up stairs like he did; six at a bound was nothing. If you had seen all the tenants rushing out of their rooms, you would have thought sure that a baby had fallen down the stairs, or that Mr. Mulcahy had "cum hum dhrunk agin". Up he went five stories, shaking the house like an earthquake. Up the sixth flight of stairs he dashed—seven at a bound was nowhere now. He reached the top. He stopped for breath—he hadn't taken a mouthful since he started. The door of the attic was locked. He rapped. No answer. He was excited. "Six hundred and nine, attic--up stairs" ran in his mind. He drew back his foot. Down went the door, kicked through. And there, there, right on the floor; just recovering from the ruffian--uncle's blow, lay his poor, dear, long lost daughter. How he hugged and squeezed her. How the mother got well so soon. How the Captain had a dozen doctors waiting on her, when himself and good food were the only doctors she needed. There was never a merrier Christmass in any family.--I don't care a snap what family it was in, there never was a merrier Christmass than they had that same day. What a grand house they had. How rich the Captain was. How happy they all are. On the parlor mantle underneath costly pictures, and besides rich gifts and ornaments, in the very centre, stands the old bottle. There it is, the fat old shining sides, the triangular chip, and the good natured, smiling crack. The poor and needy were never turned away from those grand doors; but met with a kind reception. But how did it all come about? You may think one thing, and I may think another. But the Captain and I always said "that we thought it was the bottle did it."

Take Pride in your Work.—The popular weakness of so many people of the present day being ashamed of their business, and not taking a proper pride in their profession, was forcibly and happily illustrated in a recent lecture by Hon. Mr. Parsons, on Michael Angelo. He said he was pleased to see, during his brief American experience, that we, as a people, were not so prone to the weakness above referred to as those of the old world. At a large party in London, one gentleman said to another, "Who is that beautiful lady with coal-black eyes?" There was no response; the party to whom the question was proposed seemed greatly offended and walked away. The host promptly stepped forward and said, "You have been guilty of unpardonable rudeness; did you not know that he was a coal merchant?" Another instance: A person called at a tailoring establishment in Paris; and inquired for the proprietor, whereupon he was informed that "Monsieur was up in his study, composing a pair of pantaloons."

At the close of one of his masterly efforts, Lyman Beecher was met at the foot of the pulpit with the inquiry, "How long did it take you to prepare that discourse?" "*Forty years,*" was the laconic reply.

"Faith, and why did yer cut a hole in me ticket?" said a Wicklow Home Ruler recently, on his first trip by that novel invention, a railway. "Well," said the ticket porter, "it was in order to let you through."

Why is a key like a comb? Because it undoes the locks.

The Old Folks at Home.

Dr. Aikman, in his "Life at Home," urges children not to forget the old folks at home. He says: "There is always a liability when sons and daughters have gone away from the home of their childhood, and have formed homes of their own, gradually to lose the old attachments and cease to pay those attentions to their parents which were so easy and natural in the olden time. New associations, new thoughts, new cares, all come in, filling the mind and heart, and, if special pains be not taken, they crowd out the old loves. This ought never to be. You should remember that the change is with you, and not with those you left behind. You have everything new, much that is attractive in the present and bright in the future; the heart clings to the past they have most in memory. When you went away, you knew not, and will never know until you experience it, what it cost them to give you up, nor what a vacancy you left behind. They have not, if you have, any new loves to take place of the old. Do not, then, heartlessly deprive them of what you still can give of attention and love.

Visit your parents. If you live in the same place, let your step be, perhaps daily, a familiar one in the old home; if you are miles, yea, many miles away, make it your business to go to them. In this matter, do not regard time nor expense; the one is well spent and the other will be fully, yea, a hundred fold repaid. When some day the word reaches you, flashes over the telegraph, that father or mother has gone, you will not think them much, those hours of travel which last bore you to their side.

Write to your parents. I have known father and mother wait with sick hearts through weary months, longing that some word might reach them from the absent son. They have watched the mails, till in despair they have ceased to expect any more, and while they may not have the grief of a great bereavement, they have what is almost as bad, the bitter consciousness that they are not in mind enough even to call out a few poor lines from one whose early years they watched with sleepless love. Sons are often guilty of that crime—I cannot call it less—from sheer neglect or indolence. While an hour, perhaps a few moments, would suffice to write a letter which would give unspeakable satisfaction, they let months and even years slip away in utter indifference to all the pain they are causing. Oh, how full is many a mother's heart of sorrow and foreboding, when just a few words from an absent son would fill it with joy and praise! Such indifference or neglect is shameful and wicked. One need not wonder that sons guilty of it are not prospered, that they wait in vain for those turns of fortune which will send them home, as they dream, to surprise the old neighborhood with their wealth. Their thoughtlessness has been productive only of disaster.

Keep up your intercourse with father and mother; do not deem it sufficient to write when something important is to be told; do not say "No news is good news." If it be but a few lines, write them; write, if it be only to say, "I am well;" if it be only to send the salutation that says they are "dear," or the farewell that tells them that you are "affectionate" still. The little messengers shall be like caskets of jewels, and the tears that fall fondly over them will be treasures for you. Say with a warm-hearted son:

"The hills may tower, the waves may rise
And roll between my home and me;
Yet shall my quenchless memories
Turn with undying love to thee?"

How a Boy Caught a Wild Goose.—Some days since a little boy named George Cole, aged eleven years, son of Charley Cole, blacksmith, of Sulphur Springs, was sitting down by the side of a stump in a field, when a flock of wild geese alighted near him in the same field, and in such a position that the stump hid him from their view. The boy remained still as a mouse until presently a large goose, wishing to change his feeding ground, flew directly over the stump. The boy made a grab at it and caught it by the legs, and after a severe fight with it, and after being dragged some distance by it, succeeded in conquering it, and carried it home, and had the satisfaction of eating a portion of it for his dinner. This is certainly one of the most remarkable captures we ever heard of, and as to the truth of it there can be no doubt. Deputy Sheriff is our informant.—*Hillsboro (Mo.) Democrat.*

Frogs in New York.—We find the following paragraph in a Philadelphia paper:—"It is asserted that five hundred pounds of frogs are consumed daily in New York. They are caught chiefly in Canada, and are sent here in salt sacks, laid flat on the floors of freight cars, and containing each about a hundred frogs. An average of five per cent. die in the train. Each female frog is said to spawn over a thousand at a time, but not more than fifty of that number live to attain full growth. They are often-eaten by their own species, or by birds and snakes. They are usually taken with the hook, but bite at it only when their heads are above water. A bait is often unnecessary. The frog catcher frequently brings his hook under the jaw of the frog without creating alarm, and jerks its point into the flesh. He is then easily lifted into the boat."

There was a desire on the part of the teacher to make a scholar understand what conscience is. She said, "What makes you feel bad after you have done wrong?" "My pap," said the youth, feelingly.

Aversion to Manual Labor.

The practice of educating boys for the professions, which are already overstocked, or for the mercantile business, in which statistics show that ninety-five in a hundred fail of success, is fearfully on the increase in this country. Americans are annually becoming more and more averse to manual labor; and to get a living by one's wits, even at the cost of independence and self-respect, and a fearful wear and tear of conscience, is the ambition of a large proportion of our young men. The result is that the mechanical professions are becoming a monopoly of foreigners, and the ownership of the finest farms, even in New England, is passing from Americans to Irishmen and Germans. Fifty years ago a father was not ashamed to put his children to the plow or to a mechanical trade; but now they are "too feeble" for bodily labor; one has a pain in his side, another a slight cough, another "a very delicate constitution," another is nervous; and so poor Bobby or Billy or Tommy is sent off to the city to measure tape, weigh coffee or draw molasses. It seems never to occur to their foolish parents that moderate manual labor in the pure and bracing air of the country is just what these puny, wasp-waisted lads need, and that to send them to the crowded and unhealthy city is to send them to their graves. Let them follow the plow, swing the sledge, or shove the foreplane, and their pinched chests will be expanded, their sunken cheeks plumped out, and their lungs, now "cabined, cribbed and confined," will have room to play. Their nerves will be invigorated with their muscles; and when they shall have cast off their jackets, instead of being thin, pale, vapid coxcombs, they shall have spread out to the size and configuration of men. A lawyer's office, a counting room, or a grocery is about the last place to which a sickly youth should be sent. The ruin of health is as sure there as in the mines of England. Even of those men in the city who have constitutions of iron, only five per cent. succeed, and they only by "living like hermits, and working like horses;" the rest, after years of toil and anxiety, become bankrupt or retire, and, having meanwhile acquired a thorough disgust and unfitness for manual labor, bitterly bemoan the day when they forsook the peaceful pursuits of the country for the excitement, care and sharp competition of city life.

Tit for Tat.

A young lady, the daughter of the owner of the house, was addressed by a young man who, though agreeable to her, was disliked by her father. Of course he would not consent to their union, and she determined to elope. The night was fixed, the hour came, the lover placed the ladder to the window, and in a few moments the young girl was in his arms.

They mounted a double horse, and were soon some distance from the house.

After a while the lady broke the silence by saying:

"Well, you see what proof I have given you of my affection; I hope you will make me a good husband."

He was a surly fellow, and gruffly answered:

"Perhaps I may, and perhaps not."

She made no reply, but after a silence of some minutes she suddenly exclaimed

"Oh, what shall we do? I have left my money behind in my room."

"Then," said he, "we must go back and fetch it."

They were soon again at the house, the ladder was again placed, the lady remounted, while the ill-natured lover waited below. But she delayed to come, and so he gently called:

"Are you coming?"

When she looked out of the window, and said:

"Perhaps I may, and perhaps I may not; and then shut down the window, leaving him to depart alone.—*Memoirs of Dr. Raffles.*

THE INVISIBLE CHILDREN.—It is not when your children are with you; it is not when you see and hear them that they are most to you; it is when the sad assemblage is gone; it is when the daisies have resumed their growing again in the place where the little form was laid; it is when you have carried your children out and said farewell, and come home again, and day and night are full of sweet memories, it is when summer and winter are full of touches and suggestions of them; it is when you cannot look up towards heaven without thinking of them, or look down towards yourself and not think of them; it is when they have gone out of your arms, and are living to you only by the power of imagination, that they are most to you. The invisible children are the realest children—the children that touch our hearts as no hands of flesh ever could touch them.

WHAT ALCOHOL WILL DO.—It may seem strange, but it is nevertheless true, that alcohol, regularly applied to a thrifty farmer's stomach, will remove the boards from the fence, let cattle into his crops, kill his fruit trees, mortgage his farm and sow his field with wild oats and thistles. It will take the paint off his building, break the glass out of his windows and fill them with rags. It will take the gloss from his clothes and polish from his manners; subdue his reason, arouse his passions, bring sorrow and disgrace upon his family and topple him into a drunkard's grave. It will do this to the artisan and the capitalist, the matron and the maiden, as well as to the farmer; for, in its deadly enmity to the human race, alcohol is no respecter of persons.—*The Temperance Worker.*

Young Folks' Column.

Christmas Greetings to the Little Folks.

The present issue will be placed before the large majority of our readers on Christmas day, hence we can be timely this year with our greetings; and we most heartily wish all our little folks a merry, merry Christmas, indeed. Christmas comes but once a year and it needs no proclamation to herald its appearance. All classes and all eyes are looking for it, and rejoice in its approach; but of all the holidays in the year Christmas is most essentially the children's holiday. It is remembered and observed almost everywhere, by all Christians and by many pagans. To all it brings a social interchange of courtesies. To the children it means everything good and kind. It brings to them presents without number and goodies of all kinds. The gifts of the day to the little ones are alike delightful to them, and their givers. It should be observed in every family. Each little one should be remembered. Neither Johnnie nor Mamie nor Jennie should be forgotten—no, nor even the baby in the cradle. Although he is too young to appreciate a gift, it will do you all good to see that the dear little one has something—something that you could call *his* Christmas present. God grant that there may be none without their merry Christmas. If any of our young friends know of any poor little child that will not be likely to get any Christmas present—only think how much pleasure it will afford such a lone one to be the recipient of never so small a trifle, and how much good, too, it will do the giver. Again we would say a *merry Christmas* to you all.

THE DEW.—How many of our young readers, in the bright summer morning, have noticed the dew? I hear scores of voices say, "I have." But can you tell me how dew is formed? "No, I can't tell that." When the vapors of the day part with heat in the cool of the evening, they fall to the earth in little drops, which we call dew. Did you ever see the grass by the roadside all dusty in the evening and in the morning look bright, or the flowers all scorched by the sun, looking fresh after the gentle dew? So with your hearts. If sins fall like dust upon them, God's Spirit can descend like dew, and make them clean. How many of you can turn to some passage in the Bible where dew is mentioned? "I will be as the dew upon Israel," says one. Another I hear quoting from the beautiful song of Moses: "My speech shall distil as the dew." Ah, yes there are many allusions in the bible to the beautiful dew. Pray to God that his blessings, like the beautiful "dews of Hermon" may keep your hearts fresh, and washed from stains of sin.

READ THIS, YOUNG FOLKS!—The road, young men, who earnestly strive to make good and influential members of society, must continue onward in the straight and narrow path which leads to success. To make use of an old and homely exhortation:

"If at first you don't succeed,
Try, try again."

It is the continual dripping of the water on the rock which wears it away. Continuous effort in the right direction will finally be crowned with success, and the slurs of vilifiers silenced, and the joys of enemies turned into weeping. Somebody must be hurt in the heaving of society; somebody's toes must be stepped upon. Be active, and patient and capable. Do your duty to yourselves and your employers, even if you do stand on somebody's favorite corn, and then—somebody will hate you, and somebody like you.

TO THE BOYS.—"Don't be laughed out of your money or your prayers." A distinguished English Admiral, who rose to the highest station as the effect of his meritorious exertions, used to be fond of relating that on first leaving a humble lodging to join his ship as a midshipman, his landlady presented him with a bible and a guinea, saying, "God bless you, and prosper you, my lad; and as long as you live never suffer yourself to be laughed out of your money or your prayers." The young sailor carefully followed this advice through life, and had reason to rejoice that he did so, while thousands have unavailingly regretted they have pursued a different course.

Killed by a Grizzly.

We presume there is not an individual among all our "Young Folks" readers in California who has not heard of the huge grizzly bears which infest the forests of almost every part of the State, not only in the Sierras, but also in the coast range of mountains as well. Many of our young readers have seen them either in the various shows which go about the State from time to time, or at Woodward's gardens, in this city, which all the young folks from the country should and generally do visit when they come to San Francisco.

The picture which we have placed on this page gives a very good representation of this animal. It is a savage beast to meet in the woods, under any circumstances. Even old hunters, when seeking these animals, approach the grizzly with great caution, when fully armed; but the person who comes upon one unawares, when he is hungry, is in a perilous situation.

A case of this kind occurred only a few days since, near Surprise valley, Sierra county. It seems that Mr. Samuel Berry, of that valley, was in the habit of setting traps for them, and on the 29th of last month left his residence to go and examine his traps. As he did not return at night, fears were entertained for his safety, and some fifty of his neighbors went out to hunt for him. After hunting three or four days they found his body. He had been killed by a grizzly. As there was snow on the ground his motions were easily traced, and the story of his death told as follows: It appears that he had been to examine his traps, and on his return, when passing a very large tree, a huge bear sprang from a cavity in the roots, where he had prepared winter quarters. Neither being aware of the presence of the other until that awful moment, it is supposed that the man started to run. When about thirty feet from the tree he must have fallen over a felled tree partially concealed by snow. The impressions in the snow indicate that before he had time to recover the bear pounced upon him, breaking his back. Whether the man had any use of himself after that is conjecture; but together they rolled down the hill, a distance of about thirty yards, where the man was found. The scalp was badly torn, a portion of the nose gone, the jaws, including the bones of the upper part of the face, were badly fractured, both arms torn loose at the shoulders, and both legs at the hips. He was bitten about the shoulders, throat and hands, besides the back being broken as before stated. Upon finding the body guns were fired and a fire built in the cavity of the tree. Men enough were on the ground to bear the body to the house, from which place it was borne to the grave and decently interred. The bear's track measured twelve inches in length.



A GRIZZLY BEAR.

"GOOD NIGHT, FOLKS."—There was a little girl in the cars, whose sweet, smiling ways won all our hearts. Everybody had a kind word to say to her, and she had a kind word for everybody in return. We quite forgot the heat, the dust, the noise and the cinders of the way, in following her both with our eyes and heart, wishing that for all the world that we had a bit of a darling just like her. When evening came she fell asleep. On reaching the station where her parents stopped, her father caught her up suddenly, and, as we thought, roughly. Opening her wondering eyes, and finding herself leaving us, "Good night," she said, "Good night, folks," and the car-door slammed behind her; she vanished out of sight. Not so the loving picture which she left behind. I venture to say that every one of her traveling companions, some of them rude men, was the better and happier for her sweet courtesy and winning ways.

A POOR RAGGED IRISH BOY.—A poor ragged lad came to a ragged-school in Connemara—a miserable little Arab of the streets—with scarcely a trace of the child in his face. One day, however, he appeared radiant in a new suit of clothes. "How is this, Mike?" said the teacher. "Oh, sir," he said, "sure daddy's a teetotaler; and I never stopped till I brought him to the meetings, and he signed the pledge; and look at me now, sir!"

Domestic Economy.

ROAST TURKEY.—Rinse the turkey out with several waters and in the next to the last mix a teaspoonful of soda. Fill the body with this water, shake well, empty out, and rinse with clean water, singe off the hairs, and prepare a dressing of bread crumbs, add a small piece of butter, pepper and salt, and add thyme and marjoram, or sage if preferred. Wet it with hot water or milk. The liver, hoart, etc. should be boiled and chopped fine and mixed with the dressing. The water in which they were boiled should be put in the dripping pan with which to baste the turkey. Dredge it with flour and salt before roasting, and baste often. With a brisk fire and young turkey allow ten minutes to a pound for roasting. Tie a string tightly about the neck when the craw is filled, and sew the body with strong thread. Remove this when the fowl is dished. When the turkey is lifted from the pan add a spoonful of flour wet with cold water to prevent its lumping. Boil up once and pour into the gravy boat. 'Hearth and Home' says: 'In carving a turkey, cut off the wing nearest you first, then the leg and second joint; then slice the breast until a rounded ivory shaped piece appears; insert the knife between that and the bone, and separate them; then turn over the bird a little, and just below the breast you will find the 'oyster', which you separate as you did the inner breast. Proceed the same way with the other side. The fork need not be removed during the whole process.' A sharp knife is indispensable. The platter should be drawn near enough to the carver for him to reach each part of the bird with perfect ease.

RABBIT CUTLETS.—Prepare the rabbits as you would for a stew; cut the different limbs into the size of cutlets—such as the shoulders cut in half, also the legs, with the ends of the bones chopped off, and pieces of the back, even to the half of the head. Have ready some bread-crumbs and the yelk of an egg beat up. Drop each cutlet into the egg and then cover with bread-crumbs, as for veal cutlets. Fry them a nice brown and when you dish them pour round them some rich brown gravy, which may be flavored with tomato sauce if approved, and put round them rolls of fried bacon.

COOKING OATMEAL.—W. says: One reason why oatmeal is not more generally used as food is that, in the way in which it is usually cooked it requires constant stirring, which takes a good deal of time and attention. If, after the porridge is mixed, that is, as soon as the oatmeal is stirred into the boiling water, the cover is put on and the tin saucepan containing it placed in another pot of boiling water on the stove, and the water let boil, good oatmeal porridge will be made, without the least danger of its being scorched.

CANNED GRAPE PUDDING.—Pick and wash good sweet grapes--say Concord—and put in alternate layers with one-fourth the quantity of picked and washed rice, and sugar enough to sweeten. Fill up with water, and cook in hot water one hour after it begins to boil. Can as usual for fruit, and serve cold when wanted, either with or without a sauce of sweetened cream. This pudding is not likely to keep more than two or three months, owing to the liability of the grapes to deposit tartaric acid.

HAIR DRESSING.—A nice dresssing for the hair is said, by a correspondent of the *Christian Monitor*, to be cold tea. She uses it twice a day, and insures a fine growth of beautiful, luxuriant and healthy hair, with less trouble, no danger of injury to scalp or hair, no expense, and in less time, than any, or all, of the quack mixtures, which are so loudly and persistently recommended.

SOAP AND SILVER.—Never put a particle of soap about your silver if you would have it retain its original luster. When it wants polishing, take a piece of soft leather and whiting and rub hard. The proprietor of one of the oldest silver establishments in the city of Philadelphia says that "housekeepers ruin their silver by washing it in soap suds, as it makes it look like pewter."

TO CLARIFY DRIPPING.—Put the dripping into a basin; pour over it boiling water, in which a teaspoonful of salt has been dissolved and keep stirring the whole to wash away the impurities. Let it stand to cool, when the water and dirty sediment will settle at the bottom. Repeat the operation twice with fresh water. When cold remove the dripping from the water and melt into jars.

ICING THAT WILL NOT BREAK.—Take one pound of pulverized white sugar, the whites of 3 eggs beaten until you can turn the dish upside down; one teaspoonful of flour or cornstarch added to it; flavor with lemon; flour the top of the cake as soon as taken from the oven; put on the icing with a large bladed steel knife dipped in warm water and then smooth the icing with it.

SHEEP'S TONGUE IN SAVORY JELLY.—Skin the tongues, lard them and cook them until they are quite tender, in good veal broth or any white stock. Take out the tongues, boil down the liquor to a stiff, clear jelly and pour enough of it over them to cover them. To be eaten cold.

SQUASH PIE.—Three cups of milk, two cup, of squash, one cup of sugar, two crackers, rolleds two eggs, lemon to taste. This makes two pies.

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SAN FRANCISCO:

Saturday, December 26, 1874.

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The Close of Another Volume.

With the present issue we close the eighth volume of the PACIFIC RURAL PRESS, and with it we also close another year's labors, which we confidently believe have resulted in a large amount of profit and pleasure to our readers; and which we know has brought to us its due rewards—not only in the ordinary hire of which the laborer is acknowledged to be worthy—but in many things that sweeten toil.

Our working material has increased, and our sphere of usefulness has expanded with the steady increase of our circulation, which the past year has produced. Never has our intercourse with farmers been so extended and of so intimate a character, as at the present time; and while we have been gathering within our circle a list of contributors, which will compare favorably with that of any agricultural journal in America, our communication has been quite as extensive, and fully as pleasant with that large class of friends whose names scarcely ever appear in print, but who send us many cheering and complimentary messages, and whom we frequently meet in our sanctum, at public meetings and at their homes. To all such we offer our sincere thanks, with the hope that the coming year will furnish as agreeable and as satisfactory a record. And while the readers of the RURAL PRESS have been increasing in number in cities and villages, as well as throughout the farming community, it has become more widely known for its consistent course and marked stead-fastness, and is recognized both at home and abroad as the most reliable source from which to obtain facts and opinions in regard to the agriculture of the Pacific coast, being generally acknowledged as the leading agricultural journal of the coast.

The proprietors of the RURAL PRESS have for sixteen years been successfully engaged in industrial journalism in California; and they offer the present volume of this paper as evidence that they have duly profited by this long experience, and that they have truly estimated the wants in this vast field of labor. The promises with which we herald the appearance of our coming volume are just such as our past record and present auspices, as stated above, will warrant us in making. We do not propose to startle the community with "sample numbers," to be followed by a long series that are stale, flat and unprofitable; but we guarantee the same steady and sure progress that has characterized the paper from its origin up to the present time.

With many thanks to our valued contributors, our large circle of patrons, casual purchasers of the PRESS, as well as regular subscribers, we close the eighth volume of the PACIFIC RURAL PRESS.

Novices and Adobe Soil.

Eastern people before coming to California manifest a good deal of curiosity concerning our adobe soil; and one of the prominent points of their initiation into farm life here is becoming acquainted with this stubborn reality. We have on several occasions had enquiries from such parties for information on this subject. One of these, who confesses himself a novice in this respect, asks some general questions, which in answering we hope to benefit a class of careful, energetic, persistent men, who are well calculated to subdue this stubborn portion of our soil, and make the spots where it abounds places of enduring wealth.

The character of adobe soil varies materially in different localities; it is not safe, therefore, to accept any general system for treating this kind of soil. Particular care is needed in taking the soil when in proper condition to work. To work it when perfectly dry is simply impossible; and if it is plowed when too wet, and sticky, it becomes lumpy, hard, and altogether unmanagable. Our correspondent is probably acquainted with the characteristics of the heavy clay soil that forms much—and some of the best—of the farm land of the Atlantic States. He will find the adobe soil of California of the same character "only more so." Both require the same "catching" habit in working; deriving equal benefit from thorough cultivation, and being alike in their lasting qualities. In the East this kind of soil is brought up to a high state of cultivation by underground draining, subsoiling and fall plowing, leaving it exposed to the action of the frost during winter. This soil possesses in itself remarkable endurance in fertility, and will give a better return than any other for manures applied. It is not expected that the cultivators of adobe soil in California will, as yet, resort to underground draining and subsoiling; and they will not have the aid of severe frosts and repeated thawings; still, if they use the means within their reach they can subdue this soil, and bring it up to a perfect state of cultivation.

Our friend asks, "what grain and what fruit will grow on it?" We answer that when properly treated it will grow any kind of grain or fruit, but unless the condition of the soil is favorable when worked, the labor bestowed upon it will be extremely hard and unremunerative. Probably in the locality from which our correspondent writes—San Luis Obispo—the present condition of the soil would favor plowing. If he could put in a crop of wheat while the ground is in suitable condition, then early in autumn plow in the stubble, this would lighten up the soil beside furnishing a good supply of manure. If the wheat could be put in and get a good start, so as to cover the ground before the drying northers appear, a good crop might reasonsbly be expected; but if after seeding and before the starting of the grain, the heavy rains ensue, followed by dry north winds, then the prospect is discouraging. In regard to fruit, as in other products which we have mentioned, in connection with adobe soil, we, of course, cannot consider the various surroundings; these must be taken into account by the residents of the localities; but speaking of the character of the soil, merely, we say that it is especially adapted to apples and pears; and that under favorable circumstances, the small fruits, even strawberries, would do well on it.

In answer to the enquiry of our correspondent in regard to a work giving directions for planting and working nurseries, we would inform him that this coast is, as far as we can ascertain, destitute of reliable authority on this subject. Works that meet the wants of Eastern nurserymen in every respect, are not adapted to California. Our most successful nurserymen are those who have from the starting point adapted themselves to the peculiar wants of the country and have obtained their knowledge by experience. They have had much to learn, but they have learned it thoroughly, consequently judicious selections have been made in all departments; and the treatment of what they grow is, from the first, such as the soil and climate of the country require. No portion of the United States is better supplied at this important point, or has a better horticultural basis to build upon.

Landscape Gardening.

(Written for the RURAL PRESS by F. P. HENNESEY.)

Landscape gardening is an art which is but little understood in the Pacific States, generally speaking. We shall therefore try to make it not only interesting to the general reader, but profitable to those who may have such work in contemplation. Landscape paintings are always admired by people with any pretentions to refinement, and to paint a good and faithful likeness of a landscape the artist must possess the special gift of imitative ability. But to make a park or garden or lay out the ground of a private residence, no matter what the dimensions are, the landscape gardener must have good *creative* ability, being able to create something which will harmonize with the place and its surrounding.

Men or women who are fond of natural scenery often become bewildered from the extravagant beauties which the landscape may afford, and not unfrequently will they select one particular point which to their mind surpasses all others. To possess such a piece of landscaping in some special part of their grounds, would be a satisfaction indeed; but, great as would be the delight if this was accomplished, it often follows, through the criticism of others, more eminent in the profession, that sorrow takes the place of delight, and it often occurs in this way:

A sketch is perhaps made of that which we wish to possess, and although not marked by any special gift of imitative genius, yet it may be able to call to mind all the special features of interest that are of account, or necessary to be remembered. After all the necessary preparations are completed, work is commenced; trees, shrubs, and plants are bought, rocks, soil and water are, perhaps, introduced, all to represent, as nearly as possible, the original picture. Work goes on and the required end may be attained to the entire satisfaction of the parties concerned; satisfied beyond a doubt, that they have accomplished much which is not only new and expensive, but forms one of the most unique pleasure grounds in the country; but alas for poor human nature, it depended too much on its own ability, not having had any previous knowledge of landscaping, I find that I have made a very great mistake. The introduction of such a piece of work on these grounds was entirely out of place. Finding now that it will be impossible to make such a work harmonize more improvements suggest themselves, and work is carried on from week to week, and, perhaps from year to year, and all the time finding something is wrong, and some other improvement needed, until after years of torture of mind and experience the undertaking is given up in despair. Where if the proper talent had been engaged at the proper time—and that proper time was when the first idea of improvement was entertained—all the trouble would have been avoided, an immense sum saved, and much accomplished. We often hear men say, "well, if I had this thing to do again I would do differently, for I would know better." "First be sure that you are right and then go ahead," is a good old maxim, but in nothing ought it be more strictly adhered to than in landscape gardening.

"WHERE is Mary Mountain?" has been asked so many times that we are happy to say that she renews her "Farm-house Chat" in the RURAL to-day. Indisposition interrupted her chatty pen, but the "RURAL folks" everywhere rejoice that she is bravely recovering.

ON FILE.—"Our Bay Nurseries," No. 3; "Planting the Eucalyptus," W. P. G.; "Grafting the Grape," M. A.; "Letter from Stockton," W. G. P.; "Inquiries about Ramie and Jute," W. F. B.

Happy Christmas.

A happy Christmas to all the country friends who read the RURAL PRESS. Who that looks at the gay shop windows, or watches the unloading of fresh evergreens and bright berries at the church doors, is not thankful for that distant music echoing down the centuries—"peace on earth, and good will to men." And who does not wish himself the owner of a four leaved shamrock, that he might act a blessed part, and scatter bliss around on the fairest morning of all the year?

I think city children have almost too great a proportion of the Christmas good, and if I live till another, like the author of "Happy Thoughts," I will set down every one of my recipes for making Christmas merry in the country, with home made pleasures and pleasantries which cost time and forethought rather than dollars.

During the war, we felt it a sin to spend more than was absolutely necessary to keep the festival season alive, and became toy manufacturers and inventors under the stimulus of necessity. I have never seen finer baby houses than those made of empty dry goods boxes, or better doll's furniture than we got from pasteboard, and such marvels of crochet work it would be difficult to describe. Boys and girls saved for Christmas the price of a subscription for the newspaper, to go to the army, or of a new paper for the father at home.

All this comes freshly to my mind, in trying to make a little money cover large and daintily expressed desires for the happiness of little friends in golden California. California children expect a good deal, for it is only a little while since children have been coming to this coast, and the first comers were so pampered that a fashion was set we cannot outgrow. And then the shops are so tempting! Dollies are such perfect little women, here's one with a Saratoga trunk, and the wardrobe of a full fledged belle. And better still, there's a kitchen maid, with apron and pockets, and a nice cap covering her saucy little curls, and with her comes a tiny stove, with pots and kettles, flour barrel, sieves, even a dust pan, broom, mop and door mat, enough utensils to set her up in business. Such work boxes and baskets, such lovely toy books, and dissected pictures and maps! It is enough to drive one wild to choose from such an infinite variety.

At Mr. Bancroft's we linger over the most enticing display of writing desks, drawing boxes, albums, cases of exquisite photographs, bringing the art world to the humblest level of the beautiful arts. From the parlor organ and grand piano, you may descend the musical scale of expenditure to a penny trumpet. So with books—here's Audubon's Birds of America, the costliest book ever published for lovers of science, and here are picture cards of our summer friends almost as good as bird portraits, for one cent. Here's a book we must steal from, "Homes and How to Make Them." Look at the frontispiece, and think of the hundreds of sites in the foothills *waiting* for such a snug cottage of four rooms. This is truly a seasonable book, "running over full" of common sense, and just what what we want in the Granger's library. And here's fun in the "Puddleford Papers," whose capital illustrations are as irresistible as were those of the hoosier schoolmaster. But we dare not pause or particularize, for we must flit through Logan's, a palace now of fancy furnishings; and then we will go to the seedsman's and florist's and select some choice hyacinths and pretty glasses for the little girls who are old enough to take care of their own rooms, and like a flower in the window; and then the bird fanciers, for a Java sparrow, and now we are at the end of the purse and the bag is full. We can choose some splendid red apples, and yellow bed flowers, and with bright colored and white sugared almonds, we will imitate the woodpeckers who fill the bark of the oak trees with acorns, making something novel for the Christmas tree. Then we will make some "girls and boys" of English walnuts, painting the faces on the shells, and with a few rags and sticks we can get up quite picturesque people for our Noah's ark—which never have anything in them but animals. I have selected some very choice flower seeds—dividing one paper into three or four, and making packages of a dozen kinds indigenious to this coast, for Eastern friends. I have some paper cutters of our rich laurel and redwood with photographs of the trees worked upon them in decalcomaine. But the best thing I can think of to send back to the old home is some of Mr. Green's fine silk ribbons manufactured in Oakland. Here are sashes in various colors; one feels a pardonable pride in showing such excellent work, the value of which may be still further enhanced by introducing a California flower in silk floss upon the ends. At the sewing silk factory we can get outfits for our work boxes, all shades of sewing silks, and at Mansback's we can get the finest needles in the world.

Verily we are all children in the holiday season, insatiable and eager-eyed; and we would not be otherwise if we could. My friend, who has a fine Jersey heifer driven into her back yard, with a "Merry Christmas to you" tied upon its horns, is not happier than her little folks over the "make believe" horses and cows, pulled from the long stockings, or fastened in the Christmas tree. Nor will the many to whom fortune has been lately so kind, forget in their exceeding plenitude of mercies to make a merrier Christmas for those to whom holidays are the rarest and best of gifts. J. C. C.

Farm House Chat for Christmas.

By Mary Mountain.

All sorts of truants will manage to come home for Thanksgiving or Christmas, eager for that warmth of welcome which makes the best of everybody and everything, and no questions asked.

Even so will I have the holiday pleasure of slipping back into my old corner of the Rural—sorry to have stayed away so long—but never so long away as to feel estranged, or anything else than "one of the family."

But who can dip the pen for a holiday chat without stirring up those nimble spirits of the past that, however snugly stowed for the rest of the year, are sure now to come trooping forth as gay and festive memories, or sorrowful recollections of the holidays dead and gone.

How plainly comes back to me the first ever spent in California. Away on the banks of the Stanislaus in a little cloth tent we huddled around the stove and wondered if we could possibly get up something "nice" for the Christmas or New Year's dinner.

I was as yet but a visitor in the tent, and the men had been housekeeping alone for months. How easily I could see that they were just hungry for something made by a woman's hand, and that could more easily be imagined to "taste like home."

It was easy enough to think of goodies; but as each one recalled his favorite dainty-dish it was also easy to see that nothing short of a raid upon "Old Down East" would fully satisfy the home sick appetites.

Being such unmitigated Yankees we finally decided that "mince pie it should be"—and one of the men caught his broad-ax, slipped off the log that had served him for a seat and began to hew it out for a chopping tray.

At first there was only corned beef, and various opinions as to its probable tenderness if we had only thought to put it in soak a few weeks before. It had come all the way from Boston, around the horn, and was as tough as any other "old salt" of whatever age and experience.

But fresh beef was finally procured, duly boiled, and chopped with aforesaid broad-ax in the new log tray.

Salt pork yielded its fatness for the pie crust; and for other materials there were dried apples, sugar, molasses, vinegar, essence of ginger, black pepper and salt.

To make up for lack of variety in spices what could be better than a cup or two of strong black tea? And so, rolling the crust with the vinegar bottle, I made my first mince pies; and judging from the pleasure and satisfaction with which they were put out of sight, they were certainly a great success; and the excellence of any dish may safely depend upon its nearness to the keen edge of appetite.

Some such table-philosophy as this must have inspired our old friend G—when at later and richer holiday feasts he would with serenest gravity help himself to pie the very first thing.

Will the Waterford Grangers allow any such fooling as that?

One can easily fancy the Grange festivals like an immense old-fashioned Thanksgiving and Christmas all merrily rolled into one; and though I have never yet shared their jollity, it is a comfort to believe that this great organization is helpful and harmonious in the right direction, providing social pleasures for the class which most needs them.

The business achievements of the Grange seem vast and unreal; but when I want to place myself on easy and familiar terms with this great protective "power-in-the-land," I just remember that there is no longer such need of sympathy for the lonely wives and "ranching bachelors." Are they not all safely and joyfully gathered in the friendly circle of the Granges?

* * * * * * * * * * * * * *

Our Eds. have kindly invited us to send in our "local items," and a very few lines will tell the whole story for many a quiet neighborhood like this. The short, bright days have been well improved, and farm work is unusually forward. The roads have been fine since the rains, and so it has not been difficult to manage the winter's shopping; new gowns and hats indoors have matched the brisk brightness of outdoors, and everything is now pretty well settled except the state of the weather at Christmas, and "what will we have for presents?"

One little week more will decide these important matters, and we can only wish for each other a bright and Merry Christmas and a happy New Year.

Landscape and Ornamental Gardening.—We give in to-day's issue an article on landscape gardening by F. P. Hennessy. Mr. H. comes to California with a good record, and with the intention of locating here. The calling in which he is engaged is one, which at the present time, is needed in this country. We shall give more on this subject from Mr. Hennessy.

Stump Sawing Machine.

J. A. Elston, of Elston Station, Cole county, Mo., has recently patented a machine which is designed for cutting off tree stumps, so that all kinds of farm machinery will readily pass over without obstruction. It consists of a strong saw, sprung in arc shaped and pivoted to a swinging frame—*A*, which is applied to a central sleeve to a smooth shaft sustained in a supporting frame. The saw frame is provided with handles at each end, so that one or two men may operate it. A cord attached to its center passes over the pulley *B*, on the supporting frame, and carries a weight, which produces the forward advancing and feeding into the stump. The supporting frame consists simply of inclined legs pivoted to and secured by nuts on the ends of the horizontal shaft, the elevation of the shaft above the ground and the consequent raising or lowering of the saw is provided for by spreading the legs and fastening them in the required position by arc shaped guides *C*, and set screws, the lower ends of the legs are pivoted to base runners, *D*, to admit of a steadier seating on the ground. Snitable handles on the machine serve to carry the machine from stump to stump. The mode of arranging and operating the machine is clearly shown in the engraving.

The machine is cheaply made and the inventor informs us that its usefulness has been practically demonstrated, doing the work with rapidity and ease, leaves the stump in concave shape, so as to retain moisture and facilitates its rotting,



ELSTON'S STUMP SAWING MACHINE.

To Correspondents.

Pruning Grape Vines.—The excellent article in our Horticultural Department of this week will give "G. D. C." the desired information.

Cotton Culture.—Our friend J. I. F. will find in our Arizona correspondence of this week, a clear statement of such facts as he wishes to obtain.

Charge of Monopoly, Etc.—Our correspondent plunges into a subject—politics—which is quite outside the matters to which the Rural Press is devoted. We should be pleased to hear from him on other subjects.

The latest humbug lottery advertisements sent for publication in the Press is signed A. T. Elliott, and hails from an Eastern metropolis. The proposition this time is as follows: "Tickets describing prizes are placed in sealed envelopes. On receipt of 25 cents a sealed ticket is drawn without choice, and sent by mail to any address. The prize named upon it will be delivered to the ticket holder on payment of one dollar." A list of large prizes are given and the statement made that no blanks will be drawn. Thus they make 25 cents out of their dupes to start with. Those silly enough to send another dollar will make a still greater loss. People who want something for nothing, ought to get bit; hadn't they?

Candy by Mail.—A new dodge is about being played upon the newspapers and their readers in this State, we suspect from a rejected advertisement for the Rural, from an unknown Eastern firm.

U. S. Treasury Report.—Our thanks are due to Assistant Treasurer Spinner, for a copy of the annual report of the Secretary of the Treasury, for the fiscal year ending June 30, 1874.

Horticulture.

How to Plant Trees.

[Written for the Rural Press by W. W. Beier.]

Tree-planting time has come again. Having had 24 year's observation and practice in this line, I should be able to tell how to do it. I never lose a tree in transplanting. Plow the land deep and harrow fine, as if preparing it for corn or beans. Lay off in a perfect square. Set stakes by which to dig the holes, which should be 18 inches deep. When the ground is in good condition, not too wet for planting corn, put in your trees; a little deeper than they were in the nursery. Fill up with fine earth. More trees are killed by planting in very wet ground, than in dry.

Before planting, the roots should be pruned into a neat shape, with smooth cuts at the ends. The branches should all be cut back short—never mind the looks, cut off all the limbs The root and top must have the balance of power preserved.

Many trees are killed before planting, and the nurseryman is blamed; are killed, not by transportation, but by water soaking the roots. Keep your trees in moist sand until the ground is ready to receive them. The sooner a tree is "set out" after it has been taken from the nursery, the better. In ordering trees, instruct the nurseryman to trim ready for planting, and you will save freight as well as the vitality of the tree. These rules are good for all trees; but especially for the almond and peach.

Winter Work in the Vineyard.

[Written for the Rural Press by W. A. Sanders.]

When to Prune Vines.

You can delay the time of blossoming and setting of fruit on your vines from ten to fifteen days by understanding *how* and *when* to prune them. This is a matter of much importance in many localities subject to severe frosts late in the spring.

If you live where there is no danger from late frosts, you may safely prune your vines any time from Christmas, till the vines leave out in the spring.

If your locality is subject to spring frosts, leave your vines unpruned throughout the winter, or at least do not cut off any more wood than you wish to use to propagate new vines. In the spring, when the young leaves are started and are as large as your thumb nail, then, not before, prune your vines. They will bleed freely—that will not hurt them—and they will be delayed at least ten days in the time of setting fruit, which will generally make them too late to be injured by frosts.

How to Prune.

The great error in pruning is in leaving too many stems of young wood, and in cutting all of them off too short. The number of stems of last year's wood to be left on the vine is to be determined by age of vine, distance of vines apart, variety, richness of soil and thriftiness of growth. Where all of these conditions are favorable, six or eight stems of young wood may be left,—where the conditions are unfavorable, the vines young with small growth, only one or two stems should be left. In either case the stems must not be cut too short. You will observe that the buds are larger and more prominent towards the point or top than near the base or beginning of the branches. These larger prominent buds we call primary buds, and the small flat buds near the old wood, we call secondary buds. Examine your vines so as to readily understand this distinction. Prune so as to leave three or four primary buds on each branch. There will besides these, be many secondary buds, but they will generally remain dormant, or will make but a feeble growth of wood if they start at all.

The length of these stems in inches cannot be given, as it will vary in different vines. In vines of thrifty growth and great distance between the buds, in some cases, a foot of wood must be left on each, while in vines of compact growth and buds near together, the stems will be but of a few inches in length.

Setting Grape Vines.

First and above all else, set the cuttings, not in a nursery, but in the vineyard where they are to grow permanently.

Things to Do.

Make each cutting at least three feet long. All of this but one bud should be burried under ground. Each bud so buried will throw out a sprangle of roots, thereby giving the vine a much greater growth than by the old way of using short cuttings only half buried in the earth. Cut the ends off smoothly, leaving one inch of wood above the upper bud. Some prefer to have the butt end of two-year-old wood.

Dig the holes for your vines in the form of a deep trench, 20 inches or more in depth, running in a northeasterly and southwesterly direction; the southwest end of each hole being just where you want the vine to grow. Put the butt of your cutting in the northeast end of your hole, then tramp the dirt in over it, bending the top up in the southwest end of the hole so as to leave one bud with about two inches of wood above ground, and let this incline slightly in a southwesterly direction; the object being to have the first leaves entirely shade the exposed wood during the afternoon when the sun is hottest, and also to have the top of the vine shade its underground stem during the hottest part of each day. Besides, where uniformity is observed in setting vines, they are more easily irrigated, either by running water in a small trench over them, or by pouring a pail of water into a hole above the buried portion of each vine.

Time to Set Vines.

Set your cuttings any time in January, though where from any sonrce you cannot set them so easily, you can keep them in a cool damp place, (not in water), or bury them in the ground where the water stands, and where they are shaded from the heat of the sun, thereby preventing their starting to grow. Cuttings so kept can be set as late as the 20th of March.

Things Not to Do.

Do not make more than one cutting from each branch of a vine, and make that from the butt end where the stem is large and the wood mature.

Do not set more than one bud of each cutting above the ground, and never leave more than two inches in length of wood exposed.

Do not put manure or anything else but the dirt taken from the hole next to your vine. The very utmost that is allowable is a mulch over the buried vine; but at least six inches of pure earth must be placed between the mulch and the vine. Use any form of manure or bones, rags or straw for mulch.

Do not set your cuttings by punching holes in the ground with a pointed stick, and think that you've discoverod a new way of setting vines that's easier and just as good as any other.

Do not merely "skim over the ground" when plowing for your vines, but plow at least ten inches deep—the deeper the better.

W. A. S.

Wheatville, Cal.

Early Normandy Plum.—Says the *American Garden:* A new plum bearing this name has been originated in France. The early season at which it ripens may render it worth cultivating in this country. It is thus described: Tree a very vigorous grower, with long branches somewhat divergent. Fruit large or very large—as large as a Green Gage—divided on one side by a very slight furrow. Skin fine, transparent; separating readily from the fruit when ripe; of a clear purple color on the sunny side, and light flesh-colored on the shady side; covered with a light, bluish bloom. Flesh fine and melting; of a greenish color; somewhat firm; filled with a very abundant, sugary, refreshing juice. It ripens from the middle to the end of July and this, together with its size, handsome appearance and good quality, render it valuable. We have no large plum of the same character which ripens so early.

An English writer gives a plan for protecting all kinds of fruit from birds. It is simply crossing threads from twig to twig in various directions, so that birds will strike against them, when seeking the fruit. He says it never fails to scare them away.

Jones' Heel Trimming Machine.

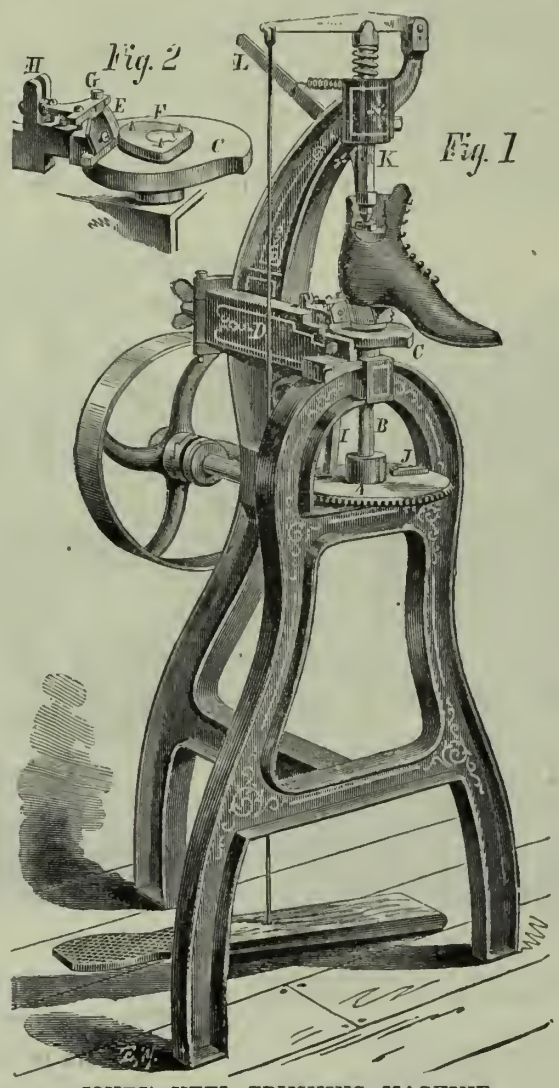
In the invention represented in our illustration are combined a vsriety of novel devices which, together, form an improved machine for trimming shoe heels. The motive power may be steam, in connection with a pulley, or hand labor, employed through a crank. Upon a horizontal shaft is a bevel gesr wheel, *A*, which rotates the vertical shsft, *B*. At the upper end of the latter is a double csm plate, *C*, the edge of which is suitably shaped to sllow the arm which csrries the kuife to move onward at the proper time. The *D* or arm is hinged to a plate attached to the rear part of the frame. Upon its inner side is formed a socket to receive the knife bar, into which is adjusted a screw rod (operated by a thumb nut, shown at the rear) which limits the movement of the knife, and also serves ss a guide for a coiled spring, by which the latter is held out to its work.

In Fig. 2 the cam plate and cutting mechanism are represented on a lsrger scale. *E* is the knife, in front of the right hand lower corner of which projects a finger, which rests against the guide, *F*. The latter is secured detachably to the shaft, *B*, above the cam plate, as shown. It is of the exact form of the required heel, and must be changed for differing sizes of the same. On the upper side of the knife bar, at *G*, is a gage, which presses agaiust the counter, and, projecting a little in front of the edge of the knife, keeps the same evenly around the seat of the heel. It may be raised or lowered to snit various hights of heels, and may be moved nearer to or further from the work by means of the screw operating in the slotted projection, H. There is also a washer under the guide, *F*, which raises the same so that the knife may rest against it for a distance of an eighth of an inch or more, as desired.

To tbe forward end of the arm is attached a hook rod, which enters a groove nnder the cam plate. This portion of the device is necessarily hidden by other parts in the engraving. The object, however, is to cause the knife to move forward quickly to cnt the elongated sides of tbe heel, and slowly while cutting the short curve of the real portion of the same. At *I* is shown the lower extremity of a drop or clutch, which is hinged to the frame at or near its middle, so tbat its upper end enters a socket in the uuder side of the arm. At a certain point of the revolution of the gear wheel, *A*, a stud, *J*, thereon comes in contact with the drop and carries the same partially around, thereby relieving the strain on the hook pin when it enters the short curve of the slot of the cam plate, at the same time serving as a brake.

The rear leg of the frame projects upward and curves forward, so that its upper extremity is directly over the vertical shaft, *B*. Through this upper end passes a shaft, *K*, which connects with a spring lever above. The latter is operated by the treadle shown, and the device serves to hold the shoe down upon the guide. Nesr the lower end of the shaft, *K*, is a joint worked by the lever, *L*, the object of which is to trip the shoe when it becomes necessary to give one part of the heel more bevel than another. The knife bar has a spring upon its under side which will allow of its conforming to all ordinary styles of heels without requiring the employment of the tripping lever.

The mode of adjusting the shoe to be operated upon is already shown in Fig. 1. The pulley is operated over about 2½ revolutions to trim the shoe, and the speed required is some fifty revolutions per minute. For further particulars relative to sale of rights, etc., address the iuventor, E. U. Jones, Woodhaven, Queens county, N. Y.



JONES' HEEL TRIMMING MACHINE.

VANILLA FROM PINE TREES.—M. Hoffmau has informed the French Academy that his two pupils, who discovered a mode of obtaining vanilla from the sap of pine tr es have established a flourishing manufactory. They obtain a hundred francs worth of vauilla from a tree of moderate size. Tbe wood is not injured by the extraction of the sap. This communication was the more interesting as cases of poisoning have lately occurred through the substitution of the wild for the tame vanilla.—*Ex.*

The substance above referred to by our contemporary is not the trne vanilla, but has been named *vanillin* by Prof. Hoffman, from its similarity to vanilla, for which it is a perfect substitute. It is obtained from that particular fluid of the conifera, which flows between the bark and the wood—known as "cambium." This discovery furnishes another very remarkable addition to the series of the popular aud economic triumphs of modern chemistry in furnishing new materials for use in the arts and economies of life.

ACID IN THE GASTRIC JUICE.—R. Maly finds tbat the pure gastric juice in dogs contains no lactic acid. The decomposition of chlorides by lactic acid cannot therefore be the sonrce of the hydrocloric acid in the stomach. Lactic acid seems to play no part in the chemistry of or the normal formation of acids. The source of the free hydrochloric acid in the stomach is a process of dissociation of the chlorides without the action of an acid.

Venus and her Secret.

The observations of the transit of Venus sppear to have been very successful at most of the stations which were in telegrsph communication with the rest of the world. Reports to this effect have already been received from many widely separsted points. So closely was the little planet watched in her shadowy journey across the sun, and so msny eyes were kept upon her every movement, thst the grest secret—that wonderful secret which she hss kept ever since the morniug stars together ssng their first chorus, will no doubt be fairly and fully drawn out from her blnsbing, radisnt face.

It is now fully 150 years since it becsme well known that Venus possessed this secret, but how to wrest it from her has been the riddle. The opportunities of finding her in the mood have been rare, and hitherto the ingenuity of man has not been sufficient to devise the ways and means. But study and skill it is supposed have at length put such appliances into the hands of our scientific detectives, that when the case is fully worked up, the secret will be fairly won.

Those whose early hours of rising have given them the opportunity of late, to study her merry twinkles as she peeps up over the hills in the early morning twilight assure us that she gives every indication of a knowledge that her secret is out, and tbat the astronomer may hereafter make his cal ulations with such unerring certainty that the paths and distances and motions of the celestial bodies may hereafter be determined with such a degree of accuracy that the sailor as he pursnes his trackless way across the ocean may henceforth have no forbodings lest an error in his chart or lunar may precipitate his ship upon some dangerous or inhospitable rock, which science had erroneously told him was far to the leeward or the windward of the point where that same science had told him he then was.

This great and important secret, which has been so long and so well kept, is nothing less than the parallactic angle of the sun. Upon tbe accuracy with which this angle is measured, depends the calculation of all astronomical distances—that of the sun itself from the earth and the distances, not only of the planets but of the fixed stars also. Indeed it is impossible to fully appreciate the real value of this secret when once in possession of the scientific world. All honor to the governments of the earth which have fitted out so many expeditions as to leave no possibility of failure either from unfavorable weather or the dangers of the sea. The thanks of the world, and particularly of the sailor, is also due and should be freely rendered to the skilled artizans whose delicate and scientific manipulatious have wrought out instruments so infinitely superior to any which have heretofore been constructed, and which superiority, alone, is the means by which the great expected end is to be produced,

The Rewards of Perseverance.

In the mining regions of California msy be found perhaps the best illustrations of what perseverance and energy will do, that it is possible to get. Hundreds of csses might be cited where poor but energetic and hopeful miners have worked for years to strike a lead, knowing when they started work about how long it would take them to accomplish their object. In the face of all obstacles, however, they persevere, and sre generally rewarded in the end. In the gravel mining regions of the State, where the miners often have to run long tunnels under the mountains to tap the auriferous gravel, these instances are quite common. Here four men own an interest in the prospect, and while one or two work on the claim, the others work for wages, and keep the pot boiling for the crowd.

It requires considerable pluck to start a hole in a hill when you know that work as hard as you msy it will be four, five or six years before you can get any return for your labor. Most men would falter at the prospect, even if they were guaranteed a certain sum at the end of that time. In these cases, however, there is no such real certainty, for the gravel when struck may be poorer than was expected. Still, in most cases, when they do strike the old channels, they get pretty well paid for their labor. There are at the present time hundreds of miners engaged in just such undertakings as we refer to, and every few months we hear of some one who "has tapped the lead," and made a "home stake."

The latest instance of this is in the Empire gravel mine, at Table mountain, opposite the Illinois ranch, Tuolnmne county. The tunnel was completed a few weeks since, snd the Tuolumne *Independent* says they have strnck the cbannel with a good bed of gravel which prospects very fair. They have already passed through 25 feet of gravel in this front channel, and intend to run across, and thence over the high ledge to the back channel, where the boys say there is gold enough "to enrich every male and female citizen in Tuolnmne county." This back channel, they affirm, is the old Caldwell or Whimtown gravel lead. Over seven years ago this gronnd was taken up by Felix Obar and Mons. Bonncfoi, of Sonora, the former having worked alone, and scsrcely without intermission ever since. They ran a tunnel over 800 feet, the whole distance through basaltic rock heavily impregnated with cnbe sulphurets. To string out the length of fuse and candles burned dnring tho construction of this tunnel would reach many miles. We doubt if there are many men who would, with such tenacious perseverance, bave completed this enterprise uuder such adverse circumstances,

Levee Law Amendments in Political Code.

As the following amendments, lately made to the new code, are not generally known, we give tbem ss important information to msny of the readers of the PRESS:

INDIVIDUALS LIABLE TO DISTRICTS FOR ALL DAMAGES SUSTAINED BY REASON OF INJURING OR CUTTING OF LEVEES. [Amendment to Political Code.]

SEC. 3490.—Any person who shall cut, injure or dstroy any levees or other works of reclamation in any district, is responsible for all damages which may be occasioned thereby to such levee works; and an action therefor mnst be brought in the District Court of the county, or either of the counties in which such levee works are situated, in the names of the trustees of the district. If there be no trustees then the action may be brought in the name of any landowner in the district. The amount recovered in such action must be paid to the treasurer of the county who must place the same to the credit of the district.

OCCUPANTS OF LANDS ON BANKS OF STREAMS LIABLE FOR DAMAGES. [Political Code.]

SEC. 3,486.—Any person owning or occupying lands upon the banks of any stream where the lands lying back of such stream are lower than the bank thereof, is responsible for all damages which may be sustained by the owners or occupants of lower lands by reason of any cut or embrasure made on the bank of such stream by the owner or occupant of the bank,

COUNTY AND INDIVIDUAL RESPONSIBLE FOR INJURY TO OR DESTRUCTION OF LEVEES BY MOBS OR RIOTS. [See Political Code and Amendment '73 and '74.]

SEC. 4,000.—Every county is a body politic and corporate, and as such has the powers specified in this code, or in special statutes, and such powers are necessarily implied from those expressed.

SEC. 4,452.—Every municipal corporation is responsible for injuries to real or personal property situate within its corporate limits done or caused by mobs or riots.

SEC. 3,453.—Actions for damages under the preceding section must be tried in the county in which the property injured is situated.

SEC. 4,454.—All actions herein provided for must be commenced within one year after the act complained of is committed.

BOARD OF SUPERVISORS AUTHORIZED TO PAY FOR DAMAGE CAUSED BY MOBS OR RIOTS.

SEC. 4,455. On the certificate of the presiding officer or of the clerk of the court in which the judgment is rendered, the board of supervisors of the county or the legislative authority of the city must by ordinance direct and cause to be issued a warrant for the payment thereof on the general fund, and the same must be paid in its regular order, as other warrants of the municipal corporation are paid; and must, at the proper times levy and cause to be collected a tax on the taxable property of such municipal corporation for the payment of such warrant within a period of not more than three years.

SEC. 4,456—The plaintiff in any action authorized by this title must not recover if it appears upon the trial that the damage complained of was occasioned or in any manner aided, sanctioned, or permitted by his carelessness or negligence.

[Title IV, Chapter I., sections 4,452, 4,453, 4,454, 4,555, *are made applicable to levees*, by amendments to Political Code.]

SEC. 4,457—The provisions of this title and chapter (Title IV, Chapter I.) are applicable to cases where losses and other works of reclamation of any District are injured or destroyed by mob or riot; and the action brought for damages therefor must be prosecuted by the Attorney-General of the State in the name of the people of the State of California; and the amount recovered in such action must be paid to the Treasurer of the county, who must place the same to the credit of the District. All provisions of law inconsistent with the provisions of this section are repealed.

TO INJURE OR DESTROY LEVEES OR OTHER WORKS OF RECLAMATION, A FELONY, UNDER "AN ACT FOR THE PROTECTION OF CERTAIN LANDS FROM OVERFLOW," APPROVED MARCH 25TH, 1868.

SEC. 18.—Any person or persons who shall wilfully or maliciously, cut, injure or destroy, any levee or other work of protection built under the provision of this Act, or that may be in charge of said Board of Supervisors, shall be deemed guilty of felony, and upon conviction thereof before any court of competent jurisdiction shall be fined in any sum not less than fifty dollars nor more than one thousand, or be confined in the State prison not less than one nor more than five years, or may be both fined and imprisoned, at the discretion of the court.

ACCESSORIES HELD AS PRINCIPLES.

SEC. 971 [Penal Code Amendment '73, '74]—The distinction between an accessory before the fact and a principal, and between principals in the first and second degree, in cases of felony is abrogated, and all persons concerned in the commission of a felony, whether they directly commit the act constituting the offense, or aid and abet in its commission, though not present, shall hereafter be indicted, tried and punished as principals, and no additional facts need be alleged in any indictment against such an accessory than are required in an indictment against his principal.

SEC. 972—An accessory to the commission of a felony may be indicted, tried and punished, though the principal may be neither indicted nor tried, and though the principal may be acquitted.

CONSPIRACY AND RIOTS, ETC., DEFINED.

SEC. 182 [Penal Code]—If two or more persons conspire—

1st. To commit any crime; or

2d. Falsely to move or maintain any suit, action, or proceeding, etc. They are punishable by imprisonment in the county jail not exceeding one year, or by fine not exceeding $1,000.

SEC. 405—Any person who participates in any riot, is is punishable by imprisonment in the county jail, etc.

SEC. 407—Whenever two or more persons assemble together to do an unlawful act, and separate without doing or advancing toward it—snch assembly is an unlawful assembly.

SEC. 408—Every person participating is guilty of a misdemeanor.

SEC. 409—Every person remaining present at the place of any riot, mob, or unlawful assembly, after warning, is guilty of a misdemeanor.

NEW METHOD OF FILTRATION. — Professor Chas. A. Seeley has invented a new metbod of filtration. At the bottom of an open glass tube, say an inch in diameter, he places a piece of filtering paper, and over this a piece of India mnslin, which is secured arouud the tnbe by a rubber ring. The tube is filled with the liquid to bo filtered, and is closed at the top with a rnbber stopper through which runs a piece of rubber piping. The tube is connected witb two bottles, so arranged that the water in the upper one flows down into the lower one, forcing out the air, which in turn runs through the rubber pipe, forcing out the liqnid through the filtering material. The arrangement is exceedingly ingenious, and by this means a liquid may be filtered in oue-fourth of the time which the operation takes by the old method.

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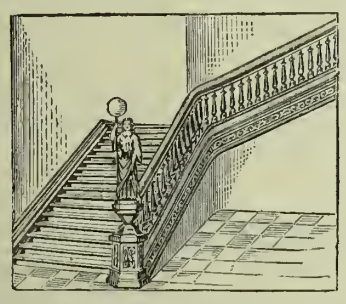
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24v8-3m Sau Jose, Cal.

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For years the farmers of the Pacific Coast have been spending money in experimenting to find a safe, cheap and efficient way of ridding their grain fields of their worst enemy, THE SQUIRRELS, which destroy Millions of Dollars' worth of grain every year; and unless a strong and *combined* effort is made to kill them off, they will become more numerous every year.

Wakelee's Granulated Squirrel Exterminator

Is just the thing the farmers of California have been looking for. It is SURE DEATH. One or two grains of it will kill a Squirrel so quick that if it is five feet from his hole it dies before it gets there. The Poison is put up DRY and in granular form, and easily handled; in one pound tins at $1 per pound. It goes a great way, as 10 to 15 grains of it are sufficient to place at each hole. Also successfully used for killing Gophers and Rats. It has been thoroughly tested in different parts of the country, and gave universal satisfaction. It is kept and sold by druggists and dealers generally through the country. The following are some of my testimonials, viz:

SANTA CLARA, April 20th, 1874.

H. P. WAKELEE, ESQ:—Your Squirrel Exterminator was used according to your directions, on my *Quito Farm* with excellent success, and in my estimation is just the thing the farmers want to kill their Squirrels.

J. R. ARGUELLO.

SAN LEANDRO, Cal., April 3d, 1874.

H. P. WAKELEE, ESQ.—*Dear Sir:* I have given your Squirrel Exterminator a fair trial and find it to be an economical and very destructive preparation, and I can safely recommend it to our farmers. Yours,

J. M. ESTUDILLO.

DOUGHERTY STATION, Alameda Co., Cal.

MR. H. P. WAKELEE, San Francisco: I have used your Squirrel Poison and found it to be just what you claim for it. It is sure death. Yours, O. M. DOUGHERTY.

H. P. WAKELEE, Druggist,

Cor. Montgomery and Bush streets, S. F.

ARE YOU GOING TO PAINT?

THEN USE THE BEST.

THE AVERILL CHEMICAL PAINT

WILLLAST THREE TIMES AS LONG as the best lead and oil, without CHALKING; is of any desired color. It is prepared for immediate application, requiring no Oil, Thinner or Drier, and does not spoil by standing any length of time. It is equally as good for inside as outside work; over old work as well as new; in fact, where any paint can be used the AVERILL CHEMICAL PAINT will be found superior to any other. Any one can apply it who can use a brush, which truly makes it the FARMER'S FRIEND.

IT IS JUST THE PAINT FOR THE AGE.

IT IS SOLD BY THE GALLON ONLY.

One gallon covers 20 square yards 2 coats.

For further information send for sample card and price list.

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Office—Corner Fourth and Townsend streets, San Francisco. 16v7-eow-bp-3m

Hooper's South End Grain Warehouse.

Japan and Townsend Streets.

SAN FRANCISCO, July, 1874.

I beg to inform you I have leased the above first-class Fire-Proof Brick Warehouse, now being erected by Geo F. Hooper, Esq., and will be ready to receive storage on the 1st of August. This warehouse offers superior inducements to parties desiring to store grain and flour, as it is situated on the Water Front, and on the line of the C. P. R. R. and S. P. R. R. It is well ventilated, rat proof, and combines all the modern advantages and improvements

Yours respectfully, JOHN JENNINGS.

Advances and insurance effected at the lowest rates Storage taken at lowest current rates. 4v8-ft

AMERICAN SWEET CHESTNUT TREES.

Thirty Thousand American Sweet Chestnut Trees for sale cheap, in lots to suit, at Room 32 Merchants' Exchange, San Francisco, where samples may be seen. ☞ The trees are two years old, and in prime order. Will be delivered either in this city, Oakland or Sacramento. These trees are valuable for nuts, timber, shade trees or lawn trees; and are preferred by many to any of the foreign varieties. tf

YOSEMITE HOUSE,

STOCKTON, CAL.

JAMES COLE, Proprietor.

This House contains all modern improvements: Saloons, Bath Rooms and Telegraph.

The only first-class Hotel in Stockton.

SOMETHING NEW.

Every business man should have one of those neat and durable Vulcanized Rubber Stamps, to mark their merchandise, stamp their envelopes, &c. Also, a name stamp for marking their clothing and cards with genuine indelible ink. Send your orders to

FRANK H. WING,

Room 14, 608 Market street, San Francisco.

Printing Wheels only $6. 25v8-1m

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REAL ESTATE BROKERS,

Employment and Intelligence Office. Horse and buggy free to see property. Offices at Compton, and at corner of Court and Spring streets, Los Angeles, Cal. 25v8-1y

CHINESE EMPLOYMENT COMPANY.

We are prepared to furnish at short notice, Domestic Servants, Hotel Cooks, Laundrymen, Waiters, Common Laborers, Farm Hands, Gardeners, Mechanics, Factory Hands, Wood Choppers, etc. Special attention given to furnishing Domestic Servants.

PIERCE & CO., 627 Sacramento St., bet. Montgomery and Kearny Sts. S F
4v17-3m

Geo. W. Chapin, Real Estate Agent, 434 Montgomery St., San Francisco, buys and sells Ranches in all parts of the State. City Real Estate exchanged for Country Property. MONEY LOANED. Post Office Box 1120.

CENTINELA COLONY

LOS ANGELES CO., CAL.

SIX MILES WEST OF LOS ANGELES, CAL.

The unparalleled success of the

LOMPOC COLONY,

SANTA BARBARA COUNTY,

Has induced the "Centinela Land Company of Los Angeles" to subdivide and place in market for sale and settlement, under the direction and management of the "California Immigrant Union," of San Francisco, the "Centinela and Sausal Redondo" Ranchos, containing Twenty-five Thousand Acres of Beautiful Valley Land, located seven miles west of the city of Los Angeles, and extending to and fronting on the Pacific Ocean. There is now on the tract an orchard of about three hundred acres, containing Orange, Lemon, Lime, Fig, Walnut, Almond and Olive trees, and a nursery of young Orange and Lime Trees. Some of the Orange and Lime trees are in bearing. The tract will be subdivided in twenty, forty, eighty, one hundred and sixty-acre farms, and sold upon easy terms and long credits.

Auction Sale of Town Lots
—AND—
5, 10, 20 and 40 ACRE FARMS,

WILL COMMENCE ON

Monday, Jan. 18, 1875, at 12 o'clock, M.

And continue Five Days. The sale will take place on the Rancho. Parties desiring to purchase should be on the ground a few days prior to the sale, in order to examine the property. Title—United States patent.

SITUATION.

"Centinela," with the addition of the "Sausal Redondo," contains 25,000 acres. The boundary of the Rancho commences three and a half miles from the city limits of Los Angeles, and extends to the Pacific Ocean.

TOPOGRAPHY.

"Centinela" is made up of one broad, level, fertile valley, of over twenty thousand acres, and beautiful fertile rolling hills near the ocean.

SOIL.

The soil is an exceedingly fertile loam, and is, without exception, the richest and most productive in Southern California. Its vicinity to the ocean insures a crop without irrigation. Excellent wheat has been raised for the last two years upon the hills adjoining the ocean. This wheat-field contains 1,000 acres, and covers the lightest soil upon the Rancho. There is no alkali or barren land.

SEMI-TROICAL FRUITS.

There are a few bearing orange and lime trees upon the Centinela, and the fruit they produce is of the largest and finest quality. There is an orchard containing 6,000 orange trees three years old, and 1,700 almond, lime and lemon trees. The almond, lime and lemon trees will bear fruit in 1875. The orange trees will bear in five years. There are 7,000 three-year-old orange trees in the nursery near the orchard. Fig, pepper and gum trees grow without irrigation. The entire orchard can be taken care of by three men with six horses. The orchard will be kept undivided by the company, to save the expense of each shareholder having a few trees to take care of. Each share will entitle the owner to about 15 trees in the orchard and about the same number in the nursery. The almond, lime and lemon trees will yield an immediate return. In five years each orange tree will produce $20 per annum, or $300 per share for those now planted. There are flowers in the garden in bloom every day in the year.

SHEEP.

A flock of about 14,000 sheep will be kept undivided, to save expense to the shareholders. This will give about 30 sheep to each share. The sheep will produce in increase and wool over $2 each, yearly, over expenses. They will be grazed upon outlying and unsold lands of the company. The "No-fence" Law is in force in Los Angeles County.

CLIMATE.

The climate of the "Centinela" is without exception the finest and most equable in the world. It varies but little throughout the year. The mean temperature is about 60 degrees. The mercury falls but little below 60 in winter and rises but little above 60 in summer. You sleep under one pair of blankets and with your bed-room window open every night in the year.

AGRICULTURE.

The soil of the "Centinela" is admirably adapted for all kinds of grain, vegetables and fruit.

WATER.

The Centinela creek rises upon the Rancho and runs through the northern portion of the tract. It affords an abundance of clear spring water. The source of the Centinela creek consists of several natural artesian springs, showing that artesian water can be obtained by boring.

THE TOWN.

A square mile is laid off at an eligible point on the tract, with lots 31x135; avenue 100 feet, and streets 80 feet wide. A stream of water can be brought in so as to supply every lot with crystal, cool, sweet water. One of the forty-acre tracts is set apart for a College and Farm School, and there will be a Ten-acre Park on each of the four sides of the town, and Four Blocks in the center of the town for Public Buildings, Schools, etc. A large lot will also be set apart for each Religious Denomination, and a block given for the erection of a large hall by the different Fraternal, Grange and Temperance Societies.

FARE.

Parties desiring to visit the Rancho can take the 8:10 A. M. train of the Southern Pacific Railroad to Soledad, thence by Coast Line Stage to Los Angeles; by 4 P. M. train to Bakersfield, thence by stage to Los Angeles; or by Pacific Mail Co.'s and Goodall, Nelson & Perkins' steamships direct to Los Angeles, where conveyances can be had to go to the Rancho free of charge.

RAILROADS AND WHARF.

The Company intend building a wharf to enable Steamships from San Francisco and other places to land passengers on the tract. A narrow-gauge railroad will be built from Los Angeles to the wharf, a distance of about 12 miles. The Main Street and Agricultural Park Railway will soon be built to the park, about — miles from the tract. This railway will be extended to the tract as soon as the settlement will justify it

Apply to **W. H. MARTIN**

General Agent California Immigrant Union, 514 California street, between Montgomery and Kearny streets, San Francisco, to TEMPLE & WORKMAN, Bankers, or Gen. SHIELDS, Los Angeles, or O. L. ABBOTT, Corresponding Secretary State Grange Immigrant Aid Association, Santa Barbara.

P. S.—A second sale will take place on the Rancho, commencing on Monday, the 8th of March, 1875.

Further particulars will be furnished by the officers and directors of the Centinela Land Company, of Los Angeles, who are: F. P. F. Temple, President; F. P. Howard, Vice-President; J. S. Slauson, Los Angeles County Bank, Treasurer; J. M. Griffith, of Griffith, Lynch & Co.; Gen. J. H. Shields; O. W. Childs; D. Freeman, on the Rancho; W. H. J. Brooks, Secretary.

BREEDERS' DIRECTORY.

PARTIES DESIRING TO PURCHASE LIVE-STOCK WILL FIND IN THIS DIRECTORY THE NAMES OF SOME OF THE MOST RELIABLE BREEDERS.

OUR RATES.—Cards of six lines or less will be inserted in this directory at the rate of 50 cents a line per month. Payable quarterly.

CATTLE.

R. G. SNEATH, Menlo Park, San Mateo Co., Cal. Choice Jersey Cows, Heifers and Bull Calves for sale.

ROBT. ASHBURNER, School House Station, San Mateo Co., Cal., breeder of Short-Horn Cattle.

CARR & CHAPMAN, Gabilan, Monterey Co., Cal., breeders of Trotting Horses, Short-Horn Cattle and Swine.

R. B. CANNON, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle and Swine.

JOS. L. CHAMBERS, St. Johns, Colusa Co., Cal., breeder of Short-Horn Cattle.

CHARLES CLARK, Milpitas, Santa Clara Co., Cal., breedor of Short-Horn Cattle.

J. BREWSTER, Galt Station, Sacramento Co., Cal., breeder of Sbort-Horn Cattle.

WM. FLEMING, Napa, Cal., breeder of Short-Horn Cattle.

C. B. POLHEMUS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

W. L. OVERHISER, Stockton, San Joaquin Co., Cal., breeder of Short-Horn Cattle and Swine.

WM. QUINN, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. B. REDMOND, Black Point, Marin Co., Cal., breeder of Short-Horn Cattle.

GEO. R. VERNON, Oakland, Alameda Co., Cal., breeder of Short-Horn Cattle.

MOSES WICK, Oroville, Butte Co., Cal., breeder of Short-Horn Cattle.

CYRUS JONES & CO., San Jose, Santa Clara Co., Cal., breeders of Short-Horn Cattle.

S. B. CAMERON, Mountain View, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Devon Cattle.

G. D. MORSE, San Francisco, breeder of Short-Horn and Devon Cattle.

A. L. BOGGS, San Jose, Santa Clara Co., Cal., breeder of Short-Horn Cattle.

L. J. HANCHETT, San Jose, Santa Clara Co., breeder of Short-Horn Cattle.

J. R. JEWELL, Petaluma, Sonoma Co., Cal., breeder of Short-Horn Cattle.

CHAS. G. BOCKIUS, Lomo Place, Sutter Co., Cal., breeder of Short-Horn Cattle.

JOHN JUDSON, Bloomfield, Sonoma Co., Cal., breeder of Short Horn Cattle.

A. MAILLAIRD, San Rafael, Marin Co., Cal., breeder of Jerseys. Calves for sale.

H. P. LIVERMORE, San Francisco, breeder of Short-Horn Cattle.

PAGE BROTHERS, 304 Davis street, San Francisco, (or Cotate Ranch, near Petaluma, Sonoma Co.): Breeders of Short-Horns and their Grades.

LEWIS PIERCE, Suisun, Solano Co., Cal., breeder of Short-Horn Cattle.

STANTON & POWERS, Sacramento, Cal. Choice Jersey Heifers at reasonable rates, Address L. C Powers, Sacramento, Cal.

SHEEP AND GOATS.

N. GILMORE, El Dorado, El Dorado Co., Cal., importer and breeder of Angora Goats.

SEVERANCE & PEET, Niles, Alameda Co., Cal., breeders of Thoroughbred Spanish Merino Sheep.

MRS. ROBERT BLACOW, Centerville, near Niles Station, Alameda Co., Cal. Pure-Blooded French Merino Rams and Ewes for sale.

A. G. STONESIFER, Hill's Ferry, Stanislaus Co., Cal., breeder of Pure-Blooded French Merino Sheep.

A. VROMAN, Jenny Lind, Calaveras County, Cal. Cotswold Bucks for sale. References: Moody & Farish, San Francisco; Shippee, McKee & Co., Stockton.

LANDRUM & RODGERS, Watsonville, Santa Cruz County. Pure-Bred Angora Goats and Cotswold Sheep for sale.

POULTRY,

GEO. B. BAYLEY, Cor. 16th and Castro rects, Oakland, Cal. Imported Brahmas and other hoice Fowls for sale.

M. FALLON, Seventh and Oak streets, Oakland, Cal., offers for sale Eggs from every variety of choice fowls.

ALBERT E. BURBANK, 43 and 44 California Market, San Francisco, importer and breeder of Fancy Fowls, Pigeons, Rabbits, etc.

M. EYRE, Napa. Bronze Turkeys, Emden Geese and other Fancy Poultry. Eggs in season.

C. W. WILSON, East Oakland, Cal. Fancy Fowls in variety; Adult Bronze Turkeys, $25 per pair; Young Bronze Turkeys, $15 per pair.

Mrs. L. J. WATKINS, Santa Clara. Premium Fowls. White Leghorn, S. S. Hamburg, Game Bantams, and Aylesbury Ducks. Also, Eggs. 21v8-3t

Mrs. L. E. McMAHAN, Dixon, Sonoma Co., Cal. Bronze Turkeys now ready for sale from the best imported stock; also eight varieties of choice Chickens; Eggs in season can be purchased very reasonably.

SWINE.

A. T. HATCH, Suisun City, Cal., breeder of Poland China Swine.

DAWSON & BANCROFT, U. S. Live Stock Exchange, S. E. Corner 5th and Bryant streets, San Francisco. All kinds of Common and Thoroughbred stock always on exhibition and for sale.

Agricultural Notes.

ALAMEDA.

Harvest Prospects.—Livermore *Enterprise*, Dec. 19: The water runs and the beautiful grass grows despite the wonderful predictions of some of our weather-cocks, and the thousands of acres of growing grain gives the false prophets a chance to ruminate in some dark cellar for new wisdom. Our hills and valleys have a life-long appearance, and but few in the State can boast of a finer prospect for the coming harvest.

This week we had a party of San Francisco gentlemen over to look at our new coal discovery. They pronounce the coal of excellent quality, and the indications the most flattering. They urge the putting on of a larger force of men for the purpose of developing the mine.

Farmers' Union.—The members of the Farmers' Union have purchased a piece of land on the south side of the railroad track, adjoining A. J. McLeod's property, and intend erecting a large warehouse at an early date.

AMADOR.

Mountain Farming.—The Amador *Ledger* is calling the attention of its readers to the profit to be derived from farming in the mountains. A large number of very convincing arguments are introduced in the form of facts. During the present year Mr. Avola, two miles south of Jackson, has realized $8,430, from 60 acres of land—39 acres in vine and fruit, 20 acres in hay and one acre in vegetables—$210.75 per acre. The hay land produced $35 per acre.

CALAVERAS.

Tropical Fruit.—Calaveras *Citizen*, Dec. 19: At Campo, Seco, in the orchard of Mr. Mackay are several orange trees which are covered with the nicest fruit grown anywhere in the world. Our reporter was shown a few days ago a limb from one of the trees about two feet in length which had on it 15 large-sized oranges. Another proof that Calaveras is one of the best counties in the State.

CONTRA COSTA COUNTY.

The Squirrel Law.—Contra Costa *Gazette*, Dec. 19: So far as we can learn, the success that has attended the operation of the new squirrel nuisance abatement law has been such as to demonstrate the practicability of utterly exterminating the pests if the District inspectors are faithful and competent. The early growth of grass this season, furnishing, as it has, abundance of feed for the squirrels as well as for the domestic stock, has left them less temptation than usual to take the poisoned bait laid out for them; yet, where the bait has been properly prepared and the business fairly followed up, we are assured there is scarcely a squirrel to be found, though the land before swarmed with them.

LAKE.

Evidences of Prosperity.—A correspondent of the Lake county *Bee* says: The people of Lake county are beginning to realize the advantages which they possess, and improvements are the order of the day. Neat, substantial residences, good barns, fences, etc., are going up throughout the county, while farmers are beginning to adopt all the latest labor saving improvements in agriculture.

Valuable quicksilver deposits have been discovered on the lake, opposite Lakeport, which will no doubt give an impetus to all kinds of business. The physical features of Lake county, as well as developments already made, indicate an inexhaustible supply of mineral deposits.

Hogs.—The *Bee* says: P. M Daly took a drove of 700 hogs from this county last week, by the Cloverdale route, for San Francisco. It is said they were the finest lot of hogs ever taken from Lake county.

MONTEREY.

Improved Sheep.—Monterey *Democrat*, Dec. 19th: Another batch of improved, fine wooled sheep has just been added to the Gabilan flocks. They are from Vermont, and together with similar purchases made by Mr. Carr, constitute a flock of 300 as fine sheep as can be found in any State of the Union.

MERCED.

Oranges in Merced.—*Tribune*, Dec. 19: The idea that orangea will not thrive in this part of the State has been exploded. Thos. Wagoner, whose ranch is near Snelling, brought a branch containing two large, beautiful oranges, from a tree raised from the seed in his garden. The tree is twelve years old and in a very thrifty condition. Last year it bore six oranges; this year it went thirty better. If it could increase in this same ratio the yield four years hence would be over 46,000. The specimen may be seen at the Cosmopolitan.

NAPA.

Beautiful Climate.—St. Helena *Star*, Dec. 17: Convincing evidence of our climate can be seen anywhere throughout our valley, which is in bloom with flowers of many hues and colors. That we are semi-tropical there can be no dispute, so long as flowers bloom throughout the winter months, in company of which the orange and lemon can be seen. What better commentary upon the mildness of our climate and the fertility of our soil can be desired? It is hard to beat nature, which in living green speaks for itself.

SANTA CRUZ.

Feeding Stock on Beet Pulp. — *Sentinel*, Dec. 19: Mr. J. D. Chace has some eighty head of stock at Soquel, being fed on beet pulp. Mr. Fiester is attending on them, and says they are doing very well. During the present week sixty head more will be added to the lot. The cattle are nightly housed in sheds and fed in stalls at regular intervals. The sugar works will have sufficient pulp to fatten several head of cattle monthly, after they get the works in full running capacity.

SIERRA.

Sierra Valley Farms.—*Mountain Messenger*, Dec. 12: Sierra valley, the agricultural portion of Sierra county, is one of the prettiest and most productive mountain valleys on the Pacific slope, hay and grain growing with but little cultivation, from a naturally deep, rich soil. Inclosed by lofty mountain ranges, viewed from a high elevation, the multitude of tastefully laid out farms, with their neat fences, out-buildings and residences, interspersed here and there with fine orchards and lovely flower gardens, together with large droves of cattle feeding on the distant plains, present a most beautiful and picturesque scene of farming in the high Sierras. A small part of the valley is shaded by a forest of pines, but the larger area is exposed to the bright rays of the sun. The lands are watered by innumerable streams, flowing in every conceivable direction, from the never-failing reservoirs at the head of the valley. Hay and butter are the main sources of profit, the severe frosts so prevalent here oftentimes blighting the grain, potatoes, etc.

SAN JOAQUIN.

San Joaquin Agricultural Society.—Stockton *Independent*, Dec. 16: The new board of directors of San Joaquin Valley Agricultural Society met last evening, L. U. Shippee, President, in the chair. The following business was transacted: Ordered, that the next annual fair of the society commence on the Monday of the week previous to the opening of the State fair at Sacramento. That our district fair commence on Monday and close on Saturday of the same week. The Secretary was directed to notify all the agricultural societies of the State of the time of holding the exhibition. The President and Mr. Arnold were appointed a committee to consult with Mr. Briggs with the view of employing him to take charge of the race track and fair grounds for one year. The President was directed to purchase and have set out on the back part of the race course as many trees as he may deem necessary. The salary of the Secretary was fixed at $250 for the year. It was moved that the board hold regular monthly meetings—to convene on the second Friday of each month at 7 o'clock P. M. It was likewise ordered by the board that the premium list be raised from 25 to 50 per cent. above that of the last fair.

SONOMA.

Improvement of Sonoma Creek.—Petaluma *Journal*, Dec 17: There is a petition being circulated in this vicinity, asking Congress to appropriate $150,000, to be expended by competent engineers appointed by the government, for deepening Petalnma creek to a depth of five feet at low water, from the head of navigation to a point 3½ miles below town. This is to be presented at the next session of Congress by J. K. Luttrell, of this district.

At the annual meeting of the Sonoma and Marin Agricultural Society the following officers were elected to serve during the ensuing year: J. R. Rose, President; H. Meacham and P. J. Shafter, Vice-Presidents; E. S. Lippitt, Secretary; A. Morse, Treasurer; G. D. Green and Robert Crane, Directors.

Real estate is quite active here at present, a number of dwelling houses having changed hands recently.

STANISLAUS.

Farming Progress.—Stanislans *News*, Dec. 11: A correspondent from Ceres writes as follows: "Farming is progressing with all the zeal and ambition that characterizes the farmers of this valley, the prospect being fair for a bounteous harvest. The farmers are agitating with each other as to who will get the most seed in, do it the best and in the shortest time. Seeding will soon be at an end; the early rains have enabled farmers to commence winter plowing sooner than usual, in fact they will, I am informed, finish seeding this year almost as soon as they have commenced on previous years."

Our Climates.—We have often boasted of the excellence of the climate of our county This year, however, exemplifies the mildness of our winters to a better advantage than any we have ever heretofore seen. In fact, we have only had one or two light frosts the present season. In many of the yards roses and other hardy flowers are still blooming; tomato vines are still fresh, and the fruit often in a growing condition. Last Saturday Mr. Vivian brought to the Grange fresh green corn, just pulled from growing stalks. Let our Eastern readers think of this; tomates and green corn in December. Surely tropical climates must be invading our Pacific coast from the South.

SUTTER.

Barley.—Sutter *Banner*, Dec. 12.—We learn that people on the tule in levee district, No. 70, are planting largely to barley. Last year the barley crop in that district was quite large, yielding from 40 to 70 bushels to the acre. It was found to be a profitable crop for the past season which is one of the lowest priced years we have had, and the average will be larger this season than ever before. Our barley is superior to that grown in any other part of the world, and has gained a high reputation in Europe and the Eastern States for malting purposes. Our soil is naturally adapted to this grain, and yields more to the acre than in any other country. How much more profitable to grow barley at a yield of 50 bushels per acre, than wheat at 20, for almost the same price. For brewing the Chevalier barley is the best.

TULARE.

Mushrooms.—Visalia *Delta*, Dec. 12: We have never seen such a sight as met our view a few days since on the plains northwest of town. We gathered a peck of mushrooms in less than ten minutes, the finest ones we ever saw; and it occurred to us that here was a chance for speculation, by gathering them for the San Francisco market, where they sell, usually, at from 25 cents to one dollar per pound. If the railroad charges are too much to admit of a fair profit, the making of cesspn would pay handsomely and afford employment for many children or Indians. Our plains in all directions, during the wet season, abound with a much more luxurious growth of this vegetable than we have ever seen offered in the San Francisco market.

Two Crops a Year by Irrigation.—The Visalia *Delta* says: Our Mussel Slough subscribers have made double crops through irrigation this season, and don't seem to think it much of a trick either. First comes the crop of cereals and then a crop of corn, beans, pumpkins, and, in fact, most anything with which they choose to seed the ground. Melons produce and reproduce all the season, and for aught we could see, looked determined to keep on till spring. Jessie Brown's ranch had a volunteer watering in the spring, through the breaking of the ditch, and the moisture from beneath, to a considerable tract of land. Corn, melons and potatoes were planted by way of experiment. Everything matured. The potatoes and melons we tried were superior to any others that we have seen grown at this very late season.

Winter Irrigation.—A correspondent, Mr. Rumford, of Plano, writes that at the Coll ns settlement, just below Plano, they will depend entirely upon winter irrigation from Deer creek. With that they can make sure of a good crop of grain, two or three crops of alfalfa, and furnish vines, trees, etc., with enough moisture for the entire season. "I have found by experience that land well soaked in the spring, if put in good condition, retains moisture all summer, and a pepper tree growing in front of my house, that has had no irrigation for a year and a half, has kept up a very rapid growth all summer, and is still growing. Fig trees that have had no irrigation since they were eighteen inches high produced fine figs, and kept of a dark healthy green all summer, and are still full of foliage, for we have had no frost yet to touch anything—not even tomato vines, they still being full of fruit and blossoms. The water here is seventy feet from the surface, though only seventeen feet a few miles below here. There is a splendid field here for capital to bring a ditch out of Tule river for winter and spring irrigation. Twenty or thirty thousand dollars would do it. It will have to come before long, and then this beautiful, healthy location, so free from frost, must be the garden spot of Tulare county. Then the plains, which are developed last, shall be first, and the bottom land which was first shall be last, and an old dream be fulfilled of Plano extending to Deer creek." I am informed parties on Deer creek are going to build a large canal, and take up all stock trespassing on the grass land.

YOLO.

Fine Raisins.—Yolo *Mail*, Dec. 10: R. B. Blowers of this county, has prepared and introduced into the market a sun-dried raisin from the Muscat grape, which far excels anything ever produced in California. We notice that the papers of San Francisco speak of them as even superior to the Malaga raisin, and further still that in putting his raisins up in boxes he gives full weight, which has caused a meeting of the buyers in the cities to express themselves freely as opposed to the style of boxing and weighing, instead of weighing and boxing. The correspondent of the Rural Press, of Dec. 5th, gives a full account of this mode of producing and drying the grape.

Bright Outlook.—Vegetation was never known to be so far advanced as it is at the present time so early in the season. Grass, where it is not pastured down with stock, is four to six inches high, and we have seen some volunteer wheat ten inches high. The whole valley is in a state of luxuriant green. The farmers are working so hard and so faithfully that a few more days will be all they desire in the way of time to prepare for any kind of a winter that may, in the wisdom of the Great Dispenser, be given. Those who are behind are beyond the pale of sympathy. They should have none. Those who work to put in too much will certainly not desire the sympathies of the community. Almost two months of splendid working weather, with the ground in good condition, is sufficient for anybody, and now, since the wheat is all in, all that can be desired is sufficient rain to make it grow until spring. The farmers will not be held responsible for what may occur between this and harvest.

A Real Convenience.—Dewey & Co: Please send me the Rural Press. It is a real convenience and I cannot do without it. Enclosed you will find five dollars. Fraternally, B. F. E. K.

Anaheim, Cal., October 12, 1874.

Woodward's Gardens embraces an Aquarium, Museum, Art Gallery, Conservatories, Tropical Houses, Menagerie Seal Ponds, and Skating Rink. Admission, 25 cents; children, 10 cents.

Subscribers who are troubled in getting their papers regularly from the P. O. should be particular to mention the name of the paper.

Patents & Inventions.

A Weekly List of U. S. Patents Issued to Pacific Coast Inventors.

[From Official Reports for the Mining and Scientific Press, Dewey & Co., Publishers and U. S. and Foreign Patent Agents.]

By Special Dispatch, Dated Washington, D. C., Dec. 22d, 1874.

For Week Ending Dec. 8th, 1874.*

Rotary Harrow.—Walter G. Read, Colusa, Cal.

Smoke and Gas Consumer for Engines.—David Matthew, Portland, Oregon.

Reissues.

Concentrator.—Joshua Hendy, S. F., Cal.

Ore Concentrator.—Joshua Hendy, S. F., Cal.

*The patents are not ready for delivery by the Patent Office until some 14 days after the date of issue.

Note.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by telegraph or otherwise) at the lowest rates. All patent business for Pacific coast inventors transacted with perfect security and in the shortest time possible.

Agricultural Items.

Russian Winter Crops Damaged.—The telegraph of last week says that a late copy of the Vienna *Free Press* has the following account of damage to Russian winter crops: "An insect, which has appeared in Russia in enormous numbers, is of grass color, and moves very slowly; but it is voracious to an alarming extent. All the winter crops in this government are completely destroyed. This worm attacks alike the wheat and rye, and is not satisfied with devouring tender sprouts; but it makes its way under the ground, where it eats the root, destroying the entire seed. The cold weather has had no effect on it.

Superior Vintage.—It is the universal opinion of wine-makers that this year's vintage will be superior in quality to that of any known in in Sonoma. The new wine is now in as good condition as ordinarily in February.

Hops.—Several hop growers near Sebastopol have contracted to sell their crops for the next two years at twenty five cents per pound.

Broom Corn.—It is estimated that 200 tons of broom corn was destroyed during the late storm.

Potato Rot.—It is stated that one-third of the potato crop in the vicinity of Bodega will be ruined by the rot.

The hop crop of Mendocino county this year was 200,000 pounds, and the wool crop 500,000 pounds.

In Sonoma county the acreage in grapes will be doubled this year.

There are 1,600 sacks of potatoes stored at Tomales.

A Noble Helper.

Compliments like the following are richer than fine gold—incentives to us to do our level best for the readers of the Rural Press:

San Luis Obispo, Nov. 23, 1874.

Messrs Dewey & Co.,

Gents:—Please find inclosed a check on Messrs. Stuart & Elder for $4.00, to pay my subscription for the Pacific Rural Press for one year. Some two years since I was induced, at the solicitation of Mr. F. M. Shaw to become a subscriber for your *invaluable* paper. Have been a constant and attentive reader of its columns since that time. My interest increases with the reading. Believing, as I do, that no intelligent farmer, nor any one who wishes to become so, can afford to do without it, you can write me down as a *life subscriber*.

I believe there was a club made up in our Grange for the Pacific Rural Press. My name was one of that club. Shall exert myself to have that club subscription continued and enlarged this year. I believe I also subscribed for a copy sent to Mr. W. R. S., Lake P. O., Ohio. When that subscription is about to expire please notify me, as I wish to renew it, and oblige,

Yours very respectfully,

G. S.

California is admirably supplied with periodical agricultural literature. The Rural Press, with which we are most familiar, gives a weekly compendium of information, theoretical and practical, relating to husbandry, which we sincerely hope is appreciated to the extent of an ample support of that paper. If there are others equally meritorious we hope they are also well sustained.—*Benicia Tribune.*

LEA & PERRINS'

—CELEBRATED—

Worcestershire Sauce.



Declared by Connoisseurs to be the only good SAUCE.

Caution Against Fraud.

The success of this most delicious and unrivalled Condiment having caused certain dealers to apply the name of "Worcestershire Sauce" to their own inferior compounds, the public is hereby informed that the only way to secure the genuine is to ask for LEA & PERRINS' SAUCE, and see that their names are upon the wrapper, labels, stopper and bottle.

Some of the foreign markets having been supplied with a spurious Worcestershire Sauce, upon the wrapper and labels of which the names of Lea & Perrins have been forged, L. & P. give notice that they have furnished their correspondents with power of attorney to take instant proceedings against manufacturers and vendors of such, or any other imitations by which their right may be infringed.

To be obtained of Messrs. CROSS & CO.,

San Francisco,

S. F. Market Report

At Wholesale when not Otherwise Indicated.

Weekly Market Review.

DOMESTIC PRODUCE.

SAN FRANCISCO, Wednesday, Dec. 23d, 1874.

The market for the leading staple, Wheat, has shown little change, abundance of choice milling being offered at $1.55 per ctl, while larger quantities of choice shipping have been readily taken at $1.52½; of fair ordinary milling, sales were free at $1.47½, while ordinary went at $1.45, and luferior at $1.25. Yesterday's Liverpool dispatches of 22d quoted Club 1d advance; but New York rates fell a trifle, though speculation there keeps prices up to the limits of exporters. Barley has sold throughout the week at our last quotstions. Corn has remained plentiful at $1.27½ to $1.30 per ctl. Choice Oats have been in demand at $1.65 per ctl, while fslr and light have sold st $1.42½ to $1.50, and the market is firm for all kinds, though a sailing vessel from Portland is due with 1375 sacks. Potstoes have been firm for choice article, and an advance took place strictly choice ranging from $1.50 to $1.75. A good many reaching the msrket sre rotten. Out of a shipment of 21 sks, 14 only were good. Onions show an advance, and sales of choice Bay were msde in lots at as high as $1.12½ per ctl. Butter is plentiful snd has a tendency to deoline. The demand for Eggs is good. Poultry has been and continues in good demand for the holidays, and live turkeys would to-day bring 18c per lb; but the supply of chickens is full and hens would not bring more than $5.50 to $6.25 per dozen, nor geese over $2 to $1.50 per pair.

Barley has sold st our quotstions throughout the week, holders closing st $1.50 for choice Bay brewing, snd $1.30 per ctl for Coast brewing, and purchsses for shipment East continue to be made ss fast as cars can be obtained. Feed kinds are also in good demand.

Buckwheat is in moderste request at 2½c per lb.

Butter, in rolls, is plentiful, and ranges from 40 to 47½c—extra, 50c.

Corn sales of good Southern yellow bave been made in lots at $1.30 per ctl, but all grades are plentiful at $1.27½ to $1.30 per ctl.

Eggs are in good demand at 45c for fresh California and 30 snd 32½ for Eastern.

Flour has continued active, with a good jobbing demand at $4 75 to $5.12½ per bbl. Chinamen have been paying but $3.65 to $4.15 for superfine.

Leather is unchsnged and dnll, but the prospect is for sn advsnce on Jodot of the better class, owing to the lsrge amounts of a light character which sre coming out of the vats, snd which sre unsaleable.

Oats are in demand at $1.40 to $1.65 for fced, and choice lots have sold for $1.70 per clt.

Onions sell at $1 to $1.12½ for choice Bay per ctl in lots.

Oranges from Los Angeles are $30 to $40 per M.

Freights to Liverpool are nomiual at £2.17s.6d. to £3, the latter being the asking rate.

Potatoes have advanced for a good article, s'rictly choice ranging from $1.50 to $1.75. Common Petaluma sold for $1.55; Humboldt in good order have been placed at $1.50 to $1.75; and choice Bodega also sold at $1.75 per ctl.

Quicksilver, according to a New York dispatch of the 19th has dropped to $1 58 gold, for round lots, the London price remainiug at 25 pounds sterling. Our quotations here are unchanged—$1 55.

Rye is plentiful at $1 15 per ctl.

Wheat was quotcd yesterday at Liverpoo l at 9s 10d to 10s 2d for average California; 10s 4d to 10s 8d for club, an advauce of 1d on club since the 21st dispatches. In New York the price declined a little during the week. In our market choice milling has been offered very freely at $1 55 per ctl., while choice shipping has beeu readily taken at $1 52½. Choice milling to the amount of 6,000 sks in lots were reported at $1 55; 800 sks fair ordinary at $1 47½, and 500 ordinary at $1 45.

Wool, fall Calfornia, is dull and a trifle lower in the East, and the movement has been very light here, and large quantities are held, Spring is firm, both here and in the East. Sales of California are quoted in New Y ork on the 19th of 100,000 lbs. of fall at 25c.; 50,000 lbs. burry do. and spring at 18c.; 21,000 lbs., slightly burry, spring at 27½c; 100,000 lbs. free do. at 30@33½c.; 5,000 lbs. scoured do. at 70c., and 100,000 lbs. spring and 85 bales fall, private; 45,000 lbs. scoured at 70@75c. At Boston the wool market was quite firm throughout the week, but with little movement in California wool, fall being particularly neglected, and only forced off at low ratcs, on account of its poor condition. The latest Boston sales of California were Spring California, 28½@35; fall do, 23@28c.

LUMBER.

WEDNESDAY M., Dec. 23, 1874.

CARGO PRICES OF REDWOOD.

Rough, ₱ M	$16 00
Rough refuse, ₱ M	12 00
Rough clear, ₱ M	32 50
Rough clear refuse, M	22 50
Rustic, ₱ M	30 00
Rustic, refuse, ₱ M	24 00
Surfaced, ₱ M	26 00
Surfaced refuse, ₱ M	16 00
Flooring, ₱ M	30 00
Flooring, refuse, ₱ M	20 00
Beaded flooring, ₱ M	32 50
Beaded floor, refuse, M	22 50
Half-inch Siding, M	22 50
Half-inch siding, ref, M	16 00
Half-inch, Surfaced, M	25 00
Half-inch Surf, ref., M	18 00
Tongued and Grooved, Half-inch Battens, M	22 50
Pickets, rough, ₱ M	13 00
Pickets, rough, p'ntd	16 00
Pickets, fancy, p'ntd	25 00
Shingles, ₱ M	2 25

PUGET SOUND PINE —Retail Price.

Rough, ₱ M	— —
Fencing and Stepping, M	— —
Fencing, 2d quality, ₱ M	— —
Fencing, ₱ lineal foot	1c
Flooring and Step, ₱ M	30 00
Flooring, narrow, ₱ M	32 50
Flooring, 2d quality, M	20 00
Laths, ₱ M	3 25
Furring, ₱ lineal ft	¾

REDWOOD—Retail.

Rough, ₱ M	20 00
Rough refuse, ₱ M	16 00
Rough Pickets, ₱ M	18 00
Rough Pickets, p'd, M	20 00
Fancy Pickets, ₱ M	30 00
Siding, ₱ M	25 00
Tongued and Grooved, surfaced, ₱ M	32 50
Do do refuse, ₱ M	22 50
Half-inch surfaced, M	40 00
Rustic, ₱ M	35 00
Battens, ₱ lineal foot	¾
Shingles ₱ M	2 75

DOMESTIC PRODUCE.

WEDNESDAY M., Dec. 23, 1874.

BEANS.

Beane. em'l wh. ₱	3	@	4
do. butter	3½	@	5
do. hayo	2	@	—
oo, pink	2¼	@	—
do. pea	4	@	4½

BROOM CORN.

Per ₱	5	@	8

COTTON

Cal. 1874, ₱ lb	15	@	15½

DAIRY PRODUCE

Butter, Cal. choice			
₱	40	@	45
do, good	35	@	40
do, inferior	30	@	35
do, firkin	30	@	35
do. pickled	35	@	40
Cheese, Cal	12½	@	17
do. Eastern	15	@	20

EGGS.

Egge, Cal. fresh	40	@	50
do, Oregon	30	@	35
do, Eastern	25	@	30
do, Ducks	—	@	—

FEED.

Bran, per ton	—	@	19 00
Middlings	—	@	28 50
Hay	12 00	@	17 00
Straw, ₱ balc	—	@	—
Oil cake meal	—	@	30 00
Corn Meal	31 00	@	32 00

FLOUR.

Extra	4 75	@	5 12½
Superfine	4 00	@	4 75

FRESH MEAT.

Beef, fr quality, ₱ lb	7	@	
oo, second do	6	@	7
do, third do	4½	@	5
Veal	4½	@	6
Mutton	4½	@	5
Lamb	5½	@	6
Pork, undressed	6½	@	6½
do, dressed	8½	@	8¾

GRAIN, ETC.

Wheat, coast	1 40	@	1 50
do ehipping	1 50	@	1 53
do milling	1 50	@	1 55
Barley, coast	1 20	@	1 30
do hrewing	1 40	@	1 50
Oats, ch ice	1 40	@	1 65
do oommon	1 20	@	1 40
Corn, White	1 35	@	1 40
do, Yellow	1 35	@	1 40
Buckwheat	2 00	@	2 25
Rye	1 12½	@	1 15

HOPS.

California, 1874	35	@	37½
East'rn, 73 ch'ice	50	@	—

MISCELLANEOUS.

Beeswax, per lb	25	@	27½
Honey in comb	18	@	22½
do Strained	5	@	10
Pulu			8½@9
Onions	65	@	1 12½

NUTS—JOBBING.

Cal. Walnuts	10	@	11
Peanuts per lb	6	@	7
Chile Walnuts	8	@	9
Pecan nuts	13	@	15
Brazil do	14	@	16
Alm'de b'rd shell	8	@	10
do, soft	15	@	22
Filberts	17	@	18
Cocoanuts, 1000	60	00@	—

POTATOES.

Sweet, per cwt	1 60	@	1 75
Cullee Covel	—	@	—
H. M. Bav	1 30	@	1 50
Pigeon Pt	1 35	@	1 55
Humboldt	1 50	@	1 75
Tomales	1 40	@	1 55
Mission	—	@	—
Salinas	—	@	—
Bodega	1 40	@	1 75
St Barhara	—	@	—
Sac. River	—	@	—

POULTRY & GAME.

Live Turkeys, hens per lb	14	@	18
do gobblers	12	@	14
do dressed	15	@	21
Hens, per dz	5 50	@	6 25
Roosters, young, large	5 50	@	6 50
Broilers, small	2 50	@	4 00
do large	4 00	@	5 00
Ducks, tame, doz	7 00	@	8 00
Geese, per psir	2 00	@	2 50
Hare, per doz	2 00	@	3 00
Snipe, Eng., doz	—	@	—
Quail, per doz	1 50	@	1 75
Mallard Ducks	3 00	@	4 00
do small	75	@	1 25
Wild Geese, gray	—	@	—
do white	2 00	@	4 00
Doves, per dozen	50	@	75
Prairie Chickens	—	@	—
Rabbits	25	@	50
do tame	5 00	@	6 00
Venison, per lb	6	@	7

PROVISIONS.

Cal. Bacon, Light	—	@	17
do Medium	—	@	16½
do Heavy	14	@	15
Eastern do	—	@	16
Hams, Cal	14	@	14½
do Whittakere	17½	@	18½
do Dufield, ch	17½	@	18½
do Plankton & Arm ur	—	@	18
do Boyd's	—	@	—
do Stewart's	—	@	16
Eastern Should's	9	@	10
do new hams	—	@	—
Cal. Smoked Beef	9	@	10
Lard	14½	@	17

SEEDS.

Alfalfa, Chili	15	@	16
do California	18	@	20
Canary	8	@	10
Cotton	6	@	10
Flaxseed	3	@	4
Hemp	8	@	10
Ky. Blue Grass	50	@	60
do 2d quality	40	@	50
do 3d quality	30	@	40
Millet	12	@	15
Mustsrd, white	1¾	@	2¾
do. Brown	1¾	@	2
Italian Rye	30	@	40
Eastern Cod	8	@	8½
Salmon in bbls	9 00	@	9 50
do ½ bbls	4 50	@	5 00
do 2½ lb cans	2	@	2 80
do 2 lb cane	2 65	@	2 75
do 1 lb cane	1 75	@	—
Do Col. R. ½ h	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	9 00	@	11 00
" Extra	—	@	12 00
" in kits	2 00	@	2 50
" Ex mess	3 00	@	3 50
" Ex mess, ½ bs	—	@	13 00
Pic'd Herr'g, hf bbl	3 00	@	3 50

NAILS.

Assorted size, ₱ lb	5 37½	@	7 50

OILS.

Pacific Glue Co. Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No. 1	—	@	1 25
do do No. 2	—	@	1 12½
Cocoanut	1 47½	@	1 50
Olive Plagniol	—	@	—
do Possel	—	@	—
Palm ₱	9	@	—
Linseed, raw	—	@	1 05
do boiled	—	@	1 10
China nut in os	77½	@	82½
Sperm, crude	—	@	1 40
do bleached	1 90	@	2 25
Coast Whales	45	@	—
Polar, refined	50	@	52½
Lard	1 15	@	1 30
Coal, refined Pet	37½	@	—
Cleophine	21	@	24
Devoe'e Bril't	25	@	28
Long Island	21	@	24
Enreka	—	@	—
Devoe'a Petro'm	21	@	24
Barrel kerosene	21	@	24

FRUITS AND VEGETABLES.

WEDNESDAY M., Dec. 23, 1874.

FRUIT MARKET.

Tshati, Or. ₱ M	—	@	—
Lorita, do	30 00	@	45 00
Cal. do	20 00	@	40 00
Limes, ₱ M	8 00	@	10 00
Cal. Lemons, ₱ M	—	@	—
Austr lian do	—	@	40 00
do Sicily ₱ b'x	—	@	—
Bananas, ₱ bnch	3 00	@	4 00
Cocoanuts, ₱ 1000	60 00	@	70 00
Pineapples, ₱ dz	—	@	7 00
Apples, ₱ box	1 00	@	1 25
Cherries	—	@	—
Blackberries	—	@	—
do wild	—	@	—
Huckleberries	—	@	—
Strawberries ₱ lb	—	@	—
Gooseberries	—	@	—
Raspberries	—	@	—
Currants	—	@	—
do black	—	@	—
Apricots	—	@	—
Plums	—	@	—
Peacnes, hskt	—	@	—
do, ₱ box	—	@	—
do ext Mountain, ₱	—	@	—
Pears, Bart't, bx	—	@	—
do Cooking	75	@	1 00
Crab Apples	—	@	—
Nectarines	—	@	—
Wat'rmel'n ₱ 100	—	@	—
Muskm'l'n ₱ 100	—	@	—
Pomegran's ₱ 100	—	@	—
Figs	—	@	—
Grapes, Bl'k H'g	—	@	—
do Muscat	—	@	—
do Malavo'e	—	@	—
do Sweetw'r	—	@	—
do Mission	—	@	—
do Rose of Peru	—	@	—
do Tokay	2 50	@	3 50
do Morocco	3 00	@	4 00
do St. Peter	—	@	—

DRIED FRUIT.

Apples, ₱ lb	5½	@	6½
Pears, ₱ lb	10	@	12½
Peaches, ₱ lb	10	@	12½
Apricots, ₱ lb	12½	@	15
Plums, ₱ lb	6	@	8
Pitted, do ₱ lb	12½	@	15
do Extra, ₱ lb	—	@	—
Raisins, ₱ lb	—	@	15
Black Figs, ₱ lb	—	@	15
White, do	10	@	15
Prunes	8	@	13
do German	14	@	—
Citron	—	@	35
Zante Currants	8	@	—
Dates	12½	@	—

VEGETABLES.

Asparagus	.50	@	75
Beets	.20	@	25
Cabbage, ₱ 100 lbs	.50	@	75
Carrots, per ton	6 00	@	10 00
Cauliflower, uoz	1 25	@	1 50
Celery, doz	40	@	50
Garlic, ₱ lb			18@25
Green Peas	6	@	10
Green Corn ₱ doz	—	@	—
Snm'r Squash per ton	—	@	—
Marro'tat Sq'sa, tn	8 00	@	10 00
Artichokes, ₱ doz	75	@	1 00
String Beans, ₱ lb			12½@15
Lima Beans			12½@15
Parsnips	15	@	20
Shell Beans	—	@	—
Peppers, green, box	—	@	—
Okra, Green	—	@	—
Cucumbers, box	—	@	—
Tomatoes, box	—	@	—
Egg Plant, box	—	@	—
Rhubarb	—	@	—
Lettuce	30	@	40
Turnips, ton	—	@	—

FRUITS, ETC., PRESERVED BY THE ALDEN PROCESS.

Apricots, pared, ₱ lb	35		
do unpared, ₱ lb †	32		
Peaches, do, ₱ lb †	16		
do pared, ₱ lb *	33½		
do do ₱ lb †	30		
Bartlett Pears, pared, lb *	45		
Pears, pared (sliced) lb *	30		
Peare, 10-lb boxes, family use, extra	35		
Currante, stemmed, lb *	30		
Royal AnnCherries, pitted, ₱ lb *	25		
Kentish Cherriee, pitted, * ₱ lb	55		
Apples, pared (ring), lb †	12½		
do do (whole), ₱ lb †	12½		
Apples, 10-lb boxes family use, extra	18		
Plums, pitted, ₱ lb †	25		
do do ₱ lb *	40		
Rhubarb, ₱ lb †	35		
Corn, ₱ lb †	32½		
Beans, ₱ lb †	60		
Potatoes, ₱ lb †	14		
Sweet Potatoes, ₱ lb †	15		
Onions, ₱ lb †	40		
Beet, ₱ lb †	40		
Tomatoes, ₱ lb †	75		
Squash, ₱ lb †	20		

*In caddies. †In bulk.

RETAIL GROCERIES, ETC.

WEDNESDAY M., Dec. 23, 1874.

Butter, Cal. ch'ice	—	@	60
do common	40	@	50
Cheese, Cal., lb	15	@	25
Lard, Cal., lb	15	@	17
Flour, ex. fam, bl	4 75	@	5 00
Corn Meal, lb	3½	@	5
Sugar, wh. cred	—	@	11½
do lt. brown, lb	7	@	10
Coffee, green, lb	22½	@	26½
Tea, fine blk, 50, 65, 75	@1		00
Tea, finst Jap, 55, 75, 90	@1		00
Candles, Admant'c	15	@	20
Soap, Cal., lb	6	@	10
Rice, lb	8	@	10
Yeast Powders, dz	1 50	@	2 00
Can'd Oysters, dz	200	@	3 00
Syrup, S F. Gol'n	—	@	75
Dried Apples	6	@	7
Wines, Old Port	3 50	@	5 00
do Fr. Claret	1 00	@	2 50
do Cal, dz. hot	3 00	@	4 50
Whisky, O.B, gal	3 50	@	5 00
Fr. Brandy	4 00	@	10 00

CALIFORNIA PORTRAYED.

The columns of the PACIFIC RURAL PRESS from January 1, 1870, contain the most complete and reliable information concerning the soil, climate, products and capabilities of the different sections of California, of any publication yet made. Neither new comers or old settlers in the rural districts can well afford to do without this enterprising and leading agricultural weekly. It is a good helper at home and a welcome guest abroad.

GENERAL MERCHANDISE.

WEDNESDAY M., Dec. 23, 1874.

BAGS.

Eng. Stand Wht	—	@	12
Detrick's Machine Sewed, 22x36, E	12	@	12¾
do 22x36, do E W	—	@	13¼
do 20x40, do A	—	@	13½
Flour Sacks ⅛s	9¼	@	11½
" " ¼s	6	@	7
Stand. Gunniee, double seam	13	@	14
single seam	13¾	@	14
" Wool Sacks	60	@	67½
Barley Bags 24x36	13	@	14
do 23x40	—	@	14½
do 24x40	—	@	15
do 28x36	—	@	16
Oat Bags, 24x40	16	@	16½
do 28x36	—	@	17
Hessian 40-in. gds	9½	@	9½
do 45	10½	@	11
do 60	—	@	16

CANNED GOODS.

Aeet'dPie Fruits in 2½ lb cans	2 50	@	2 75
do Table do	3 50	@	4 00
Jame & Jellies	3 75	@	4 00
Pickles ½ gl	—	@	3 50
Sardines, qr hoxl	80	@	—
do hf boxes	3 20	@	—

COAL—Jobbing.

Anstralian, ₱ ton	10 50	@	12 50
Coos Bay	—	@	10 00
Bellingham Bay	—	@	8 50
Seattle	—	@	11 —
Cumberl'd, cks	—	@	18 00
do bulk	16 00	@	17 50
Mt. Diablo	6 25	@	8 50
Lehigh	—	@	17 00
Liverpool	10 50	@	11 50
West Hartley	—	@	14 00
Scotch	10 00	@	11 00
Scranton	—	@	13 50
Vancouver's Isl	11 00	@	11 50
Charcoal, ₱ sk	75	@	—
Coke, ₱ hbl	—	@	60

COFFEE.

Sandwich Island	—	@	22
Central Americ'n	20	@	22
Costa Rica per lb	23	@	24
Guatemala	20	@	22
Java	—	@	26½
Manilla	19	@	20
Ground in cs	—	@	27
Chicory	9	@	10

FISH.

Pac. Dry Cod, new	5	@	6
caees	6	@	7
do boneless	11	@	12
Eastern Cod	8	@	8½
Salmon in bbls	9 00	@	9 50
do ½ bbls	4 50	@	5 00
do 2½ lb cans	2	@	2 80
do 2 lb cane	2 65	@	2 75
do 1 lb cane	1 75	@	—
Do Col. R. ½ h	—	@	—
Pick. Cod, bbls	22 00	@	—
do ½ bbls	11 00	@	—
Bos. Sm'k'd Her'g	40	@	50
Mack'l, No. 1, ½ bls	9 00	@	11 00
" Extra	—	@	12 00
" in kits	2 00	@	2 50
" Ex mess	3 00	@	3 50
" Ex mess, ½ bs	—	@	13 00
Pic'd Herr'g, hf	3 00	@	3 50

NAILS.

Assorted size, ₱ lb	5 37½	@	7 50

OILS.

Pacific Glue Co. Neat F't No. 1	—	@	90
Pure	—	@	—
Castor Oil, No. 1	—	@	1 25
do do No. 2	—	@	1 12½
Cocoanut	1 47½	@	1 50
Olive Plagniol	—	@	—
do Possel	—	@	—
Palm ₱	9	@	—
Linseed, raw	—	@	1 05
do boiled	—	@	1 10
China nut in os	77½	@	82½
Sperm, crude	—	@	1 40
do bleached	1 90	@	2 25
Coast Whales	45	@	—
Polar, refined	50	@	52½
Lard	1 15	@	1 30
Coal, refined Pet	37½	@	—
Cleophine	21	@	24
Devoe'e Bril't	25	@	28
Long Island	21	@	24
Enreka	—	@	—
Devoe'a Petro'm	21	@	24
Barrel kerosene	21	@	24
Olive	4 20	@	9 25
Downer Kerose'e	—	@	37
Gas Light Oil	—	@	26

PAINTS.

Atlan. W. Lead	6	@	10
Whiting	—	@	2
Putty	4	@	5¾
Cbalk	—	@	2½
Paris White	2¾	@	—
Ocbre	2	@	5
Venetian Red	3½	@	5
Red Lead	7	@	11
Litharge	10	@	11
Eng. Vermillion	2 00	@	2 10

RICE.

Cbins No. 1, ₱ lb	6½	@	6¾
do 2. do	5¾	@	6
Japan	6	@	7
Siam Clesned	7	@	—
Patns	6	@	6¾
Hawaiian	7¼	@	8
Carolins	10	@	10½

SALT.

Cal. Bay, per ton	10 00	@	14 00
do Common	5 00	@	7 00
Carmen Island	11 00	@	13 00
Liverpool fine	—	@	24 00
do coarse	16 00	@	—

SOAP.

Castile ₱ lb	10	@	11
Local brands	5	@	8

SPICES.

Cloves	50	@	55
Caesia	26	@	27
Citron	33	@	35
Nutmeg	1 20	@	1 30
Whole Pepper	21	@	23
Pimento	—	@	15½
Gr'nd Allsp prdz	—	@	12½
do Cassia do	—	@	50
do Cloves do	—	@	50
do Mustard do	—	@	20
do Ginger do	—	@	1 00
do Pepper do	—	@	1 00
do Mace do	—	@	2 00

SUGAR, ETC.

Cal. Cube per lb	11½	@	—
Partz' Pro. Cube bbl or 100 lb hxs	—	@	11¾
do in 50 lb bxs	—	@	12
do in 25 lb bxs	—	@	12¼
Cornelian Crushed	—	@	11½
Powdered	—	@	11¾
Fine crushed	—	@	11½
Granulated	—	@	11¼
Golden C	—	@	10
Hawaiian	8	@	11¾
California Beet	10¾	@	11½
Cal. Syrup in bls	—	@	67½
do in ½ bls	—	@	70
do in kegs	—	@	75
Hawaiian Molasses	25	@	30

TEA.

Oolong, Canton, lb	19	@	25
do Amoy	28	@	50
do Formosa	40	@	80
Imperial, Canton	25	@	40
do Pingsuey	45	@	80
do Moyune	60	@1	00
Gunpo'der, Cant	30	@	42½
do Pingsuey	50	@	90
do Moyune	65	@1	25
Y'ng Hy., Canton	28	@	40
do Pingsuey	40	@	70
do Moyune	65	@	85
Japan, ½ chests, bulk	30	@	75
Japan, iacqnered bxs, 4½ and 5 lbs	45	@	67
Japan do, 3 lb bxs	45	@	90
do pl'n bx, 4½ lb	35	@	65
do ½&1 lb paper	30	@	55

TOBACCO—Jobbing.

Bright Navys	50	@	60
Dark do	50	@	55
Dwarf Twist	70	@	72½
12 inch do	60	@	70
Light Pressed	70	@	80
Hard do	50	@	60
Conn. Wrap'r	35	@	40
Penn. Wrapper	20	@	45
Obio do	15	@	20
Virgi'a Smok'g	45	@	75
Fine cut chewing, buc'ts, ₱ lb	75	@	90
Banner fine cut	9 00	@	9 25
Enreka Cala	—	@	9 00

TURPENTINE.

Eastern	55	@	60

METALS.

WEDNESDAY M., Dec. 23, 1874.

American Pig Iron, ₱ ton	—	@	46 00
Scotch Pig Iron, ₱ ton	42 00	@	46 00
White Pig, ₱ ton	—	@	46 00
Oregon Pig, ₱ ton	—	@	46 00
Refined Bar, bad assortment, ₱ lb	—	@	3½
Refined Bar, good assortment, ₱ lb	—	@	4
Boiler, No. 1 to 4	—	@	5½
Plate, No. 5 to 9	—	@	5½
Sheet, No. 10 to 13	—	@	5¾
Sheet, No. 14 to 20	—	@	5¾
Sheet, No. 24 to 27	—	@	09
Horse Shoes, per keg	7 50	@	8 00
Nail Rod	—	@	—
Norway Iron	—	@	—
Rolled Iron	—	@	—
Other Irons for Blacksmiths, Minere, etc.	—	@	4½
COPPER.— Braziers'	—	@	32
Copper Tin'd	—	@	—
O. Niel's Pat	—	@	—
Sheathing, ₱ lb	—	@	24
Sheathing, Yellow	—	@	25
Sheathing, Old Yellow	—	@	12½
Composition Nails	—	@	—
Composition Bolts	—	@	—
TIN PLATES.— Plates, Charcoal, IX ₱ box	13 00	@	15 00
Plates, I C Charcoal	13 00	@	14 50
Roofing Plates	12 50	@	15 00
Banca Tin, Slabs, ₱ lb	—	@	33
STEEL.—English Cast, ₱ lb	—	@	25
Anderson & Woode' American Cast	—	@	16½
Drill	—	@	16½
Flat Bar	—	@	22
Plough Steel	8 50	@	10 00
ZINC	—	@	11
Zinc, Sheet	—	@	11½
NAILS—Assorted sizes	4 25	@	8 00
QUICKSILVER, per lb	—	@	1 55

LEATHER.

WEDNESDAY M., Dec. 23, 1874.

City Tanned Leather, ₱ lb	26@29
Santa Cruz Leather, ₱ lb	26@29
Country Leather, ₱ lb	24@28
Stookton Leather, ₱ lb	25@29
Jodot, 8 Kil., per doz	$50 00@54 00
Jodot, 11 to 19 Kil., per doz	66 00@90 00
Jodot, second choice, 11 to 16 Kil. ₱ doz	55 00@72 00
Cornellian, 12 to 16 Ko	57 00@67 00
Cornellian Females, 12 to 13	63 00@67 00
Cornellian Females, 14 to 16 Kil	71 00@76 50
Simon Ullmo Females, 12 to 13, Kil	60 00@63 00
Simon Ullmo Females, 14 to 15, Kil	70 00@72 00
Simon Ullmo Females, 16 to 17, Kil	73 00@75 00
Simon, 18 Kil., ₱ doz	61 00@63 00
Simon, 20 Kil. ₱ doz	65 00@67 00
Simon, 24 Kil. ₱ doz	72 00@74 00
Robert Calf, 7 and 9 Kil	35 00@40 00
Frenoh Kipe, ₱ lb	1 00@1 15
California Kip, ₱ doz	40 00@[illegible] 00
Frenoh Sheep, all colors, ₱ doz	8 00@15 00
Eastern Calf for Backs, ₱ lb

Agricultural Articles.

THE CALIFORNIA HARROW,

—MANUFACTURED BY THE—

Kimball Car and Carriage Manufacturing Company,

Cor. Bryant and Fourth sts., San Francisco.



IN THE FIELD.

The California Harrow, large numbers of which we are now making, has seven distinct and well defined improvements possessed by no other Harrow, each of which saves both time and labor:

FIRST—This Harrow has an easy seat and three wheels, all attached to the central section, on which the driver rides and manages the Harrow and team with ease and comfort.

SECOND—By means of but three levers the driver in his seat on the Harrow can raise the Harrow and himself on the wheels, and trot to and from the field, and without leaving his seat can let the sections down and proceed with his work.

THIRD—By the use of but one lever conveniently situated at the right side, the driver in his seat, and without stopping his team, can regulate the depth of the Harrow teeth in the ground, and can set them deep or shallow, as the conditions of the soil require. This meets a demand for harrowing Alfalfa or small grain, in the spring.

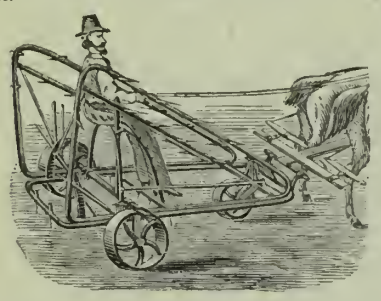
FOURTH—This Harrow is made in three sections, connected by loose hinges. The driver, as he moves along on the field, can raise any one of the sections, and pass a tree or stump, or other obstacles, without interfering with the work of the other two sections.

FIFTH—By the use of a brace made of a board but 3 feet long and ¾x4 inches, let on the tops of the levers of the wings, this can be made a stiff Harrow, and the driver by lowering the lever at his right can throw his weight and that of the wheels and extra fixtures on and off at his pleasure.

Complete work can be done up to and all around trees, without changing the course of the team.

We build these Harrows of wood and tubular iron, making beautiful and very powerful Harrows, unaffected by exposure to the weather.

We have any number of letters in praise of these Harrows from farmers who have put them to practical use.



ON THE ROAD.

The KIMBALL CO. are the owners and sole manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, which has become so popular the past few years. For further information send for circulars.

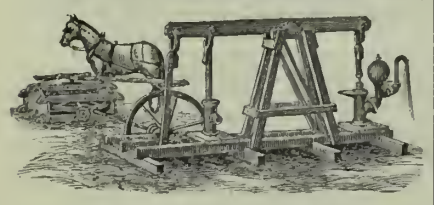
VINE AND FRUIT GROWERS,

TO RAISE LARGE CROPS

YOU MUST IRRIGATE.

To irrigate successfully, you must have the power that does not give out when the wind fails.

Laufkotter Bros. & Churchman's Horse-Power,



[PATENTED FEBRUARY 13TH, 1872.]

Never fails to supply more water than four or five Windmills, even supposing you had all the wind you want. It is also suitable for running light machinery, such as Barley Crackers, Corn Shellers, Fanning Mills, Grain Separators, or, for Sawing Wood. They are never failing, cannot get out of order, easily worked, substantial, and always give satisfaction wherever they have been used. One horse can easily work two 8-inch pumps, with a continuous flow of water. Force Pumps, from 3,000 to 10,000 gallons per hour. WINDMILLS of all kinds manufactured to order. Wells Bored, Windmills and Horse-Powers set in any part of the State, and repairing of all kinds done.

Manufactured and for sale by

LAUFKOTTER BROS.,

v7-2m-3m Cor. J and 10th Sts., Sacramento.

Farmers and Threshers

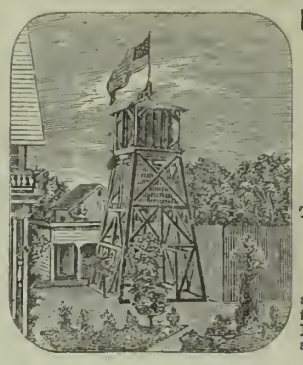
WISHING TO HAVE

STRAW BURNING ENGINES

For next season must engage them soon, as most of those now building are already sold. Threshing Engines for Repairs should be sent in now. A number of Second-hand Engines—taken in exchange for "Straw Burners"—for sale cheap. For particulars and prices, address

H. W. RICE,

23v8-3m Haywood, Alameda County.



Parties who have been troubled with Windmills blowing to pieces and getting out of repair should by all means examine the

DEXTER,

THE ONLY PERMANENT MILL IN EXISTENCE.

It runs with lighter wind than any other; regulates itself in a gale; and has never been known to be injured by storms, although it has stood for six years on the **Plains of Kansas, Nebraska, Missouri, Iowa and Illinois**, where no other mills have been known to stand any length of time. All we ask is a full investigation of the DEXTER.

A. H. SOUTHWICK & CO.,

OFFICE—428 Sansome Street.....SAN FRANCISCO

4v8-eow-3m MANUFACTORY, FOOT OF BROADWAY, OAKLAND.

The attention of Wool Growers is continually invited to the

Thoroughbred Stock Bred and Kept on the MERINO RANCH,



Situated at Niles, Alameda County, Cal., only five minutes walk from the station, junction of San Jose and C. P. R. R. Parties desiring to visit our ranch can leave San Francisco at 3 o'clock P. M., and have an hour at the ranch, returning on Overland train at 6 P. M. Or coming out in morning, can return to city at 11 o'clock A. M. The proprietors make the

THOROUGHBRED SPANISH MERINO SHEEP A SPECIALTY,

Believing them to be the BEST SHEEP IN THE WORLD, and are constantly receiving fresh importations from Addison County, Vermont.

Our flock are all Imported Sheep, and have no superiors in the United States. We always have on hand choice young RAMS and EWES, of all ages, for sale at Reasonable Prices, giving time, if required, to responsible parties. **City Office—315 California Street, San Francisco.**

SEVERANCE & PEET,

10v7-eow Importers and Breeders of Spanish Merino Sheep.

THE TREADWELL SULKY



GANG PLOW.

Improved for 1874, with BLACK HAWK Plow Bottoms, is the best GANG PLOW in the world. It is Simple, Strong and Durable, and does its work effectually. Has high wheels, running both on unplowed land; iron axle, wrought iron beams, and is built nearly all of iron and steel. No farmer should neglect to see it before buying. Send for descriptive circular and price. We have also the "VICTOR GANG," with hard wood beams and heavy cast iron standards; price, $75. Also the "GOLDEN STATE GANG," with all iron beams; price $75. "PFIEL'S GANG," improved; price $50; old style, $25. The largest and best stock of Plows, Harrows, Cultivators, Grain Drills, Seed Sowers, Farm Wagons, etc., in the country.

TREADWELL & CO.,

18v8-tf San Francisco

O. CREGO. S. O. BOWLEY.

CREGO & BOWLEY,

Importers and Manufacturers

—OF—

CARRIAGES and WAGONS,

No. 9 Merchant's Exchange,

CALIFORNIA STREET.....SAN FRANCISCO

Keep constantly on hand top and open Buggies, top and open Rockaways, Jump-seat Buggies, Track and Road Sulkies, Skeleton Wagons, Basket Phaetons of the very latest styles and finest workmanship.

We would call particular attention to our fine stock of light Road and Trotting Wagons, made to order by the following celebrated makers:

Charles S. Coffrey, Camden, New Jersey;
Helfield & Jackson, Rahway, New Jersey,
Gregg & Bow, Wilmington, Delaware;

And the first-class makers, which we are prepared to sell on the most reasonable terms.

Also, a large assortment of single and double Harness, of the most celebrated makers:

C. Graham, New York; J. R. Hill, Concord; Pittkin & Thomas, Philadelphia.

Also, a full assortment of Dress and Light Blankets, Fur and Lap Robes, Whips, Halters, Surcingles, etc., at wholesale and retail.

CREGO & BOWLEY,

No. 9 Merchants' Exchange, California street,

24v5-3m San Francisco.

MATTESON & WILLIAMSON'S

AMERICAN CHIEF GANG PLOW.



Took the Premium over all at the great Plowing Match in Stockton, in 1870.

This Plow is thoroughly made by practical men who have been long in the business and know what is required in the construction of Gang Plows. It is quickly adjusted. Sufficient play is given so that the tongue will pass over cradle knolls without changing the working position of the shares. It is so constructed that the wheels themselves govern the action of the Plow correctly. It has various points of superiority, and can be relied upon as the Best and Most Desirable Gang Plow in the world. Send for circular to

14v2-3m MATTESON & WILLIAMSON, Stockton, Cal.

THE CALIFORNIA SCRAPER,

—MANUFACTURED BY THE—

Kimball Car & Carriage Man'f'g Co.

COR. FOURTH & BRYANT STS., S. F.



THE CALIFORNIA SCRAPER.

This Scraper has been long needed in many departments of labor. Heretofore all classes of Scrapers have imposed immense labor and hardships on the driver, but this one is so constructed as to give him a place to ride, and yet manage the team and Scraper with ease in all classes of work.

The driver can throw his weight in front, and force the Scraper into the soil, and when he has gathered his load and driven to the place of deposit, he can throw his weight on the rear part of the platform and leave the load all in one place, or deposit it gradually, as the case may require, leaving the ground smooth and level.

This improvement is well adapted to leveling all irregularities on the surface of the soil where parties are preparing to irrigate.

For making roads, removing dirt from ditches, cleaning up barn yards or sheep corrals, it has no equal.

The KIMBALL CO. are sole owners and manufacturers of the celebrated IMPROVED EAGLE HAY PRESS, also the California Harrow. For further information send for circular.

Plows

☞Black Hawk,
Collins,
"Jones,"
Peoria,

Of all kinds and sizes. The largest stock ever offered in California; all NEW and just received, at low prices. Also, Cultivators, Harrows, Seed-Sowers, etc. Sold by

TREADWELL & CO., San Francisco.

☞Send for Price List. 18v8-tf

Notice—To Tule Land Owners.

I am manufacturing a Gang Plow specially adapted to ploughing Tule Lands. Address

Vallejo Foundry, J. L. Heald, Prop.,

18v29-3m VALLEJO, CAL

CO-OPERATIVE MARBLE WORKS.

JOHN DANIEL & CO.,

Manufacturers of and Dealers in

Monuments, Headstones, Tombs,

MANTEL PIECES, ETC.,

421 Pine street, between Montgomery and Kearny, SAN FRANCISCO.

21v2-1y



FOR SALE OR TO LEASE.

A fine place, well adapted for keeping summer boarders. Two large houses, orchard, vineyards, natural forest and good springs, water brought into the houses. Location and scenery unsurpassed.

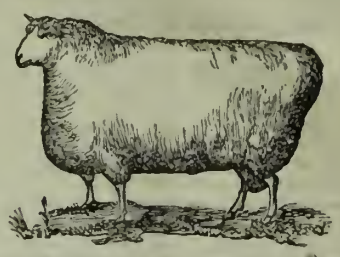
A. E. BALL,

Office of Sawyer & Ball. 502 Montgomery St.

24v8-4t

Live Stock Notices.

B. W. OWENS, San Francisco. | E. MOORE, Stockton, Cal



OWENS & MOORE,

COMMISSION MERCHANTS,

DEALERS IN

WOOL, HIDES, PELTS AND GRAIN.

Office—405 Front street, S. F. 14v7-3m

Notice to Wool Growers.

We have for sale Pure-Bred and High Grade (up to 63-64ths) Angora Goats, as good and will sell as cheap as any party will sell like quality. We have also for sale, Rams of the following breeds and crosses: Pure-Bred French Merinos, rams with Pure-Bred Cotswold and South Down Ewes; also a cross with the Texel and Spanish Merinos; a cross with the Lincoln and Leicester; a cross with the South Down and Cotswold; a cross with the French and Spanish Merinos. Our Rams are large, clear of scab and in good condition for service. They are good to breed to Grade Merinos; they lengthen the wool and improve the size and breeding qualities, etc. Our Rams are near the Tres Pinos Depot, seven miles from Hollister, San Benito County.

5v8-3m THOS. BUTTERFIELD & SONS.

U. S. LIVE STOCK EXCHANGE,



S. E. Cor. 5th & Bryant Sts., SAN FRANCISCO.



Fresh Milch Cows and Cattle; Saddle, Work and Carriage Horses; Thoroughbred Durhams and Devons; Pure Blooded Berkshire Pigs; Thoroughbred Cotswold, Southdown and French and Spanish Merino Sheep, sold on commission or bought on farm for cash. Address, DAWSON & BANCROFT.

P. S.—*Special rates to members of the Grange.*

Grange Notices.

The Sewing Machine

—FOR THE—

GRANGERS.

NO COMBINATION! NO MONOPOLY!

The New Improved FLORENCE,

Side Feed and Back Feed.

Agency established on the Pacific Coast in 1863. The lightest running, most simple, and most easily operated Sewing Machine in the Market. Always in order and ready for work. If there is a Florence Sewing Machine within one thousand miles of San Francisco not working well I will fix it without any expense to the owner. Samuel Hill, Agent, 19 New Montgomery Street, Grand Hotel Building, San Francisco.

Mr. I. G. Gardner, State Agent for the California Granges, is authorized to make liberal terms to all Grangers who purchase the FLORENCE. No combination against favoring the Grangers has ever been joined by Florence Agents.

7v8-tf SAMUEL HILL, General Agent.

California Farmers' Mutual Fire Insurance Association.

Office, 6 Leidesdorff Street, - - - San Francisco.

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This association is organized for the purpose of affording the farmers of this State the means of safely insuring against loss by fire, at actual cost of insurance, without being connected with city risks. a822-tf

PACIFIC OIL AND LEAD WORKS,

SAN FRANCISCO,

Manufacturers of

Linseed and Castor Oils,

OIL CAKES AND MEAL.

Highest price paid for Flax Seed and Castor Beans delivered at our works.

Office, 3 and 5 Front street.

Works, King street, bet. Second and Third. fe15-eow

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Blank Books Ruled, Printed and Bound to Order.

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Nurseries and Seedsmen.

Established 1853.

Stocks for Nurserymen.

Plum Seedlings, Mirobolan, the best French stock, does not sucker	$50 per 1000
Apple Seedlings	10 per 1000
Pear Seedlings	10 per 1000
Cherry Seedlings, Mazzard	12 per 1000
Cherry Seedlings, Mahaleb	20 per 1000
Walnuts, English, 4 to 6 feet	15 per 100
Cork Elm, best Elm, 4 to 6 feet	15 per 100
Blue Gum or Eucalyptus, in variety	5 to 10 per 100
Magnolia Grandiflora	LARGE STOCK
Magnolia Acuminata	
Magnolia Tripetela	
Golden Arborvitæ	
Cratagus Arboria	
Swedish Juniper	
Irish Juniper	
Heath-leaved Arborvitæ	
Heath, Mediterranean	$2 50 per doz.
Lauristinus, 6 to 12 in	2 50 per doz.

Making the growth of Oranges and Lemons a specialty, I have imported from all sources the best known varieties, and now offer five thousand Grafted Trees properly worked and twice transplanted at $18 per dozen. Grafted oranges by the 100 or 1,000 at prices on application. The amateur in want of large PALMS, large AURICARIAS, large CAMELIAS and large TREE FERNS, a good stock on hand; also the usual large stock of fruit and ornamental trees.

BERNARD S. FOX,
San Jose, Cal.

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